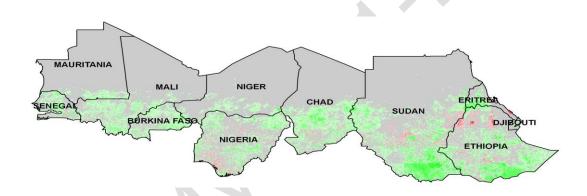


# **GREAT GREEN WALL INITIATIVE**



# 2021-2030 DECENNIAL DPIP/GGW

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### **Acronyms and Abbreviations**

CECDA Clean Energy Community Development Actions

IGA Income Generating Activities

NAGGW National Agency of the Great Green Wall PAGGW Pan-African Agency for the Great Green Wall

GGWCB GGW Carbone Bank

CADT Terroirs Development Support Centre

CPETF Technical and Financial Planning and Implementation Framework

NDC Nationally Determined Contributions
CEN-SAD Community of Sahel-Saharan States

CHSG Conference of Heads of State and Government

CAGE Climate Change and Green Economy

WSC Water and Soil Conservation

RSDC Rural Sustainable Development Committees
CMA Communication, Marketing and Advocacy

CM Council of Ministers

TCE Technical Committee of Experts

SDS Sustainable Development and Security

REDS Resilient Economic Development and Security

DOIC Operational Information and Communication Mechanism

SDR Soil Defense and Restoration

ICAF Integrated Agricultural Community Farms

FAO Food and Agriculture Organisation of the United Nations

FARCDEL Climate Change Adaptation and Resilience and Local Economic Development Fund

RMEIF Rural Microfinance and Entrepreneurship Impulse Fund

SLM Sustainable Land Management

SLMW Sustainable Land and Water Management

GGW Great Green Wall

ICMA Information, Communication, Marketing and Advocacy

GGWI Great Green Wall Initiative

GGWSSI Great Green Wall for Sahel and Sahara Initiative

GII Global Impact Indicators

DRLI Development and Resilience Local Initiative

OVI Objectively Verified Indicator

MORESCITECH Mobility, Scientific and Technical Networks LDN Land Degradation in terms of Neutrality

SGD Sustainable Development Goals
IGO Intergovernmental Organization
LDO Local Development Opportunities

LTDO Local and Transboundary Development Opportunities

PAREFPE Programme d'Appui à la Recherche et à la Formation et au Perfectionnement PTSSTI Platform for Technical and Scientific Support and Technological Innovations

CAADP Comprehensive Africa Agriculture Development Programme

NTFP Non-Timber Forest Products
DPIP Decennial Priority Investment Plan
IMSIP Integrated Multi-State Impact Program
RLIP Return to the Land Incentive Program

PP Priority Program

SLDOP Strategic Local Development Orientation Plan

PPFA Priority Programs for Flagship Actions

RPSDH Rural Production and Sustainable Development Hubs

RSP Regional Structuring Programs

PF Portfolio

TFP Technical and Financial Partners

#### Great Green Wall Initiative /2021-2030 DPIP Decennial Priority Investment Plan

SSTC Strengthening of Scientific and Technical Capacities

RECALOSTT Strengthening of Logistical, Scientific and Technical Capacities

RESAC Network of Ambassadors and Program Champions

RFP Land Reclamation and Forest and Landscape Rehabilitation

ANR Assisted Natural Regeneration

SADEL Local Economic Development and Planning Scheme

ES Executive Secretariat

SIOBAP Observatory, Early Warning and Response Information System SIPTA Integrated Agricultural Production and Processing Systems

PMIS Planning, Monitoring, and Information Service

TAP Trans Africa Pipeline

TMCDT Terroir Average Population Growth Rate

AU African Union

UCIDD Integrated Community Unit for Sustainable Development

UICN International Union for Conservation of Nature

UNFCCC United Nations Framework Convention on Climate Change

UNCBD United Nations Convention on Biological Diversity
UNCCD United Nations Convention to Combat Desertification

CSFFV Climate-smart Family Farming Village

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# **GENERAL INTRODUCTION**

The annual activities of Sustainable Land Management, particularly land restoration and biodiversity conservation and development have been effective in all Member States only from 2015 during the pilot phase intended for the strategic framing, launching and promotion of operational actions in the technical structuring of the GGW concept. The assessment of the first decade 2011-2020 of actions for the implementation of the Great Green Wall highlights concrete achievements with multiple positive impacts on local communities and populations as well as ecosystems.

The pilot activities at the origin of the achievements of the assessment of the decade of actions 2011-2020, focusing mainly on sustainable land management, socio-economic development and climate change management have identified and documented the constraints, parameters and best operational techniques and the strategic framework, as well as set the fundamentals of the GGW Initiative, including the vision, conceptual and operational approaches, objectives and impacts, the strategic planning model and their consistency with the policies and priorities of Member States. The achievements of the pilot phase and their real impacts confirm the relevance of the GGW Dakar concept in Djibouti and constitute solid milestones and founding foundations in the construction of the GGW.

The single reference on the variable "area restored", although very important, in the analysis and assessment of the achievements of the GGW Initiative is very restrictive and not representative of the state of implementation of the Great Green Wall based on an integrated and multisectoral approach and a multisectoral framework concept. Indeed, far from being a monogenic structure for reforestation or land restoration, conveyed by institutions with a reductive vision centered on their core business, the GGW is already a golden and already a polygenic structure, built around a mosaic of activities of different vocations, concentrated in a circumscribed area labeled "Corridor of the Great Green Wall".

The implementation status of the GGW, at the end of the 2020 decade of actions is globally quite significant for the implementation process, for having allowed on the one hand, the participatory co-construction by the main actors, beneficiaries, based on the aspirations of countries and realities on the ground, the founding and fundamental foundations of the GGW Initiative and laying the groundwork for the implementation of the Initiative through activities to raise awareness of local communities and populations and various pilot projects in the field. It has also helped to identify and mark out the most relevant operational approaches and Major Strategic Axes for the development of the initiators' vision on the arid and semi-arid zones of their countries, which are particularly confronted and less well prepared to environmental and climatic challenges.

The assessment of the decade of 2011-2020 actions, in terms of the scope and importance of these very valuable building blocks in the next stages of implementation, is far from weak, to the point that some skeptics of Africa's leadership have been diligent. These Afro-pessimists, although they are on the periphery and have no mastery of the fundamentals of the GGWI, are still skeptical about the future of an African Major Program of such scope, initiated, designed, and implemented by Africans and they judge a white elephant and already a failure, despite the momentum acknowledged by most of the international community.

The contribution of this assessment, in particular the priority actions and their impacts on sustainable land management, in particular, the restoration and development of land and biodiversity sites, adaptation to change and improvement of living conditions of local communities and populations, as well as in terms of lessons and prospective orientations,

constitutes the indispensable support for the conduct of the next stages of consolidation of achievements and amplification of achievements and impacts and scaling up in the various terroirs of the zone on the Agenda 2030.

The analysis of this assessment shows, among other strategic indicators, a relatively low value of area of land and ecosystems restored and recovered, compared to the magnitude of the indicative area at stake. However, this performance is fully measured up with the very low level of expected financial resource mobilization, despite promising announcements from Technical and Financial Partners. Among the major constraints that have considerably diminished the achievements and impacts is the problem of planning and mobilization of financial resources, which is rightly considered the weak link in the implementation strategy, probably because of institutional fungibility. In fact, despite the expansion and strengthening of the Partnership Platform and the intensification of advocacy towards sources of financing reputed to be promising, the level of mobilization of financing remained well below planned requirements and did not cover ten (10) percent of these requirement. Ninety (90) percent of the financial resources mobilized and utilized during the period 2011-2020 come from the efforts made by Member States in their investment budgets. These are the financial resources received by the GGW structures at regional or national level, mainly oriented to operations and annual support from the State in operational activities on the GGW national component.

The lack of financial support expected from Technical and Financial Partners has severely limited the scale and scope of the flagship actions of this first decade. The amounts of funding listed in the literature as support from Partners for the implementation of the Great Green Wall "and that GGW structures should validate in the" Great Green Wall " projects of the GGW national components are not always known and well mastered by these GGW structures. This recurring situation of dispersion of financing deemed GGW, observed and denounced regularly by the Pan-African Agency and the national structures of the GGW is also a relevant indicator of the lack of coordination of the interventions of the partners, so desired and reiterated by the Member States and the Pan-African Agency GGW in charge of the expected regional coordination in relation to the authorized GGW structures. It would allow better traceability and a more relevant evaluation of the achievements and impacts of financial support in GGW projects effective in the global geographical Exercice Zone (GGEZ) of the GGW initiative. The GGAE corresponds to the configuration of priority areas in which programmes and projects activities GGW-labelled should be carried out. It derives its legal basis from the choice of priority areas (national GGW components) made at the level of the Member States, as part of the implementation of the Global Harmonised GGW Strategy adopted in 2011, by sequential approach like any other major technical programme. In addition to the need for a better common understanding of the fundamentals of the GGW Initiative, other institutional constraints at the organizational and technical level are identified and must be diagnosed and solved as a matter of priority. They focus on operational governance, operational strategic approaches to the transformative vision and coordination of activities by the Initiative's GGW structures, the strategy and financial resource mobilization plan of the GGW Initiative.

Such observations at the end of the first and on the eve of the second decade of implementation justify the urgency of relevant solutions to these constraints, and more particularly that of GGW funding, including planning, traceability, coherence, and coordination in GGWI funding. Indeed, considering importance of financial resources measured up with the ambition of the GGW to make a decisive contribution to solving the challenges of economic recovery and social, economic and health resilience in the post-Covid-19 period.

Certainly, the challenge, the need, and the priority of financing a multi-State program of the scale of the GGW Initiative, sometimes perceived and wrongly as non-economic, could be subject to discussion for those who do not perceive the contribution and the real impacts that

the GGW could make in the short and medium term in the economic recovery and the implementation of the post-Covid-19 resilience plans of the GGW countries. Indeed, the innovative model of the GGW Initiative built on a multisectoral and integrated approach and Regional Priority Impact Programs, underpinning a transformative vision of the Sahel is an opportunity to foster and consolidate solutions to post-Covid-19 emergencies. It is as part of that the 2021-2030 Decennial Priority Investment Plan (DPIP) is developed as a prospective strategic framework for the decennial implementation of Actions on the 2030 Agenda (2030 CSDA) of the GGW Initiative.

The 2021-2030 DPIP is a Regional Framework for Technical and Financial Planning and Implementation (CREPETEF), priority actions (PA) of the Programs/Projects labeled GGW for the next ten (10) years. It is designed to better identify and improve the approach and overall framework for mobilizing investment and financing needs and to facilitate the identification and control of objectives, strategic indicators, added value and impact program sensitivity index. It reflects the 2030 ambition of the GGW Initiative and is in line with the time frame for action on emergencies, in terms of (i) sustainable management and development of land and water resources, (ii) Conservation/Protection of Biodiversity, (iii) Climate Action and Green Growth and (iv) Resilient Economic Development and Security. It is based on the consolidation, strengthening, and scaling up of achievements and promising actions, alignment with the priorities, objectives and indicators of the Member States while integrating the prospective post-COVID-19 orientations and the prioritization of emergencies.

The overall objective is, while capitalizing on the constraints, to accelerate the achievement of the humanistic, ecological and transformative vision and the accomplishment of the strategic objectives of building, in a sustainable and inclusive manner, the social and health resilience of local communities through socio-economic development that is resilient to climate risks, the reduction of gaps in availability and access to basic needs, services and infrastructure and security and, on the other hand, the resilience of ecosystems and convergence towards the Sustainable Development Goals (SDGs) of the United Nations, in particular SDGs 1, 2, 4, 5, 6, 7, 13 and 15 and those of the African Union's 2063 Vision.

It is in line with the consolidation and amplification of relevant actions and results of the first decade 2011-2020, while strengthening technical capacities in operational activities, coordination, communication, and advocacy, as well as financial resource mobilization.

The DPIP is based on a Results-Based Management (RBM) approach. It is built on a set of Priority Impact Programs (PIPs), with Indicators, more specifically on the impacts and sensitivity of the beneficiaries of the value added generated by the Program in the Major Strategic Targets (MSTs). These Priority Programs address recurring and ever pressing emergencies, in particular the actions of Sustainable Management of Natural Capital, Inclusive Socio-Economic Development, Climate Management and Security.

It targets, on the one hand, endogenous resources, coming from the States, local authorities and national private sector for 20% and, on the other hand, investments and foreign direct financing for 80%, in particular Socially Responsible Investments (SRI), respecting the principles of efficient management of climate, environmental, social, ethical and governance constraints, at the heart of the founding principles of the Pan-African Agency of the Great Green Wall and the multi-donor climate and environment funds.

The 2021-2030 DPIP Strategic Orientation Document is structured in two chapters.

The first chapter is a general introduction in two parts. The first part is focused on the Background, Legal, Governance and Fundamentals, including the foundation of the GGW Concept

that gave birth to the Initiative, the Vision, conceptual and operational approaches. The second part is a synoptic overview of the achievements and lessons of the actions of the first decade 2011-2020 and some major orientations for the next 2021-2030 implementation actions.

The second chapter sets out the framework and rationale, approach, indicators and strategic objectives and key elements of the Priority Programs of the 2021-2030 Decennial Priority Investment Plan (DPIP). It also reviews the estimates of financing and investment needs in the Major Strategic Axes (MSAs) or Portfolios (FPs) of Flagship Programs and Projects as well as the potential sources and planning elements of the financing and investments expected in each of the two programming cycles 2021-2025 and 2026-2030. Finally, it assesses the overall potential strengths and risks on the 2021-2030 implementation path of the Initiative.

# FIRST CHAPTER: REMINDER OF THE BACKGROUND, LEGAL BASIS AND FUNDAMENTALS OF THE GGWI

#### Introduction

This is key information on the founding operational basis of the GVW Initiative, defined in the Globally Harmonized Strategy (GHS) and implemented in the first decade of actions over two five-year cycles 2011-2015 and 2016-2020. The 2011-2015 cycle corresponds mainly to the strategic framing and start-up phases of pilot actions and the second cycle 2016-2020 to the consolidation of the pilot phases and the updating of the GGW Initiative's fundamentals. This chapter provides a synoptic overview of key information on the emergence context, legal framework, governance, and fundamentals, including the conceptual framework, vision, strategic and operational approaches, objectives and expected results and overall indicators.

#### 1.1. Context of the Initiative's emergence

The Sahel-Saharan zone of Africa extends from East to West, from the Red Sea to the Atlantic Ocean. It covers more than ten (10) million km2 and has an estimated population of four hundred (400) million people in the GGW part. It is one of the areas with the greatest climatic variability marked by a retreat of isohyets of about 200 km between the period (1950-1967) and that of (1968-1985). It also corresponds globally to one of the areas most affected by the effects of desertification, climate change, land degradation, water resources and biological diversity. These effects, particularly exacerbated by recurrent anthropogenic actions linked to the very high level of poverty and vulnerability of local communities and populations, have led to the drastic reduction of water resources and the productivity and agricultural, forestry and pastoral production, the backbone of the economies of most of the countries of the Sahel-Saharan Band. This trend has been highlighted over the last two decades and has had in the Sahelian terroirs south of the Sahara Desert, serious repercussions on the state of natural capital and generated multiple stresses, which have strongly impacted the level of human and socio-economic development and accelerated migratory flows and conflicts related to the strong pressure on the relics of natural resources. The arid and semi-arid zones of this band represent remarkable sets of cultural and biological heritage that must be conserved, restored, and developed to ensure the coherence and viability of the Development Strategy. Such realities call for a cross-analysis of the dynamics and their interactions: Degradation of natural resources-climate change, population growth, migratory flows, social and economic development, and security. Any relevant response must be based on an integrated territorial approach, integrating constraints, comparative advantages, the sociology of terroirs and the participation of local populations and communities.

Faced with the limitations in terms of positive impacts of national programs and projects implemented in the last two decades as part of the United Nations RIO Conventions and other initiatives implemented to this effect, and the need for actions in emergency management in these heavily affected areas, emerged the concept "Great Green Wall Dakar in Djibouti". This concept, which gave birth to the Great Green Wall Initiative, is the result of a strong political will and commitment and a real awareness of the African High Authorities of the urgency of concrete actions for relevant solutions. This concept emerged from the Conference of Heads of State and Government of the States of the Community of Sahel-Saharan States (CENSAD) held on June 1 and, 2005 in Ouagadougou, Burkina Faso.

The Great Green Wall Initiative (GGWI) is therefore the result of regional cooperation between the Sahel-Saharan States in response to the urgent need for concerted responses to the problems of desertification, land degradation, water resources and biodiversity and climate change and the contingencies of precariousness, poverty, food insecurity and malnutrition.

#### 1.2. Legal basis

The Great Green Wall Initiative (GGWI) is the result of regional cooperation between the Sahel-Saharan States to address the urgent need for concerted responses to the adverse effects of desertification, land degradation, water resources and biodiversity and climate change and their contingencies. The GGW Initiative is built on a legal framework referring to the United Nations RIO Conventions and multiple constitutive acts and decisions of African institutions and bodies. The legal framework of the GGWI, is globally based on the Objectives of the United Nations Conventions on Combating Desertification, Climate Change and Biological Diversity. It also refers to the Constitutive Act of the African Union adopted in Lomé on July 12, 2000 and the new vision of a sustainable development of Africa through the New Partnership for Africa's Development (NEPAD) and more specifically to the idea of building a Great Green Wall from Dakar to Djibouti approved by the Conference of Leaders and Heads of State of the Community of Sahel-Saharan States (CEN-SAD) on June 1 and 2, 2005, giving birth to the Concept "Great Green Wall from Dakar to Djibouti", Declaration 137 (VIII) of the 8th Ordinary Session of the Assembly of Heads of State and Government of the African Union of 2007 in Addis Ababa (Ethiopia) approving the "Great Green Wall" Initiative and finally the International Convention establishing the Pan-African Agency of the Great Green Wall, signed in 2010 in N'Djamena by the Heads of State and Government of the Sahel-Saharan States and already ratified by several Member States. This general framework is supplemented at the national level by multiple legal and regulatory acts (laws, decrees, and orders) relating to the creation and operation of a national structure dedicated to the Great Green Wall.

#### 1.3. Fundamentals of the GGW Initiative

The GGW initiative is a concerted and strong political and technical response of the Sahel-Saharan states to the environmental and climate challenges that significantly affect natural resources, living conditions and socio-economic development in their territories. Indeed, the countries south of the Sahara Desert are severely confronted with the advanced state of degradation of land sources of wealth, the high vulnerability to climatic hazards, the urgent need for socio-economic development and insecurity. These countries, aware that no country in the world taken in isolation and whatever its means, cannot reverse the trends, have federated their national actions and policies to provide relevant responses jointly and effectively to the challenges.

Such an Initiative must carry a global African vision of regional integration, both economic and political. Therefore, the collective response is based on regional cooperation articulated around a Global Harmonized Strategy (GHS), based on several fundamentals.

The founding parameters of the GGW Initiative mainly concern the foundation of the GGW Concept, the genesis of the GGW Initiative, the 2030 vision, the conceptual and operational approaches, the objectives, expected results and overall strategic indicators. The fundamentals have been approved by the eleven (11) Member States and globally specified in the Convention of 17 June 2010, establishing the PAGGW and in the orientation and strategic framework documents. They are based on scientific, sociological, biophysical, biogeographical, botanical data and time series analysis of spatial images available on certain parts of the Sahel-Saharan band. These data validated during workshops, international symposia and ministerial meetings come from scientific work conducted from 2005 to 2010 by multidisciplinary thematic groups of experts set up for data body to the concept of the Great Green Wall. These fundamentals have been refined and brought into compliance over the decade, taking into account lessons learned and constraints identified in implementation.

#### 1.3.1. Basis of the concept and intervention zone of the GGW

The operationalization of the GGW Initiative is based on the Great Green Wall Concept from Dakar to Djibouti, whose geographical, technical, and operational boundaries are clearly specified in the Convention establishing the PAGGW, particularly in its Article 4. This "Great Green Wall" Concept is innovative through its new integrated approach to the management and development of the terroirs. It is part of a transformative vision of the Sahel, a holistic and ecosystemic approach, based on the integrated management of ecosystems and the socio-economic development of local communities and populations of the terroirs. The GGW Initiative concerns a Global Geographic Exercise Zone (GGEZ) or control, in the Sahara perimeter, from the Atlantic Ocean to the Red Sea and circumscribed between the isohyets 100 and 400 millimeters of rainfall averages over approximately 7000 km in length. It reflects the priority areas identified at the national level (GGW national component) by Member States and on which the activities of GGW labeled programs and projects must be carried out. The PAGGW or GGW corridor covers approximately a total area of three hundred thirty-two (332) million hectares. In addition, the analysis of biophysical, biogeographic, and socio-economic profiles and land use plans has identified, in agreement with FAO, a potential of two hundred and thirty-two (232) million hectares of degraded land and ecosystems to be restored and developed.

Similar to any other large-scale technical program, the implementation of the GGW Global Harmonized Strategy is based on a sequential approach, envisaging a pilot phase, strategic framing, and the launch of flagship activities in the key areas identified by each of the Member States. These test areas identified by the Member States, in accordance with Articles 4 and 5 of the Convention establishing the PAGGW, were to be enclosed on a 15 km indicative route in width with ramps if necessary. The following operationalization phases, particularly consolidation, scaling up and sustainability of actions and impacts pinpoint the entire global geographic exercise zone (GGEZ) or control of more than 332 million hectares and a North-South in width of more than three hundred (300) km in the GGW national components of some member countries such as Niger, Mali, Mauritania, Chad.

#### 1.3.2. Vision 2030

The Great Green Wall is the result of a political commitment, the expression of leadership and a highly ecological, humanistic, and transformative vision of the Heads of State and Government of the Sahel-Saharan States. It structures one of the major responses and contributions of Africa, following the example of other continents in the fight against desertification, land degradation and climate change and their impacts on the socio-economic development of local communities and the resilience of ecosystems. The vision for 2030 that underpins the creation of the GGW Initiative is the transformation of the drylands of the Sahel into integrated Rural Production and Sustainable Development Poles for the emergence and development of an area of sustainable prosperity. It is part of the acceleration of large-scale transformative change, in particular the control and management of vulnerability to environmental and climate risks, green growth, resilient economic development, security, and the creation of productive green jobs.

The 2030 GGW Vision is fully in line with the African Union 2063 Agenda 2063 and consistent with the objectives of the three (03) United Nations RIO Conventions and Sustainable Development (SDGs), SDGs 1, 6 and 15.

#### 1.3.3. Strategic Objectives

The overall strategic objective of the GGW is to reverse current trends of natural capital degradation and to ensure Land Degradation Neutrality (LND), high vulnerability to climate variability and endogenous development of terroirs. More specifically, it will be about:

- (i) to intensify the fight against desertification and land degradation and to achieve Neutrality in Terms of Land Degradation (LDN) in a significant part of the GGW corridor lands by restoring and developing large areas of land and other degraded ecosystems on the 2030 trajectory,
- (ii) significantly increase the area of agricultural land for substantial productivity enhancement and production of agro-sylvo-pastoral systems, optimization of agricultural value chains to ensure food security and self-sufficiency and the creation of wealth and productive green jobs directly related to Sustainable Land Management activities.
- (iii) to develop economic clusters through the processing and development of local products to strengthen the conditions for the emergence and development of the economic scope of the GGW, and thus promote the strong involvement of the private sector in the implementation and development of business opportunities in the areas of Rural Production and Sustainable Development Hubs,
- (iv) ensure the mobilization and Integrated Management of a significant part of water resources, for the significant improvement of the rate of access to drinking water and sanitation services, as well as the development of agricultural potential and convergence towards the SDGs, 1, 6 and 15, in the rural areas of the GGW.
- (v) to develop and promote renewable energy resources in the GGW corridor to close the gaps in domestic energy needs and low-carbon energy infrastructure by 2030 and accelerate green growth towards resilient economic development.
- (vi) to contribute effectively through capacity building and scaling up low-carbon achievements, the implementation by Member States of the international commitments of the 2015 Paris Agreement on Climate Change and the NDCs and resilient socio-economic development,
- (vii) to promote inclusive development and the culture of peace, security, and social cohesion in the Sahel-Saharan Band, through the establishment and operation of Intercommunity Frameworks for Exchange, Dialogue and Conflict Prevention (CIEDPC) of the terroirs.

#### 1.3.4 Conceptual Approach

The conceptual and strategic approach targets in land restoration activities the endogenous plant species with high economic value adapted to water and soil stress and with high plasticity and the development and enhancement of Local and Transboundary Development Opportunities (LTDO) of natural capital in the local economic development (LED) component. Thus, at the structural level, the Green GGW Dakar-Djibouti Strip will eventually and from 2030, one of the largest ecological structures as composite and one of the wonders of man, made of mosaics of components of different vocations, including multi-species plant units and agro-sylvo-pastoral, sites of biological diversity and networks of socio-economic infrastructure corridors of water works, energy infrastructure and health structures, education.

The conceptual approach considers the sociological, anthropological, and eco-geographical realities and the real aspirations of the local communities of the terroirs. Therefore, the goal is to develop in the field multi-State Priority Programs and Projects with a low carbon footprint, sustainable management, restoration, protection and conservation of land, water, and forest resources and to carry out concurrently a package of income-generating activities, strengthening access to social infrastructural, health, education, water, sanitation, and energy needs.

The conceptual scheme built on a multisectoral and holistic approach, makes of the GGWI, far from a monogenic structure of reforestation or land restoration rather, a polygenic structure built on a mosaic of activities of different vocations, concentrated in a circumscribed area labeled GGGW of about three hundred thirty-two (332) million hectares between the isohyets

100 and 400 millimeters of average rainfall. In this context, the reference to the only variable "restored area", which is certainly very important, in the analysis and assessment of the results of implementation is rather restrictive and not very representative of the implementation status of the GGW structure.

#### 1.3.5. Integrated Operational Approach "territories"

In addition to the 2030 Transformative Vision, the conceptual approach based on various integrated and planned activities, the implementation strategy is based on an innovative integrated operational approach. This fully integrated "territorial" approach focuses on local Communities and Populations and their priorities are eco-systemic, holistic, and multi-sectoral. It is also participatory, with a strong sense of responsibility on the part of the primary stakeholders, at the core of the action, and coordination at all regional, national, and local levels.

In its implementation, the Globally Harmonized Strategy (GHS) develops a sequential approach with a five-year cycle with successive phases: (i) pilots, (ii) operationalization and consolidation, (iii) scaling up, strengthening and sustainability of impacts (Box 1).

The *pilot phase* (1st cycle 2011-2015) allowed to lay the legal and institutional organizational foundations and set up a modern and transparent Management and Monitoring/Evaluation System, as well as the strategic and operational framework, both at the regionally and nationally, and the implementation of a package of pilot operational actions in the field in most of the Member States.

The *operationalization phase* strengthens the upward momentum of tangible achievements and impacts with the amplification and diversification of pilot activities initiated in the first five-year cycle 2011-2015 and continued during the 2016-2020 cycle to lay solid milestones and pillars and boost the active operationalization of the Initiative.

The phase of scaling up, strengthening, and sustaining impacts marks activities towards 2030 and represents the 2021-2025 and 2026-2030 cycles.

The analysis of achievements, impacts and lessons learned in the various targets of the Major Strategic Axes (MSAs) and the independent evaluation of 2016-2020 Strategy, in terms of approaches, achievements, governance, strategic indicators and funding mobilization strategy have helped to better frame the operational actions in the second decade of GGW 2021-2030 priority actions.

Therefore, the strategic orientations and prospective analysis of emergencies and their constraints on the 2030 Agenda have enabled to undertake major changes and to initiate a global strategic planning, based on a 2021-2030 Decennial Priority Investment Plan (DPIP), sequenced over two five-year cycles on the 2030 Agenda.

#### 2016-2020 2021-2025 2011-2015 2030 Agenda Operationaliza **Enhanceme** Legal and tion and Development nt, scaling and Integration Organizational Enhancement of up Tools, of RPSDH of priority achievemen Management achievements -LDN ts and Framework, -Resilient **Emergence of** impacts of Monitoring/Eval **Economic** Rural the **RPSDH** uation, Development Production and strategic -Achievement and Sustainable SDG15 framework **Evaluation Development** contribution to **Hubs (RPSDH)** other SDGs Scaling and Strengthening Consolidation and **Operational**

GLOBAL HARMONIZED STRATEGY (GHS)/QUINQUENNIAL ACTION PLANS (QAP)

Phase

#### 1.3.6. Governance, Coordination and Monitoring/Evaluation Mechanism

Phase

Pilot Phase

The political and operational governance of the Great Green Wall Initiative through the Pan-African Agency of the Great Green Wall and its statutory bodies is based on an institutional mechanism for guidance, steering and management (DIOPILG).

The PAGGW, a regional intergovernmental organization (IGO), created under the aegis of the African Union, governance is based on the following statutory bodies:

- (i) the Conference of Heads of State and Government (CHSG) is the supreme organ and High Council of Orientation (HCO). It includes the President of the African Union Commission, who has a role in the political advocacy and implementation of the Initiative. The CHSG sets the strategic orientations, consolidates political advocacy and implementation, and informs the General Assembly of the African Union on the progress of the GGW Initiative.
- (ii) The Council of Ministers acts as the High Steering and Operational Orientation Committee (HCOPILO), composed of the Ministers in charge of the GGW in the Member States and senior officials of regional and sub-regional community institutions.
- (iii) the Executive Secretariat, the central regional body in charge of Management, Planning, Coordination and Resource Mobilization in relation to the community institutions.
- (iv) the Technical Committee of Experts (TCE) composed of experts from Member States and partner institutions. It plays the role of support-advisor to the Executive Secretariat.

In addition, at the national level of the Member States, 11 national operational structures for the implementation of the GGW have been created and Rural Committees for Sustainable Development (RCSD) at the local level (terroirs), which are frameworks for consultation,

and

**Sustainability** 

monitoring and evaluation of GGW activities and impacts, with the support of an advisory and supervisory task force.

Boxes 1 and 2 respectively provide an overview of the history, structure, and useful data on the governance bodies of the Pan-African Agency of the Great Green Wall (PAGGW), in charge of regional coordination, and the structural scheme for the Governance, Steering and Management of the GGW Initiative.

Box N° 1: Hystory and Structuring of IGGW						
« Great Green Wall » Concept	June 1-2, 2005, Conference of Heads of State and Government of the Community of Sahel-Saharan States (CENSAD) Ouagadougou/Burkina Faso					
GGW Initiative (GGWI)	Endorsement of the Great Green Wall for the Sahara and the Sahel Initiative (GGWSSI) by the African Union in 2007.					
Creation of PAGGW	June 17, 2010 N'djamena/CHAD, 1st Summit of Heads of State and Government of the Sahel-Saharan States by International Convention					
Ratification	Ten (10) Member States out of eleven (11)					
Legal Status	Intergovernmental Organization (IGO)					
Founding Member States	Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, and Sudan.					
Fields of Activities	Desertification, Climate Change, Biodiversity, Economic Development					
Missions Planning, Coordination, Monitoring/Evaluation and Mobilizat Resources						
Statutory Bodies	Conference of Heads of State and Government (CHSG), Council of Ministers (CM), Executive Secretariat (ES), Technical Committee of Experts (TCE).					
Focal Points	GGW National Structure in each Member State					
Head Office Ilot C 414, BP: 5059 Nouakchott/MAURITANIA						
Contacts  www.grandemurailleverte.org, www.facebook.com/PAGGW  Tel. +222 45 25 56 88, Email: ase.apgmv@grandemurailleverte.org						

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Box $N^{\circ}$ 2: Orientation, Steering and Management Mechanism (DOPILG)								
Framewo	Composition	Entities	Missions					
rk								
High	African Union and CEN-SAD: General	Continental						
Orientation	Assemblies		Political					
Council	Conference of Heads of State and	States	Orientation					
(HOC)	Government of the PAGGW							
	African Union Commission, CEN-SAD	Regional	Orientations,					
High Steering	General Secretariat		Political Steering					
Committee	Council of Ministers	States	Monitoring and					
(HCOPIL)			Orientation					
	RECs: ECOWAS, ECCAS, UMA IGAD).	Sub-regional	Technical Support					
Management and Coordination	Pan-African Agency of the Great Green Wall	States	Regional Coordination					
	GGW National Structures	Countries	National Coordination					
Structures	Sustainable Development Rural Committees	UCIDD*	Local Coordination					

The Coordination, Monitoring & Evaluation system for all operational activities, from design to impact assessment, is participatory and decentralized, from the regional to the national and local levels, from PAGGW, the GGW national structure to the Local Committee for Sustainable Development (LCSD) of the region, both for operational activities and for mobilizing financial

resources. For a smooth flow of information in situ and response capacities at the terroir scale, it is intended to establish and operate Centers for Support to the Development and Resilience of Terroirs (CADRT).

The CADRTs are true hubs for local information, monitoring and early warning, awareness, exchanges and training, and technical and logistical support located at the epicenters of the Integrated Community Units for Sustainable Development (UCIDD) of the terroirs. The CADRTs strengthen the efficiency of the coordination and monitoring/evaluation system at the local level.

#### 1.4. Review of achievements and experiences from 2011-2020 actions

#### Introduction

The assessment of the first ten (10) years of 2011-2020 implementation of the Initiative is largely detailed in the reference work published by the Agency on the occasion of the closing of the second five-year cycle 2016-2020 of implementation of the Initiative's Globally Harmonized Strategy (GHS). In the development of the Decennial Priority Investment Plan (DPIP), the technical and financial planning and implementation framework (TFPIF) for the flagship actions over the next decade 2021-2030, the main achievements and their actual impacts are described, as well as the various lessons and directions experienced. The main achievements in the first decade 2011-2020 of actions relate to the strengthening of the legal, institutional, and organizational framework, the strategic planning framework, as well as the main operational activities and their impacts. These operational activities, mainly in pilot phases, focused on the pillars of the Global Harmonized Strategy, namely Sustainable Land Management, Climate Change, Economic Development and Local Governance, Scientific and Technical Capacity Building and Information, Communication and Advocacy.

#### 1.4.1. Main achievements

At the legal, institutional, and structural level, the first decade of implementation led to the signature on June,17 2010 in N'Djamena and the ratification of the Framework Convention establishing and setting out the missions of the Pan-African Agency for the Great Green Wall (PAGGW). It also led to the structuring and strengthening of the fundamentals of governance, the coordination and management mechanism at regional, national, and local levels of the Initiative as well as the strategic framework, particularly the vision and the conceptual and operational approach of the Great Green Wall concept.

The operational mechanisms and chains of coordination, planning and monitoring are controlled and consolidated at the various operational stations, particularly at the regional, national, and local levels. In addition, an operational information and communication mechanism (DOIC), equipped with adequate tools and instruments for communication and advocacy is operational, the Platform for Scientific, Technical and Financial Cooperation and Partnership, the Charter of Ethics and Governance, as well as the administrative, financial, and accounting management instruments and the standards for the accountability are refined and put in place. This coherent system strengthens and completes the legal, structural, and operational arsenal, which is essential for the framework of the implementation of the GGW Initiative.

In terms of operational activities in the field, each of the eleven (11) GGW national components has recorded significant achievements at the end of the first decade of actions 2011-2020. These achievements relate to Sustainable Management and Land Use Planning, Biodiversity Conservation and Protection, Mobilization, and Integrated Water Resources Management (IWRM),

Local Economic Development (LED), Adaptation and Resilience of Local Communities and Populations and Capacity Building.

Table 1 summarizes the actual achievements of Member States in the GGW corridor and under the initiative. The achievements relate to the Priority Activity Areas (PAAs) in the first ten (10) years of the flagship actions.

#### Great Green Wall Initiative /2021-2030 DPIP Decennial Priority Investment Plan

	Summary of 2011-2019 Achievements														
	SUSTAINABLE MANAGEMENT AND DEVELOPMENT OF LAND, WATER RESOURCES AND BIODIVERSITY  SOCIO-ECONOMIC LOCAL DEVELOPMENT											TSS			
	Land restoration	n and recovery and protec	tion, develo	pment, and con	servation of bio	diversity		Strengtheni	ng access to	water, domesti	c energy. Inc	ome and emp	oloyment ge	eneration.	
Member States	Forest Seed Production(to ns)	Restoration and Recovery and Degraded Lands (Reforestation, protection, ZAI, ANR, dunes fixation, half- moons, etc.) (ha)	Wind break (km)	Firebreak(k m)	Dams and watersheds( ha)	Stone cord and dyke-barrier development (ha)	Community Forest protection and biodiversity conservatio n (ha)	Development and rehabilitation of water points (boreholes, wells, and water supply)	Supply of motor pumps	Improved cookstoves	ICAF	Permane seasond		Income Generated by the GGW:IGA+ca sh for work (CFAF)*1000	Technical Skills Strengtheni ng
Burkina Faso		53 214	2 818	-	-	2 709	-	-		49 633	1	62 856	11 035	5224425,762	37 458
Chad		32 186	61	-		-	-	24	26	3 000	10	3 337	1 000	4 800	1 015
Djibouti		138	-	-	3	-	-	8	15			122	240	300\$/ beneficiary	404
Eritrea		-	-	-		-			Ť			-	-	-	-
Ethiopia	183	1 690 476	-	10	272 776	235 145	124 541	32 000 000				47 423	4 413	-	91 273
Mali	2	296 073	8	170		5		9	1		8	-	8 742	32 517	8 924
Mauritania		360					-	4			1	-		3996,8	80
Niger		1 124 079	-	40 174		312 460	-				5	21 487	3 282 195	48 530 370	1 576
Nigeria		4551,58	649	-			270	156		3 000	1	191	-	-	1 135
Senegal		120 000	-	13 250			000					-	-	33 698	177
Sudan		238 493	-	-	28		428	277				-	-	-	5 002
TOTAL AMOUNT	185	3 559 570	3 536	53 604	272 807	550 319	128 239	32 000 478	42	55 633	26	135 416	3 307 625	53 829 807,992	147 044
GLOBAL AMOUNT												permanen t	seasona l	53 829 807 992	

NB: Empty boxes: items not filled in by the countries.

#### (i) Sustainable Land Management and Conservation of Biodiversity (SLMCBD)

The restoration and development of degraded lands are the main focus of the Flagship Actions for the decade 2011-2020. Indeed, the problems of land degradation and anthropogenic actions on natural resources are the main concerns of the Sahelian countries. Land degradation annually affects more than two (2) million hectares of agricultural and pastoral land and plant cover in the eleven (11) GGW member countries.

The operational area of the GGW, made up of hyper-arid, arid, and semi-arid zones is circumscribed between the 100- and 400-mm isohyets and covers an area estimated at 332,585,103 hectares. The assessment of the biophysical, eco-geographic and socio-economic profiles and land use plans of the geographical units in the GGW corridor, through processing and interpretation mainly by Erdas Imagine and FAO's "Collect Earth", of very high-resolution satellite images, taken from "Google Earth", "Bing Maps" and "Google Earth Engine" has identified a potential of 232,809,570 ha of land and other ecosystems to be restored, corresponding to about 70% of the GGW control.

In the first decade of actions, three million six hundred thousand (3,600,000) hectares (ha) of degraded land have been restored and protected in the GGW corridor and most countries such as Ethiopia (1,690,000) ha, Niger (1,124,000) ha, Mali (296,000) ha, Sudan (238,000) ha, Senegal (120,000) ha and Burkina (53,000) ha, are in an upward dynamic of the restoration process. In addition, the techniques, the most suitable plant species with high economic value and the most efficient conditions for sustainable land management and protection of biodiversity sites are perfectly controlled according to the various eco-geographical zones of the Great Green Wall corridor. These achievements are certainly limited in terms of percentage, but they are nevertheless catalytic milestones for future activities.

#### (ii) Mobilization and Development of Water Resources

The development and rehabilitation of water points through various types of hill reservoirs, various hydraulic works, and water access points (wells, boreholes, retention basins are effective in the GGW corridor in almost all countries, to support the main activities of Sustainable Land Management (SLM), rehabilitation of biodiversity sites and improve access to water for people and livestock. These are mainly boreholes and wells equipped with renewable energy and various types of hillside reservoirs (mini-dams, retention basins, bunds, stone barriers, half moons, Zaï). The GGW countries, particularly Ethiopia with more than thirty-two million (32,000,000) water points created or rehabilitated, Burkina Faso, Niger, Nigeria, Mali, and Senegal are already making significant efforts in hydraulic development on the GGW perimeters. In the other countries, although not yet sufficiently listed in the country reports, efforts are being made in this direction. The boost and amplification of programs and projects for the mobilization and integrated management of water resources (IWRM) and their scaling up in the various GGW areas should contribute to the countries' commitments in terms of NDT and to the growth of agricultural production and the establishment of Production and Sustainable Development Hubs and their integration by 2030.

#### (iii) pilot activities for socio-economic development and resilience to climate change

In most of the countries, activities for sustainable land management have been initiated in parallel with activities for sustainable land management, others for the generation of wealth and productive employment, for the benefit of local communities and populations in the GGW corridor areas. They focus on additional Income Generating (IGA) by increasing the production, exploitation and marketing capacities of market garden, poultry and beekeeping products, various timber (TFP) and non-timber forest products (NTFP) and small sheep/goat breeding

through the establishment of about thirty Integrated Community Agricultural Farms (ICAF). In addition to the traditional multi-purpose and nutritious gardens developed by most member countries, the Pan-African Agency of the Great Green Wall has launched and popularized the "Integrated Community Agricultural Farm (ICAF)" model, which is a model of multi-species agroecological farming supported by water drilling and solar installations. The evaluation of the implementation and impacts of the ICAF model, through twenty-six (26) ICAF established in six countries (Mali, Chad, Niger, Mauritania, Burkina Faso and Nigeria), proves the relevance and efficiency of this mechanism in boosting and sustaining the processes of endogenous development, poverty reduction, food insecurity and malnutrition, as well as in empowering women and encouraging young people to return to the land and agriculture. In addition to net and direct income to the population, fixed and seasonal jobs are also generated in the exploitation of opportunities associated with SLM activities.

The significant impacts on the living environment and well-being of the populations of the GGW terroirs, although still limited, have contributed to the mitigation of food insecurity and malnutrition, the poverty of rural households in the terroirs and the optimization of adaptation to climate change for the populations. These achievements are mainly the result of the positive impacts of participatory interventions of local populations, especially women and youth in GGW activities and other related community activities supported as part of the GGW. Other still apprehensive initiatives to strengthen access to drinking water, the reduction of biomass energy sources through the use of solar energy, bioenergy and more efficient energy saving technologies are being developed at the scale of a few terroirs in the different countries.

The various community development actions and optimization of adaptation and resilience capacities have generated more than fifty (50) billion CFAF in direct income and created more than three million four hundred thousand (3,400,000) jobs, including 118,296 permanent jobs for the benefit of the local populations. The creation and equipping of water boreholes and pastoral wells in the GGW terroirs, in support of the implementation of the GGW, has significantly improved the populations' access to drinking water and the diversification of water points for livestock. In addition, various ad hoc support to certain local authorities in the GGW terroirs in areas of basic education and literacy through the construction or rehabilitation and equipment of classrooms has helped to improve the perception of certain localities of their priorities in terms of basic social services.

# (iv) Climate actions to mitigate vulnerability to climate change and reduce the carbon footprint.

Real impacts on optimizing the adaptive capacities and resilience of populations to climate impacts and reducing the carbon footprint and carbon sequestration in soils are effective in the ecological transition. However, no significant initiatives have been identified in terms of reducing the ecological footprint by substituting clean energy for biomass, which still provides more than 90% of the energy needs, mainly domestic. It is true that in most countries such as Burkina Faso, Nigeria and Chad, energy saving, and efficiency initiatives have been identified through the distribution and extension of improved stoves and solar kits. One of the major challenges of the 2021-2030 Decennial Priority Investment Plan is to increase through the promotion and development of the huge renewable energy potential of the land to cover energy needs, reduce the carbon footprint and contribute significantly to the objectives of mitigation and resilient economic development.

#### (v) Strengthening the technical capacities of GGW actors and beneficiaries

In the first decade of actions 2011-2020 to implement the GGW, nearly one hundred and fifty thousand (150,000) actors with different profiles and status have benefited from the

strengthening of technical and scientific skills. National experts through various seminars, symposia, customized training sessions, exchanges and visits as part of the partnerships with FAO, UNDP, China and Turkey or direct initiatives of PAGGW have attended sessions in Monitoring / Evaluation, strategic planning and best techniques of SLM and local actors at the base of strengthening activities in best practices of reforestation, production, processing and conservation of local products through supervision, support and advice and providing support to local communities and populations.

These activities have enabled the consolidation of the participatory approach and the adoption of GGW projects and programs by the population at the grassroots level.

#### (vi) Mobilization of Expected Financial Resources

Among the major constraints that have considerably diminished achievements and impacts is the problem of planning and effective mobilization of financial resources, rightly considered the weak link in the Initiative's implementation strategy. In fact, despite the expansion and strengthening of the Partnership Platform, the intensification of advocacy towards sources of financing reputed to be promising, and the importance of financial support pledges, the level of financing mobilization has remained well below expectations. More than 90% of the financial resources accounted for by the Pan-African Agency and the Member States of the Great Green Wall and targeted in the GGW flagship programs and intervention zones and likely to be labeled GGW financing come from the endogenous resources of Member States. Thus, the level of achievements in the decade 2011-2020 of actions, sometimes considered low, is quite commensurate with the low level of funding received for operational activities in the field.

In this context, a dispersion and a lack of coordination and traceability in the reputed interventions in favour of the Great Green Wall of the Partners were noted. Indeed, most of the funding of projects supporting the Great Green Wall granted by Partners through other institutions, most often escape the Pan-African Agency and the national structures of the Great Green Wall in their management, objectives, coordination, monitoring/evaluation, tracing of the expenses incurred and impacts to be sustained.

Thus, among the major challenges in the interventions of the Partners in the next decade 2021-2030 are the following:

- Appropriate coordination of the interventions of the various technical and financial Partners,
- a better tracking of the financing of programs and projects labeled GGW, which are intended for projects in compliance with the objectives defined and agreed upon in the Great Green Wall intervention zone and which present a strong added value in the implementation and in particular on the local communities and their living environment.
- and greater accountability of the States through the statutory structures regionally and nationally, which they have created specifically for the implementation of the GGW and which are in charge of coordination, monitoring and resource mobilization.

#### 1.4.2. Lessons learned, challenges and major orientations

The assessment of the results of the 2011-2020 decade of implementation of the Great Green Wall in terms of relevance of conceptual and operational approaches, Sustainable Land Management techniques and choice of endogenous plant species, as well as the control of biophysical, edaphic and pedological constraints of reforestation and other types of sustainable land management in the GGW corridor is globally positive.

The Major Strategic Axes and their flagship programs on the Major Strategic Targets reflecting on the one hand the priorities and needs of Communities and Populations and on the other hand the strong actions for the resilience of the ecosystems of the terroirs to climatic and ecological emergencies and resilient social and economic development are perfectly identified and their operational planning in the consolidation and scaling up phase well controlled. In addition, the participatory approach based on outreach and empowerment of the populations is effective and the communication, information and advocacy mechanism is in place and functional through various innovative tools and instruments of the PAGGW (see www.grandemurailleverte.org).

The first decade 2011-2020, in terms of achievements, impacts and lessons learned, has set solid milestones and achievements in the implementation of the GGW for the next decade 2021-2030. It has also enabled, beyond the achievements and impacts, to draw important lessons and identify major constraints and priority needs of local communities in the face of multiple emergencies.

One of the major constraints and the limiting factor in the implementation during the decade of action has been the recurrent low rate of effective mobilization of financial resources, despite the major efforts made in terms of communication, marketing, and advocacy. These sustained efforts have enabled the GGW Initiative to be adequately positioned at the international level and ownership of the approach and vision by Member States, multilateral, and bilateral partners as well as the populations and beneficiaries.

The Member States have made substantial efforts from their own financial resources, which so far represent almost all the funding received and perfectly recorded by the GGW structures, in the implementation of the GGW and which have enabled the GGW to get off the ground and the GGW pilot actions. However, given the renewed political commitment of States and the inclusion of the GGW among national priorities, the eligibility of national and GGW multi-State programs and projects to the various allocations should be effective.

The economic scope, as well as the large pool of business opportunities offered by the enhancement of the significant Natural Capital developed in the implementation of the GGW and the comparative advantage of the demographic dividend of the terroirs, should strongly contribute to the economic recovery programs and the objectives of economic and social resilience of the Member States. This will be done through the development of agro ecology, the strengthening of production systems, the optimization of value chains as well as the exploitation and processing of GGW inputs, which should encourage the mobilization of endogenous resources of Member States, local authorities and local private sectors.

At the level of Technical and Financial Partners, despite various partnership agreements and funding pledges, commitments and disbursement of financial resources are slow to materialize. Moreover, the itinerary and difficulties in accessing the various climate funds, particularly the Green Climate and Adaptation Funds and the Global Environment Facility (GEF), have not allowed the mobilization of the pledged resources. The two major constraints with strong negative impacts on the acceleration of implementation are, on the one hand, the low mobilization of targeted financial resources due to the lack of appropriate significant interventions by the international community at bilateral and multilateral levels and by the private sector and, on the other hand, internal dysfunctions in the governance and regional coordination of the initiative.

The solutions to these constraints call for transformational changes at the level of member states at the organizational and technical level of the GGW structures both regionally and

nationally, as well as harmonization of interventions in governance and coordination of operational activities and resource mobilization and a stronger and more assertive political leadership. At the level of the technical and financial partners, a paradigm shift is needed in terms of identification and coordination of funding for GGW projects in relation to the statutory structures authorized by the Member States (Pan-African Agency and GGW National Structures) for better visibility, tracking and accounting of funding granted and achievements of their interventions for the benefit of the GGW Initiative.

The completion and consolidation of the regional 2030 vision and the overall objective of the GGWI to achieve the sustainable establishment of economic, social and health resilience, through inclusive and resilient economic development, which will generate wealth, productive employment, access to basic needs and infrastructure and security in the communities and local populations of the territories will necessarily require the removal of these major constraints of funding and governance of the Initiative. To this end, global objectives and indicators should be targeted, with priority being given to the following five major pillars: (i) restoration, development and recovery of land, water, and biodiversity conservation, (ii) management and reduction of vulnerability to climate impacts, (iii) economic development and security, (iv) communication, marketing, and advocacy, and (v) technical and scientific capacity building, based on training and development and support research.

In the implementation, emphasis will therefore have to be placed on strengthening the following levers:

- (i) A coherent and operational 2021-2030 Decennial Priority Investment Plan (DPIP), supported by the strengthened political commitment and advocacy of High State Authorities. The DPIP will be based, on the one hand, on relevant targets and indicators and, on the other hand, on a New African Financial Instrument (NAFI), for the mobilization of sustainable public and private financial resources from States, bilateral and multilateral cooperation and the international private sector through the Public Private Partnership (PPP) in the structuring Programs. This African financial instrument dedicated to the Great Green Wall will be based on clear and flexible procedures and mechanisms more accessible to Member States,
- (ii) Outreach and strengthening of the results-based programmatic approach and the signing of State/GGW Performance Contracts, with precise indicators, in the intervention of Member States, which would further facilitate the planning, impact and relevance of these interventions,
- (iii) A strong political decision by the States, reaffirming the fundamentals and basic principles of the Initiative, clearly delimiting the missions and fields of action of the different stations of the political and operational governance of the Great Green Wall and setting the framework for the intervention of the technical and financial Partners.
- (iv) Greater awareness and involvement of women and youth in flagship activities and better care for their needs,
- (v) A coherent and ambitious training and scientific and technical development plan for the strengthening of intervention capacities, in terms of logistics and motivation of the structures and actors of the Initiative,
- (vi)An operational and relevant Communication, Marketing and Advocacy Plan with modern and appropriate tools towards the international community and the general public,
- (vii) Correct analysis and good control of the impacts of the health situation related to the COVID-19 pandemic and its subsequent challenges, as well as the priorities of States and the international community, which will inevitably interfere and have a considerable impact on the progress, results and expected impacts of the Initiative.

# CHAPTER 2: 2021-2030 DECENNIAL PRIORITY INVESTMENT PLAN (DPIP)

#### Introduction

One of the major constraints that strongly limited the achievements and the accomplishment of the objectives of the first decade of implementation of the priority actions was the mobilization and planning of the financial needs associated with the various Programs of the Great Green Wall.

As part of the new decade 2021-2030, in order to promote a better flow of financing and investments to cover the financial needs of GGW Programs and Projects, the strengthening of the Partnership Platform, the intensification of advocacy and the alignment of programs with the Partners' areas of interest are necessary. Furthermore, the management, coordination, and mobilization of the needs of the Initiative must be based on anticipation and prospective analysis of contexts and their changes at the international level and national priorities in the face of contextual emergencies. The problem of financing the GGW could be more difficult in a particular post-Covid-19 context, marked by a downturn in the world economy and the emergence of new national priorities oriented towards economic recovery strategies. Indeed, this unforeseen health situation will have impacts and set up an economic recession, a massive loss of productive jobs, an expansion of precariousness in the communities due to confinement, and the very likely significant reduction in foreign financing and investment that could have a negative impact on the progress and attainment of the GGW's specific objectives and indicators.

The Great Green Wall, sometimes wrongly perceived as non-economic, could in the short and medium term make a very significant contribution to boosting the economic recovery and the post-Covid-19 resilience plans of the GGW countries.

The 2021-2030 DPIP is a Regional Framework for Technical and Financial Planning and Implementation (CREPETEF), priority actions (PA) of the GGW labeled Programs/Projects for the next ten (10) years. It is designed to better identify and improve the approach and overall framework for mobilizing investment and financing needs and to facilitate the identification and control of objectives, strategic indicators, added value and impact program sensitivity index. It reflects the 2030 ambition of the GGW Initiative and is in line with the time frame for action on emergencies, in terms of (i) sustainable management and development of land and water resources, (ii) Conservation/Protection of Biodiversity, (iii) Climate Action and Green Growth and (iv) Resilient Economic Development and Security.

It is based on the consolidation, strengthening, and scaling up of achievements and promising actions, alignment with the priorities, objectives and indicators of the Member States while integrating the prospective post-COVID-19 orientations and the prioritization of emergencies.

The 2021-2030 DPIP is in line with the consolidation and scaling up of achievements in each of the Member States and in line with the vision, global objectives and expected contributions to the 2030 Agenda. It considers the urgent need for climate action for ecological transition and inclusive economic development, in an unprecedented context marked by the likely multifaceted and multisectoral impacts of the post-pandemic Covid-19 on the economic and social environment and the implementation of the GGW Initiative. However, the very plausible ambition of the Great Green Wall Initiative in this particular context is to build a well-structured, coherent, and relevant DPIP, commensurate with the multiple challenges of the next decade and make the DPIP one of the powerful drivers of responses to post-COVID-19 emergencies and constraints.

The DPIP is based on a Results-Based Management (RBM) approach and more specifically on the impacts and sensitivity of the beneficiaries of the value added generated by the Program. It targets the endogenous resources of the States, Local Authorities and the Pan-African Agency of the Great Green Wall and the national private sector.

The amount of US\$17 billion over ten years, sought to cover the financing needs of the DPIP Priority Programmes, would represent less than 0.17% of the annual contribution of

US\$100 billion provided for in the Paris Agreement for Climate Management and 0.034% of the socially responsible investments (SRI) estimated in 2018 within the OECD at more than US\$5 trillion. SRIs are sustainable development funds with high environmental, societal and climate impact. The allocation to the GGW Initiative of a part (5 to 10%) of the financial commitments of States in the various international agreements, particularly regional agreements (CDNs, NDT and CAADP), in the form of contributions or shares of States to the financing of the present DPIP would facilitate the coverage of the financial needs of the DPIP in terms of endogenous resources expected from States and local authorities.

In addition, the development and exploitation of the comparative advantage represented in the terroirs by the Natural Capital and the demographic dividend, which constitutes a pool of living forces, offer an important potential for growth and diversification of agricultural production and business opportunities conducive to the involvement of the private sector in the implementation and exploitation of the inputs of the Great Green Wall. Such an approach to endogenous development, based mainly on the development and enhancement of natural resources and the optimization of value chains is perfectly in line with the transformative vision and the mutation towards Production and Sustainable Development Hubs.

The main focus of the DPIP is on the nexus of Land Restoration and Development and Biodiversity Conservation / Integrated Water Resources Management / Climate and Ecological Impact and Risk Management / Capacity Building / Resilient Economic Development and Security.

Emphasis is placed on the Sustainable of Land Management and Development, Water Resources and Biodiversity (SLMDWRB) Portfolio, in particular on programmes for the restoration and development of degraded lands and integrated water resources management (IWRM). The strong ambition granted to these two high-impact programs is the result of the vector and gas pedal roles of land and water for social and economic development in the terroirs, through the development of agro-ecology, productivity growth and production of agro-sylvo-pastoral systems, the optimization of Agricultural Value Chains (AVC) and the enhancement of local products.

#### 2.1. Strategic objectives

The overall objective is to develop a 10-year strategic plan 2021-2030 for key technical activities, together with an efficient financing scheme to further relevant and sustainable responses to emergencies of social, economic, and environmental resilience. This will be done through the implementation of impact-oriented priority programs (PPs) focused on major strategic axes (MSAs) or portfolios (FPs) and to mobilize and plan according to a Results-Based Management (RBM) programmatic approach, the financial resources needed on the 2030 agenda. The Decennial Priority Investment Plan (DPIP) will be a reference framework for planning and technical and financial execution (CPETF) of the activities and financial resources required for their implementation. It is thus based, on the one hand, on the consolidation and strengthening of achievements on the basis of States' priorities and, on the other hand, on future key actions in the context of emergencies. The DPIP is fully in line with and integrates the convergences with the three UN RIO Conventions and SDGs as well as those of the Regional Policies and Strategies relating to the issues of land restoration, biodiversity conservation, climate risk vulnerability management and Africa's 2063 Agenda.

During the next decade 2021-2030, the Initiative should be of significant assistance to member states in the process of rebuilding the economic and social fabric and achieving economic, social and health resilience. The overall objective of the 2021-2030 DPIP is to develop a 10-year strategic plan 2021-2030, flagship activities, with an efficient financing scheme to boost relevant and sustainable responses to social, economic, and environmental resilience emergencies to plan and secure sustainable financing and investments to implement Priority Programmes in the next decade 2021-2030. This will be done through the implementation of priority programs (PPs) with impacts focused on major

strategic axes (MSAs) or portfolios (FPs), the planning of flagship actions according to a results-based management (RBM) programmatic approach and the mobilization of resources.

The DPIP is in line with and integrates convergences with the three RIO Conventions and some UN SDGs. It is also consistent with the major thrusts of the National Policies and Strategies of member countries, relating to land restoration, biodiversity conservation and climate risk vulnerability management and Africa's 2063 Agenda. It also intends for the following specific objectives:

Objs.01. To restore and develop land resources and other fragile terrestrial ecosystems and waters, conserve and protect biodiversity in order to grow and increase agricultural production and the creation of productive green jobs, which is a crucial emergency in the post-COVID 19 context.

Objs.02. Develop and enhance natural capital resources and other local development opportunities (LDOs) through the intensification of agro-ecology and other agro-sylvo-pastoral production systems, including the model of Integrated Community Agricultural Farms (ICAFs), already successfully launched in 26 pilot sites and six countries. Their good appropriation by the local populations, the additional wealth and productive green jobs generated, and the opportunities offered constitute an argument for candidates to return to the land.

Objs.03. Manage and reduce the vulnerability of Production Systems to climatic and ecological hazards, increase sequestration capacities and carbon balance and promote effective conditions for green growth and resilient economic development and transition towards the Sustainable Development Goals (SDG), adaptation and resilience of the populations of Sahel terroirs to climate change.

Objs.04. Contribute effectively to the commitments in terms of Nationally Determined Contributions (NDCs) and Land Degradation Neutrality (LDN) of Member States.

Objs.05. Ensure the strengthening and acquisition of logistical, technical, and scientific skills needed by GGW structures and other actors, as well as support for Research & Development assistance in the implementation of the GGW.

#### 2.2. Main markers and indicators of DPIP impacts

In order to ultimately achieve resilient economic development, a prosperous and secure environment and, overall, the essential objectives of sustainable development in the regions, investments and financing are mainly oriented towards Priority Impact Programs (PPI). The PPIs are structured around markers or Targets, impact indicators and expected results.

#### 2.2.1. Markers for DPIP impacts in 2030 Vision

The following impact markers are identified in the structuring of the DPIP in accordance with the Initiative's 2030 Vision:

- The development, conservation, and enhancement of Natural Capital, by reversing the trend of advanced degradation, towards Land Degradation Neutrality (LDN), ecosystem resilience and protection of biological diversity,
- Local economic development of terroirs through the strengthening and diversification of agro-sylvo-pastoral production systems, the promotion of agro-ecology and the best climate-smart techniques with a low carbon footprint,
- the optimization and enhancement of agricultural value chains (AVC) and industrial clusters and the significant involvement of the private sector in the implementation and exploitation of the products of the Great Green Wall.
- the optimal reduction of precariousness, poverty, and food security through the generation of wealth, productive employment, and food self-sufficiency in the terroirs,

- Reducing vulnerability to climate risks and the carbon footprint of interventions and infrastructure, to build a resilient economic development that promotes green growth,
- full coverage of domestic energy and rural electrification needs through the promotion and implementation of renewable energies and their total substitution to biomass energy in domestic needs,
- the achievement of SDGs 1.2, 3, 6, 13 and 15 and access to basic social needs and services in the various terroirs,
- covering the needs for drinking water, sanitation and hygiene services through the mobilization, integrated management, and efficient use of water resources,
- the eradication of poverty and food insecurity through the restoration and diversification of production systems and the creation of several million productive jobs,
- the implementation and integration of the Rural Production and Sustainable Development Hubs and the creation of a GGW area of sustainable prosperity and peace,
- the availability of logistical means and human resources and the strengthening of technical capacities in the various fields useful for the implementation of the GGW,
- the empowerment and significant increase in the women's access rate to land ownership and agricultural financing,
- the coherence and optimal coordination of operational activities by setting up a GGW network of Harmonized Management and Monitoring & Evaluation Systems and a Technical Platform for information and monitoring,
- securing private property and initiatives in the GGW's area of intervention.

#### 2.2.2. Definition and method of evaluation of indicators

The Ten-Year Priorities Investment Plan is based on a Results-Based Management (RBM) approach and more specifically on the impacts and the sensitivity of the value added of these impacts on the targets. To this end, regional, multi-state priority programs (PPs) have been favored in the identification and strategic planning of the activities of the DPIP and the impact indicator used instead of the traditional performance indicator, which focused more on the level of program implementation than on the impacts of the achievements on the targets.

The impact indicator was identified considering international norms and standards and then adapted to the particular context and specificity of Sahelian terroirs. It is based on markers or Major Strategic Targets (MSTs) that better guide the strategic objectives, flagship actions and expected results of the priority programs.

Thus, in the Ten-Year Priority Investment Plan (2021-2030), in order to achieve a better control of the strategic objectives and a good quantification and qualification of the expected results and their impacts, global impact indicators (GII) and specific impact indicators (SII) have been defined, evaluated, and selected to better reflect the sensitivity and added value of the activity on the beneficiaries and targets. The GII is used to globally assess the main expected results and their impacts of the Portfolio (PF) of Priority Impact Programs, while the SII is reported at the level of the Priority Program that constitutes the Portfolio (PF). In the strategic planning and coherence logical framework of the Priority Programs (PP), each of the Portfolios or Major Strategic Axes defines specific Impact Indicators (SII) in relation to the expected results.

In addition, to better understand the state of sustainable development, there is a "green GDP" indicator frequently used in the economic studies and statistics of France's National Institute of Statistics and Economic Studies (INSEE). This type of indicator is very relevant to reflect not only real economic productivity but also the well-being or the feeling of the targets in their living environment. It considers the climate/ecology duality that prevails in the Sahel, but also environmental accounting and economics and the level of decoupling between environmental pressures and economic growth.

The particularly strong environmental pressure due to anthropogenic effects and the very high level of precariousness in local communities and populations reflect a large ecological footprint. The endogenous economic development of the terroirs, mainly based on the strengthening of agro-sylvo-pastoral systems, which are reputed to be responsible for twenty-three (23) % of greenhouse gases (GHG), also raises the issue of managing ecological footprints and carbon sequestration, in the framework of the 2030 objective of inclusive and resilient economic development.

The impact indicators set out in the 2021-2030 DPIP are relevant and realistic if the major issues targeted are at the top of the list of emergencies and political priorities of States and the international community. They are based on a reference rate of mobilization of at least 70% of the financial needs of the DPIP.

#### 2.2.3 Planning and financing strategy

The planning and indicative sources of mobilization of the estimated needs of the Decennial Priority Investment Plan (DPIP) target on the one hand foreign direct investment and financing and on the other hand a participation of twenty (20) % of the amount of endogenous resources from Member States and their local authorities of the Pan-African Agency of the Great Green Wall and the local private sector.

The financing and investments expected from bilateral and multilateral technical partners and the international private sector are intended in particular to Socially Responsible Investments (SRI), which respect the principles of efficient management of climate, environmental, social, ethical and governance constraints, at the heart of the founding principles of the Pan-African Agency of the Great Green Wall and the multi-donor climate and environment funds.

The expected twenty (20) % of endogenous resources would come from member states and their local authorities for four (4) %, the Pan-African Agency of the Great Green Wall for one (1) % and the local private sector for fifteen (15) %. The resources expected from Member States are contributions from budgetary resources to projects and programs in terms of financial support, facilitation of access to bilateral and regional funds and contributions in kind (salaries of national experts, infrastructure, and tax relief etc.). The additional financial resources expected from the Pan-African Agency of the Great Green Wall would come, on the one hand, from the exploitation of innovative resource mobilization instruments, such as the GGW Carbon Bank (GGWCB), the Fund for Adaptation and Resilience to Climate Change and Local Economic Development (FARCDEL) and the Economic Forum on GGW inputs (FOREP) and on the other hand, financial and in-kind contributions from PAGGW to national and cross-cutting multi-state projects and programs, capacity building, institutional support etc.).

#### 2.3. 2021-2030 DPIP priority programs

The decade 2021-2030 is an important milestone in the process of achieving the vision of resilient inclusive socio-economic development, sustainable development, and security of the GGW space terroirs which are at the heart of the strategic objectives of the Great Green Wall initiative. In the context of the GGW arid terroirs, the limiting factor and constraints of resilient development mainly include the availability and sustainable management model of productive arable land, water, energy, and vulnerability to climatic, ecological and security risks.

Climate change has greatly accelerated land degradation and loss of fertility and has also led to the disruption of biodiversity and the reduction of water resources with the drying up of many water access points and structures, despite increased population pressure and agricultural and pastoral needs. Access to and management of water in arid terroirs is currently, and will be on the 2030 Agenda, a global challenge for economic development, sustainable development, and security in the arid and semi-arid Sahelian terroirs along the GGW route.

The structuring and planning of the DPIP Priority Investment Plan (DPIP) of the 2030 perspective is based on emergencies and priorities in the terroirs and mainly around the five (05) Major Strategic Axes (MSA) pillars or Portfolio (PF) of Priority Impact Programs (PIP) as follows:

- A. Sustainable Management and Development of Land, Water Resources and Biodiversity (SMDLWRB).
- B. Climate Action and the Green Economy (CAGE).
- C. Resilient Economic Development and Security (REDS).
- D. Strengthening of Scientific and Technical Capacity (SSTC).
- E. Information, Communication, Marketing and Advocacy (ICOMAA).

The 2021-2030 DPIP is structured as follows:

- **1. Strategic planning** in each of the Major Strategic Axes (MSAs) or Portfolios (FPs), based on the following key elements:
- (i) Objectives (Obj) Global Strategic Indicators (GSI).
- (i) Priority Programs (PPs) and Major Strategic Targets (MSTs) or Components,
- (i) Assessment of financing and investment needs.
- (i) Resource mobilization strategy.
- (i) Monitoring and evaluation of program performance.
- **2.** the overall summary of the estimated funding and investment needs to cover the Priority Programs in the two cycles 2021-2025/2026-2030,
- 3. the breakdown of overall requirements by Portfolio and by Member State.

It is based for SLM on the biophysical profile, indicators and expected results indicated by Member States. In the case of the socio-economic development component expressed through the projections of community socio-economic needs and services, it considers the population and socio-economic context of the GGW areas,

4. a summary of the Assumptions and Influencing Factors of Risks and Opportunities for the DPIP's development.

The content of these various planning elements will be assessed and adapted to the constraints and directions arising from each milestone assessment and the realities of the context of the period.

Table 2 shows the programmatic structuring of the Portfolios (PF) or Major Strategic Axes (MSA) and the Priority Programs (PP) and Major Strategic Targets (MST) of the 2021-2030 DPIP Priority Investment Plan.

PORTFOLIO(PF)	Priority Programs (PP) PA: Priority Actions RS: Regional Structuring	Major Strategic Targets (MST) or Components
A. Sustainable Management and	PIP.01. Restoration and development of land and protection of biodiversity	MST.01.1 Restoration and development of land and other terrestrial ecosystems MST.01.2 Development, rehabilitation and protection of biodiversity and protected areas. MST.01.3 Development of agro-sylvo-pastoral systems MST.01.4 Strengthening the Logistical Capacities and Technical and Scientific Skills of National and Local Structures and Actors
Development of Land, Water Resources and Biodiversity (SMDLWBIO)	PIP.02. Mobilization and Integrated Management of Water Resources and Watershed Development	MST.02.1: Creation and rehabilitation of hydraulic works and hydro-agricultural developments  MST.02.2: Management and conservation of wetlands and watersheds  CSM.02.3: Integrated management of local and transboundary inland water resources  MST.02.4: Training, maintenance and advisory support in rural equipment and hydro-agricultural development techniques.
	PIP.03. Adaptation and Resilience to Climate Change and Green Growth	MST.03.1: Development and enhancement of agro-sylvo-pastoral resource potential and value chains MST.03.2: Enhancement and development of smart agriculture MST.04.1: Promotion of green economy
B. CLIMATE ACTIONS AND GREEN ECONOMY (CAGE)	PIP.04. Green Growth and development of renewable energies	MST.04.2: Fostering and development of renewable energy and resilient infrastructure  MST.05.1: Promotion and Development of domestic renewable energy
, ,	PIP.05. Vulnerability Management to climate risks	MST.05.2: Assessment of Soil Carbon Footprint and Productive Systems
C. RESILIENT ECONOMIC DEVELOPMENT AND SECURITY (REDS)	PIP.06: Development and enhancement of promising local opportunities	MST.06.1: Audit and enhancement of Local and Cross-border Development Opportunities  MST.06.2: Promotion of local products and ecosystem services and optimization of their
	PIP.07: Food and Nutritional Security	value chains  MST.07.1: Strengthening and development of innovative agro-sylvo-pastoral production systems
	PIP.08: Promotion of productive green jobs	MST.08.1: Development of start-ups and promotion of youth and women's entrepreneurship, encouraging the return to the land
	PIP.09: Improving access to basic	

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	Great Green Wan minative / 20	21-2030 DFIF Decentifian Friority investment Flan
	household needs and social	MST.09.1: Water and Sanitation
	services	MST.09.2: Development and fostering of domestic energy and bioenergy
		MST.09.3: Community Health and Health Prevention
		MST.09.4: Development of Socio-Economic and Communication Infrastructure
		MST.09.5: Expanding the school map and promoting the retention of girls in school.
	PIP.10. Consultation frameworks. Dialogue and Conflict Prevention and Securing Property in the Terroirs.	MST.10.1: Improving Local Governance of Local and Transboundary Natural Resources  MST.10.2: Structuring and facilitating inclusive frameworks for information, consultation and conflict prevention.
	PIP.11. Research, Development and Enhancement of Local Knowledge	MST.11.1: Improvement and Innovation of Local Techniques and Technologies through Scientific Research
		MST.11.2: Exchange of experiences between actors and beneficiaries
	PIP.12: Support for Research, Training and Development	MST.12.1: Training and development of stakeholders on GGW targeted themes
D.STRENGTHENING OF SCIENTIFIC AND TECHNICAL CAPACITIES (SSTC)		MST.12.2: Strengthening cooperation of training and research institutions in the GGW area
	PIP.13: Mobility and Scientific and Technical Networks	MST.13.1: Creation of platforms for the exchange of experiences between researchers, institutions, partner laboratories, etc.
		MST.13.2: Establishment and structuring of a Platform for Technical and Scientific Support and Technological Innovation.
	PIP.14: Knowledge and innovation Management	MST.14.1: Setting up and operationalization of observatories.
		MST.14.2: Promotion and Valorization of Research and Innovation Products and Local Knowledge
	PIP.15: Strengthening Logistical, Scientific and Technical Capacities	MST.15.1: Strengthening the Technical and Logistical Capacity of GGW Structures and Local Development Initiatives of Member States
		MST.15.2: Strengthening the Scientific and Technical Competencies of the Structures and other Actors of the Great Green Wall.

	PIP.16 Terroirs Development and Resilience Support Centres (CADRT)	MST.16.1: Creation and Operation of the Terroirs Development and Resilience Support Centres (CADRT)Institutional Support from Member States  MST.16.2: Outreach, Information, Initiation and Support-Advice to primary actors and beneficiaries in the sustainable management of natural resources and socio-economic development.  MST.16.3: Initiation to the Planning and Evaluation of Local GGW Activities and the Early Warning and Response System (EWRS) of primary actors.
E. INFORMATION, MARKETING AND ADVOCACY (IMA)	PIP.17 Monitoring-Evaluation and Information Knowledge  PIP.18 Communication,	MST.16.4: Strengthening the capacities of the coordination structures (PAGGW, SNGGW and CLDD) and local Terroir Development initiatives.  MST.17.1: Establishment and operationalization of Information, Observatory and Early Warning and Response Systems (SIOBAP).  MST.17.2: Mechanism for the Publication and Dissemination of Scientific and Technical Information and Innovation and the Forum of Stakeholders and Beneficiaries (FORAB)
	Marketing and Advocacy	MST.18.1: Youth Green Caravan MST.18.2: Women's Green Platform MST.18.3: Network of Ambassadors and Program Champions for GGW Programs MST.18.4: Structuring and Functioning of National Alliances (NAs)

Table.2: Programmatic architecture of the Major Strategic Axes (MSAs) or Portfolios (FPs) of the 2021-2030 Decennial Priority Investment Plan (DPIP).

# PF: SUSTAINABLE MANAGEMENT AND DEVELOPMENT OF LAND, WATER AND BIODIVERSITY(SMDLWBIO)

#### Introduction

The Sahelian terroirs of the Great Green Wall are strongly affected by the effects of climate change and anthropic actions, which mostly affect the Natural Capital with, in particular, the advanced degradation and its consequences on the land, the decrease in water resources (hydrological and hydraulic regimes) and the loss of biodiversity observed in all the Sahelian terroirs. Therefore, one of the urgent needs is the restoration, protection, and conservation of this important heritage of natural resources by ensuring the resilience of ecosystems. The economic cost of the absence of sustainable management actions for productive bases can be enormous and a limiting factor for economic development, a source of food insecurity and even an increase in famine, at a time when population growth is on the rise and food demand is increasing.

Urgent action is needed in particular to restore, recover and develop land and water and to preserve biodiversity in order to improve and strengthen all agricultural, forestry and pastoral production systems in the region.

In these arid and semi-arid zones, the socio-economic development, well-being, and food self-sufficiency of the populations depend essentially on the state and productivity of natural resources, particularly land and water availability. In spite of its arid context, the region is endowed with considerable surface and groundwater resources estimated at 720 billion m3, according to DODO et al, 2020, which are unfortunately very insufficiently mobilized.

The health crisis of COVID-19 and its multiple economic and social consequences will have strong repercussions on the world food system and a global food crisis and even famine in the next decade. This high impact on the urgent need for social, economic and security resilience strengthens the recurrent challenge of food security and job creation. Faced with this situation, efforts to increase agricultural production must be supported by increasing arable land through the restoration and development of large tracts of degraded land and establishing Land Degradation Neutrality (LDN), particularly in countries south of the Sahara.

Sustainable management and development of land and water resources, particularly through the restoration and recovery of vast areas of degraded land, and the mobilization and integrated management of water resources, represent an accelerating force for socio-economic development and resilience. They enable the increase of productive base through the availability of more formerly degraded arable land and water and to foster agricultural growth and diversification, the pillar of land development through the intensification of production systems and the optimization of value chains. In most Sahelian countries, the national GDP is heavily dependent on agriculture, which can, in some countries, represent more than 50% or even 70% of the national GDP. This significant contribution of agriculture to national GDP actually reflects a virtual effect of development and productivity of agriculture in these Sahelian countries due to the low contribution of the secondary and tertiary sectors, which are severely handicapped by the lack of investment despite the importance of existing economic business opportunities in the region.

The development of family farming that is more compatible and more adapted to the scale and land tenure realities of the terroirs, as well as a community approach based on family units that are very characteristic of the terroirs, will be one of the priorities. The expected agricultural development will be based on increasing the area and fertility of degraded, restored, and recovered land in agro-sylvo-pastoral production systems and the use of appropriate climate-smart methods, such as agro-ecology and agro-forestry. The growth and diversification of agricultural production, as well as the processing of agricultural products and value chains should be pillars of industrial emergence and development through the optimization of the industrial clusters generated.

The GGW Initiative's vision of creating and integrating Rural Production and Sustainable Development Hubs in the GGW terroirs is at the core of this issue. The priority given to the revitalization and strengthening of agricultural, pastoral and forestry production bases and systems will be done through the programs of the Portfolio (FP) Sustainable Management and Development of Land and Water Resources and Biodiversity (SMDLWR)" and mainly those on the restoration and conservation of land and water resources and the protection of biodiversity. These Activities should be the priority of the GGW Initiative's Decennial Priority Investment Plan (DPIP) 2021-2030.

#### 1. Strategic objectives

The strategic objective and vision assigned to the GGW Initiative is the revitalization and strengthening of agricultural, pastoral and forestry bases and production systems in order to create and integrate Rural Production and Sustainable Development Hubs in GGW terroirs.

Sustainable management, conservation, and protection of land (SLM) and water resources are at the core of this land-use planning issue and represent a priority in the Sahelian zone given the state of land degradation. The overall objective is to combat desertification and its impacts and to reverse the strong trend of land and water resource degradation and slow down the loss of biodiversity. The objective is to undertake over the next decade the rebuilding and protection of natural capital by balancing the ecological footprint through the scaling up of land and biodiversity restoration and development, as well as the mobilization and integrated management of water resources. The GGW's footprint is estimated at 332 million ha. During the next decade 2021-2030, a global area of about 58 million additional hectares of degraded land will be restored and recovered in eleven (11) countries. This represents 25% of the 232 million hectares, i.e. 70% of the GGW area.

Reducing the large ecological footprint of local or exogenous terroirs requires a massive awareness campaign and a drastic reduction in harmful anthropogenic effects, the substitution of firewood by alternative renewable energies and improved technologies, and the fight against poverty. The fight against poverty, the main source of the ecological footprint in the terroirs, requires increasing the productivity and production of agricultural, pastoral and forestry systems and sustainably optimizing the resilience capacities of the communities in the GGW corridor.

The main Specific Objectives (Objectives) are in particular:

Objs.01. Ensure the restoration and management of 20 million in 2025 and 38 million additional hectares in 2030 of degraded land and the achievement of food security and resilience of rural populations and ecosystems in the various GGW lands,

Objs.02. Contribute to countries' commitments on Land Degradation Neutrality through National Determined Contributions including voluntary national targets,

Objs.03. To rehabilitate and revitalize the various water points and hydraulic infrastructures, to increase the efficiency of water use in the processes of growth and diversification of agricultural production and to ensure the integrated management of water resources and hydro-agricultural and watershed development,

Objs.04. Inventory and revitalize special ecosystems and natural habitats and other sites of animal and plant biological diversity and establish new protected areas to develop ecotourism opportunities,

Objectives.05. Protect and sustainably conserve land and water resources through the development of climate-smart agriculture using proven hydro-agricultural development techniques (drip irrigation, underground irrigation networks, etc.),

Objs.06. Support the establishment of a concerted framework for the governance and development of transboundary resources and ecosystems.

#### 2. Global Impact Indicators (GII)

The GGW Initiative has a societal and environmental objective and a primary ultimate goal of inclusive and resilient social, economic, health and safety development, consistent with the objectives of sustainable development and green growth by 2030.

The achievements of the first decade in the key areas of the strategy, while having real impacts, remain clearly insufficient and need to be developed to meet the challenge of inclusive development in its various aspects. In addition to the fundamental challenge of mobilizing significant financial resources in the order of eight (08) billion US dollars over ten (10) years targeted in this Decennial Priority Investment Plan, the efficient implementation of the key Programs for sustainable management of land and water resources and biodiversity in compliance with the Global Impact Indicators (GII) is also a challenge. Thus, it is expected to be undertaken throughout the eleven (11) Member States in the next decade.

Therefore, the Sustainable Management and Development of Land and Water Resources and Biodiversity represents the most important portfolio of the 2030 DPIP. This Portfolio shall consist of three specific profiles whose objectives are to contribute consequently to the revitalization of the productive systems of the GGW terroirs in order to create Rural Production and Sustainable Development Hubs. The area covered by the GGW in the eleven Member States is approximately 332,000,000 ha. This Portfolio will ultimately lead to a master plan for sustainable development throughout the GGW areas and will meet at least 50% of land needs, the mobilization and integrated management of water resources with 40% coverage (rate of access to water) of hydraulic needs and hydro-agricultural developments that will restore biodiversity:

- Indicators in terms of Integrated Water Resources Management and biodiversity will enable the reintroduction of agricultural and forest crop production systems, pastoral land, revitalized, developed and protected perimeters of particular ecosystems and conservation by: the mobilization of 50 to 60% of the water resources potential, the rehabilitation and creation of sufficient and operational equipped hydraulic structures to cover the water needs of agro-sylvo-pastoral systems, hydro-agricultural developments and the coverage of at least 60% of domestic water and sanitation needs, particularly drinking water.
- the development of watersheds and irrigated perimeters in more than 60% of the arable land to develop a strong growth in land productivity and diversification of agricultural production to support the average agricultural GDP of the eleven countries of the Great Green Wall area in which the primary sector and in particular agriculture contributes the most to the national GDP.
- the promotion of access and ownership of rural women to land for at least 15% of the developed land in each terroir to support local initiatives for women's empowerment through women's entrepreneurship and micro finance,
- the establishment and equipment of two (02) resource stations in the terroirs for rural development equipment and materials per country, as a complement to traditional public services in terms of logical intervention and maintenance capacities for the sustainability of supply and the maintenance and renewal of rural equipment and materials,
- Assistance to States in the form of various materials and equipment to support sustainable management and protection of natural resources and agricultural production activities by mobilizing at least 50% of RECALOST's investments.

#### 3. Priority Impact Programs (PIP) (SMDLWB)

In the terroirs of the Sahel-Saharan strip, socio-economic development, food security and domestic needs are highly dependent on Natural Capital, which constitutes the real development heritage of these terroirs. The advanced land degradation and reduction of water resources and the loss of biodiversity resulting from the effects of desertification, climate change and anthropogenic pressure on relics have strongly affected and altered this natural capital in the Sahel-Saharan strip, which has become a breeding ground for poverty, food insecurity and social conflicts. Thus, the degradation of natural resources poses real threats at the economic, environmental and security levels. Various reports on land degradation indicate that twenty-four (24%) of useful agricultural land is degraded, causing an estimated economic loss of more than US\$400 billion (USD) per year in terms of loss of agricultural production and productive green jobs.

Land restoration, recovery and conservation have become priorities in the face of malnutrition and precariousness and have an economic value and will be an opportunity to attract significant flows of green investment.

The sectoral framework for planning and implementation of the Sustainable Land Management component is based on the identification and structuring of PP Priority Programs (PP)and the estimation of the funding required to ensure that the Global Impact Indicators (GII) objectives and targets are met.

The "Sustainable Management and Development of Land and Water Resources and Protection of Biodiversity" Portfolio is based on the following two (02) key Programs:

- PPI.01.Restoration and Development of Land and Water Resources and Conservation of Biodiversity,
- PPI.02Mobilization and Integrated Water Resources Management.

The implementation and performance of the Priority Program in terms of impacts are based on Major Strategic Targets (MSTs) which are reference markers directing the Priority Program's Flagship Actions.

## 3.1.PP. LAND RESTORATION AND DEVELOPMENT AND PROTECTION OF BIODIVERSITY (LRDBIO)

#### Introduction

In the terroirs, the relevant national policies and strategies for agricultural development, job creation, Sustainable Land Management (SLM) and biodiversity conservation are closely related and interlinked. Several facts and successful experiences indicate the relevance of integrating components on land restoration, land reclamation and biodiversity conservation in Agricultural Development Programs to boost the leveraging and enhancer role of agricultural production growth, creating productive green jobs, and combating food insecurity and malnutrition. Thus, programs for the restoration and conservation of land and biodiversity, the main sources of wealth and food, should be at the core of national and regional priorities and hold an important part in the inclusive development programs in the terroirs.

The implementation of a bold program to restore and reclaim degraded lands and the integration of various agricultural value chains into the GGW corridor should boost green economic growth, agricultural processing, and runoff impacts to industrial clusters. As part

of this framework, the Comprehensive Africa Agriculture Development Programme (CAADP) of AUDA/NEPAD, is slow to produce the expected results and the 2003 Maputo commitment of States to increase their investments in the agriculture sector by at least 10% of their national budget is slow to materialize. The updating of the operational approach of the PDDA by giving a leading role to the sustainable management and development of land and water and the protection of Biodiversity (SMDLWBIO), should facilitate the mobilization and give more efficiency to investments towards land and its development in the increased needs of agricultural production and diversification in the next decade.

#### 3.1.1. Strategic objectives

The overall objective of this program is to make Land Restoration and Conservation and biodiversity protection powerful levers and accelerators of agricultural production growth, the creation of productive green jobs to combat food insecurity and malnutrition, as well as carbon sequestration and efficiency and contribute to the achievement of SDG 15.

The goal is to optimize the performance of actions on the major strategic targets (MST), in particular the Global Impact Indicator (GII), through the specific objectives (Objectives) below:

- Objs.01. Optimize, popularize, and preserve the humanistic, eco-systemic and multisectoral approach, integrating Restoration actions, land reclamation, climate management, agricultural growth and wealth and employment generation.
- Objs.02: to foster and strengthen the technical and logistical capacities and performances of the States in the conservation, restoration of land, and the consequent developments through efficient techniques and practices of Sustainable Land Management.
- Objs.03: support a relevant communication and advocacy plan on-site and importance of land and water resources restoration and development and mobilize at least 50% of the funding and investments required in land restoration and recovery activities,
- Objs.04: To contribute effectively to the operational process of national commitments on neutrality in terms of land degradation to achieve at least 80% of national targets by 2030 in terms of restoration and LDN and the implementation of appropriate speculations,
- Objs.05: Strengthen activities for the development, rehabilitation and protection of biodiversity and other fragile ecosystems and the creation of new community protected areas,
- Objs.06: To achieve production efficiency and productivity of agro-sylvo-pastoral systems and the potential for carbon sequestration on family farms through climate-smart techniques and therefore contribute significantly to food and nutrition security, ecological transition, and ultimately green growth.

#### 3.1.2. Specific Impact Indicators (SII)

In terms of indicators, the 2030 DPIP foresees on the specific profile of land recovery and restoration, the realization of 58,000,000 ha distributed between the two five-year phases, of which twenty (20) million ha (2021-2025) and thirty-eight (38) million ha in 2026-2030, allowing the improvement of agricultural productivity, carbon sequestration and the creation of green jobs.

#### 3.1.3. Major Strategic Targets (MST)

In the implementation of the Land Restoration and Development and Biodiversity Protection Program, the following four (04) Major Strategic Targets (MSTs) should be highlighted:

- (i) Restoration and management of land and other terrestrial ecosystems,
- (ii) Development, Rehabilitation and Protection of Biodiversity and Protected Areas,
- (iii) Development of agro-sylvo-pastoral systems,
- (iv) Strengthening the logistical capacities and technical and scientific skills of national and local structures and stakeholders

#### 3.1.3.1. Restoration and Development and Land other Terrestrial Ecosystems

This Major Strategic Target (MST) focuses on the large-scale restoration and recovery of degraded land and other terrestrial ecosystems through intensive reforestation of adapted and high economic value tree species, ANR perimeters and other SLM techniques as well as the rehabilitation, management and protection of community forest landscapes and areas at local and transboundary levels.

## 3.1.3.2. Development, Rehabilitation and Protection of Biodiversity and Protected Areas

The objective is to update the inventory wetlands, relict and fossil natural habitats and other degraded ecosystems at the local level and to undertake their revitalization and protection through the establishment of new protected areas for the reconstitution, diversification and conservation of biological genetic resources. Strengthen seed and germplasm banks, forest and animal parks, arboreta, and other forms of collections in a global territorial management scheme, integrating the exploitation of ecosystem services.

#### 3.1.3.3. Development of agro-sylvo-pastoral systems

Several facts and successful experiences in Sustainable Natural Resource Management indicate that best agricultural practices such as agro-ecology and agro-forestry, low-carbon pastoral and forestry practices contribute strongly to the performance of land restoration and reclamation programs. The strengthening and integration of agro-sylvo-pastoral systems in actions to restore and reclaim degraded land gives them a real economic scope and makes them a powerful lever for agricultural growth and the creation of productive green jobs. This integrated approach also fosters the fight against food insecurity and malnutrition and the building of Rural Production and Sustainable Development Hubs targeted in the transformative vision of the Great Green Wall for the Sahel Initiative.

The MST aims to promote the RDP approach (Restoration, Development and Production) integrating these actions into the same Program. At the operational level, it is a question of carrying out integrated restoration actions with undergrowth grazing production areas in reforestation plots, hydro-agricultural developments, and the development of various agrosyvo-pastoral production systems in community or individual perimeters. Overall, the MST aims to promote, in each national GGW component, the creation of a mosaic of community or individual perimeters restored and developed and productive in the image of Integrated Community Agricultural Farms (ICAF), multipurpose or nutritious gardens as part of village initiatives to support the restoration and development of degraded land perimeters in

order to optimize the capacities of resilience to climate change and the fight against poverty.

#### 3.1.3.4. Strengthening the Logistical and technical capacities of actors

Beyond the stated willingness to engage in a vast project of Sustainable Management and Development of Land and Water Resources and Biodiversity Conservation, the availability of material, equipment and technical and scientific skills are essential. Public forestry, agricultural and pastoral services urgently need to strengthen their logistical and technical capacities to support national and local GGW entities.

The Major Strategic Target (MST) consists in providing Member States with the material and equipment necessary for the activities of reforestation, agriculture, market gardening, protection and conservation of biodiversity, Monitoring/Evaluation, bush fire control, development of pastoral, agricultural and hydraulic resources etc.), as well as the strengthening of technical capacities for design, strategic planning and operationalization.

## 3.2. IPP .MOBILIZATION AND INTEGRATED MANAGEMENT OF WATER RESOURCES (MOGIRE)

#### Introduction

Water and soil availability and fertility are limiting factors in the development of arid zones in Sahelian terroirs. Water control is an imperative and a limiting factor for the sustainable development of Sahelian countries where more than 80% of the population live from agriculture and livestock farming and often have no access to drinking water and sanitation.

Given the central place and vital role of water in the lives of people and the socioeconomic development of the regions, the mobilization and integrated management of existing water resources are priorities in the management and development of the potential of natural capital and in the achievement of social, economic and health resilience, which has become a strategic objective of the post-COVID-19 period. In the terroirs of the GGW countries, access to water and sanitation in quantity and quality constitutes a strong and significant social demand that has not been resolved to any great extent. The control, protection and integrated and efficient management of water resources, at the heart of all economic and health development efforts, will be among the main challenges of the next decade, at the global level and in particular in arid zones such as the Sahel-Saharan regions covered by the GGW.

The DPIP will place particular emphasis on the mobilization, control, and integrated and concerted management of water resources, through the creation and rehabilitation of water access structures, hydro-agricultural developments, hill reservoirs and other run-off water storage tanks. The creation at the local level of rural resource stations (R2S), in addition to traditional public services, responsible for the supply, maintenance and advisory support in rural materials and equipment and rural techniques is also to be implemented to facilitate the performance and sustainability of these actions.

#### 3.2.1. Strategic objectives

The overall objective is the inventory, control, and efficient management of water resources through the creation and rehabilitation of water access structures, the revitalization and development of various water points, the integrated management of local and transboundary water resources within a planned framework of needs and hydro-

agricultural developments. Specifically, the water resources program has the following objectives:

- Mobilize and undertake integrated management of local and transboundary water resources.
- Strengthen and develop networks of hill reservoirs and mini hydro-agricultural dams.
- Inventory and develop the main watersheds.
- Rehabilitate and develop wetlands for the reconstitution and/or creation of biological diversity.

#### 3.2.2. Specific Impact Indicators (SII)

The DPIP provides as specific impact markers:

- Mobilized water resources and their integrated management through the creation and development of hydraulic, hydrological, and hydro-agricultural works and infrastructures.
- The reversal of the trends of scarcity and degradation of water resources.
- the rate of coverage of water needs at the domestic level and agricultural development.
- the acceleration and level of restoration of degraded land and hydro-agricultural developments and their impact on the growth of agricultural production and the restoration of biological diversity.
- the development, rehabilitation and protection of biodiversity areas and sites (Classified Forests, Wildlife Reserves, National Parks, Community Forests).

#### 3.2.3. Major Strategic Targets (MST)

The implementation of the priority program "Waters", relies on the MSTs:

- (i) Creation and rehabilitation of hydraulic works and hydro-agricultural developments,
- (ii) Development and Conservation of Wetlands and Watersheds,
- (iii) Integrated management of local and transboundary water resources in the terroirs,
- (iv) Training, maintenance and advisory support in rural equipment and hydro-agricultural development techniques.

#### 3.2.3.1. Integrated Management of local and Transboundary Water Resources

The land and water resources of the terroirs are normally development opportunities and screens to economic and social precariousness but can also be sources of tension and social confrontation in the absence of a concerted management and development plan, integrating the various beneficiaries and stakeholders.

The operationalization of such a Major Strategic Target (MST) should be based primarily on the priority actions (PA): (i) the structuring at the local level of a consultation framework on the management and development of water resources, (ii) the control and integrated management of water resources as part of a bold initiative for the development and development of agricultural, pastoral, forest and aquaculture lands, (iii) the intensification throughout the terroirs, of irrigation systems for small and medium exploitation perimeters.

## 3.2.3.2. Creation and Rehabilitation of hydraulic structures and hydroagricultural facilities

The goal is to ensure the mobilisation and exploitation of the potential of water resources through the rehabilitation and creation of hydraulic works (boreholes, pastoral wells, etc.), equipped with solar or wind-powered dewatering equipment and motor pumps on the scale of the Great Green Wall's terroirs.

#### 3.2.3.3. Development and Conservation of Wetlands and Watersheds

As part of the mobilization and conservation of water resources and their integrated management, a large component should be intended for the development and revitalization of water points (backwaters, ponds) in the fossil valleys and the construction of hill reservoirs (stone barriers, retention basins, dams, etc.), coupled with reforestation activities around them, as well as the development and exploitation of the various wetlands and other special biodiversity ecosystems in forest and animal parks and the development of agricultural and pastoral land in the catchment areas.

## 3.2.3.4. Training, maintenance, and advisory support in rural equipment ad hydro-agricultural development techniques.

The availability and maintenance of equipment and materials for hydraulic structures and the choice and control of efficient hydro-agricultural development techniques are often lacking and affect the yield and sustainability of rural projects in the areas. Therefore, among the priority actions under this target of the Priority Program relating to the mobilization and integrated management of water resources should be included in support of operational activities: (i) the creation throughout the local warehouses and maintenance teams for rural materials and equipment, (ii) a unit for training and upgrading and advisory support for hydro-agricultural development techniques and in particular irrigation.

#### 4. ESTIMATE OF FUNDING NEEDS

The estimate of the global financing needs to carry out the key activities of the Priority Programs of the SMLWRBIO component in the 11 member countries is based on the following specific parameters:

- (i) the overall useful area to be restored, approached by analysing the biophysical profile (relief, climatic zone, accessibility) and the socio-economic and ethnological profile of the local communities and their populations (standard of living, land tenure, level of security, level of awareness),
- (ii) the hydro-climatic and edaphic parameters of the soils as well as the ethnobotanical relationships, defining the utilitarian and societal links between Communities, local populations, and the species of the plant capital of their environment,
- (iii) restoration conditions and techniques (availability of water and reforestation plant species and labour,
- (iv) the symbolic participatory budget of the communities and village groups, which corresponds to the financial contributions through self-financing (guarding costs, human investments, income from the exploitation of opportunities, sale of fodder generated in the reforested perimeters and agricultural and market garden produce from the multipurpose gardens, etc.).

Table 4 below summarizes the priority financing needs in each of the portfolios (PF) of priority projects and programs and, as a guideline, the annual planning of needs in the different programs as well as the Global Impact Indicators (GII) expected in each Portfolio.

#### PF 01. SUSTAINABLE MANAGEMENT AND DEVELOPMENT OF LAND AND WATER RESOURCES AND BIODIVERSITY (SMDLWRB)

The "Sustainable Management and Development of Land and Water Resources and Biodiversity" portfolio is the most important and priority portfolio in terms of impacts and investment volume. It is the foundation and accelerating lever for development in these predominantly agro-sylvo-pastoral areas where the increase in arable land through restoration activities and the availability of fresh water for domestic needs and agricultural activities are the pillars of socio-economic development, food security and job creation. The 2030 ambition of restoring and developing 80 million hectares implies integrated natural resource management and the nexus Land Restoration - Integrated Water Resources Management (IWRM) - Promotion of renewable energies and Strengthening of logistical, scientific, and technical capacities (RECALOST Program) considering the outdated means of intervention of the rural development services of the Member States.

PRIORITY ACTIONS PROGRAMS (PIP)	MAJOR STRATEGIC TARGETS (MSTs)	KEY INDICATORS/EXPECTED IMPACTS	FINANCING (×100US\$)
PROGRAMS (PIP)  PIP01: Restoration and Development of Land and Other Terrestrial Ecosystems  Total PIP1		100,000,000 ha restored, developed, and protected	
	Restoration and Development of Land and Other Terrestrial Ecosystems	Sequestration of approximately 250 MtCO2 and 60% reduction of the carbon footprint	
		Achievement of NDT targets in 40% of the lands and ecosystems in the GGW corridor	2 538 050
	Strengthening of the technical skills of national and local structures and actors	creation of 35 centers for agricultural equipment and materials and improvement in maintenance	74 648
	Development of agro-sylvo-pastoral systems -	food security and self-sufficiency in more than 50% of GGW terroirs.	746 485
		30-50% growth in agro-sylvo-pastoral production	
	Development, Rehabilitation and Protection of Biodiversity and Protected Areas Significant contribution to the achievement of SDO6 targets	Development and Protection/conservation of 100 new Protected Areas	373 243
Total PIP1			3 732 427
PIPO1: Restoration and Development of Land and Other Terrestrial Ecosystems  Total PIP1  PIPO2: Mobilisation and Integrated Management of Water Resources	Creation and Rehabilitation of hydraulic works and hydro-agricultural developments	Creation and rehabilitation of 10,000 hydraulic works and protection of various water points	
		Significant contribution to the achievement of SDG6 targets	545 610
	Development and conservation of wetlands and watersheds	80% of biodiversity sites, fragile ecosystems and wetlands identified, developed, rehabilitated, and conserved	272 805
	Training, maintenance and advisory support in rural equipment and hydro-agricultural development techniques	30 hydraulic training and maintenance centers created and operational	136 403
	Integrated management of local and transboundary water resources	Coverage of the drinking water needs of 80% of households and 40% of agricultural needs.	409 207
	<b>() Y</b>	Access to sanitation services for 50% of households in the region.	
Total PIP2			1 364 026
Total SMDLWB			5 096 453

## P.F. CLIMATE ACTIONS AND GREEN ECONOMY (CAGE)

#### Introduction

Climate urgency is a central issue in any development and natural resource management action. Thus, the time for action to manage the various climatic impacts has become an imperative, particularly in the arid and semi-arid terroirs of the Sahel-Saharan. Economic, social and health resilience, which is the main objective of countries in the next decade 2021-2030, necessarily involves controlling climate impacts and vulnerability to climate risks through key climate management actions.

The Priority Actions (PA) on the Major Strategic Targets (MST) of the Priority Programs (PP) of the Climate Actions and Green Economy (CAGE) Portfolio (FP), focus on the adaptation and resilience to climate change, reduction of vulnerability to climate risks and more globally of the carbon footprint to ensure resilient and sustainable development in the regions. They mainly strive to foster and develop climate-smart, low-carbon footprint practices and techniques in order to establish the ecological transition, the green economy, and the main sustainable development objectives over time, on the 2030 trajectory.

#### 1. Strategic objectives

The global objective is to promote and strengthen actions for the Sustainable Management and Development of Land and Water Resources, the conservation of biological diversity, and socio-economic development while reducing vulnerability to climate risks and the carbon footprint and preserving natural ecological processes that support production systems and in particular sustainable agriculture.

The strategic objectives of this portfolio are (i) the large-scale extension of Integrated Community Agricultural Farms (ICAF) whose pilot phases have been successful and the Sustainable Management of Oasis Systems (ii) the promotion and development of Renewable Energies and Resilient Infrastructures in GGW terroirs.

The direct impacts of these actions will be to ensure food security for at least 50% of the population through the establishment and operation of 20 to 50 Integrated Community Agricultural Farms (ICAF) and the development of agricultural, forestry and pastoral value chains. They aim at reaching more than 1,300,000 households through the promotion of renewable energies (60% substitution of traditional domestic energy sources) by increasing the rural electrification rate by 30% and covering more than 50% of domestic energy needs. It is especially envisaged to promote the development of agricultural -smart practices and techniques in more than 40% of the projects, the creation of at least 5 climate-smart villages/countries, the transformation of production and the implementation of the mechanism and techniques for evaluating, integrating and monitoring ecological and climatic risks in all interventions in the regions.

The Specific Objectives (Objs) based on the MSTs and their indicators are mainly:

Objs.01. Improve and foster Sustainable Agriculture Production Systems, including agricultural, forestry, pastoral and aquaculture production systems integrating climate-smart practices and enhancing resilience to climate change.

Objs.02. Strengthen the dissemination throughout the terroirs of the Integrated Community Agricultural Farms (ICAF) whose pilots have strongly contributed to the areas of implantation to the adaptation of local populations to climate change by improving food security, nutrition, and household incomes.

Objs.03. Strengthen operational skills to assess the carbon stock of the soil and agricultural, forestry and pastoral systems as well as the carbon balance and carbon footprint in the various

production systems and infrastructures, in order to better determine the degree of vulnerability.

Objs.04. Support States in assessing progress in the implementation of commitments at the level of Nationally Determined Contributions (NDCs).

#### 2. Global impact indicators

The implementation of the Priority Climate Actions will have the following main expected results:

- (i) revitalization and resilience to climate impacts of ecosystems and production and processing systems, by reducing vulnerability to climatic and ecological risks on at least 70% of the terroirs,
- (ii) ecological transition and resilient socio-economic development through appropriate management of the carbon footprint in the various productive systems and human activities, (iii) resilience and food security of at least six hundred thousand (600,000) rural households in extreme poverty in 2025 and another seven hundred thousand (700,000) in 2030,
- (iv) the substitution of more than 60% of traditional domestic biomass energy sources by clean energy sources such as solar and wind power and bioenergy,
- (iv) the promotion and extension of sustainable agriculture at the local level and the creation of at least ten (10) Climate-Intelligent Villages (CIVs) in each Member State by 2025 and eventually two to three CIVs per UCIDD by 2030,
- (v) the establishment on a local scale and in almost all the terroirs of at least two (02) structures for forecasting, integrating, and monitoring ecological and climatic risks within the reach of local communities and populations.

#### 3. Impact Priority Programs (IPP)

The Climate Actions and Green Economy Portfolio (CAGE) is divided into three (03) Priority Programs (PP):

- IPP. 3.01 Adaptation and Resilience to Climate Change and Green Growth
- IPP.3.02. Green Growth and Renewable Energy Development
- IPP. 3.03 Management of vulnerability to climate risks.

#### 3.1. IPP . ADAPTATION AND RESILIENCE TO CLIMATE CHANGE

This Program aims at the resilience of Local Communities and Ecosystems to the effects of climate change, through the implementation in the Major Strategic Targets (MSTs) of high impact Priority Actions (PAs) on the optimization of resilience capacities to climate change and risks and of ecological transition processes and green growth.

#### 3.1.1. Strategic objectives

The global objective is to develop priority actions to accelerate the green transition and ultimately green growth by sharply reducing the carbon footprint in all interventions and social, economic, health and ecological resilience. The aim is to increase carbon sequestration capacity and the number of carbon sinks through SLM best practices, in particular large-scale reforestation and agro-ecological development.

#### 3.1.2. Major Strategic (MST)

The Objectives and Global Impact Indicators (GII) of the Priority Program (PP) are structured around the implementation of Priority Actions (PA), mainly on the Major Strategic Targets (MST):

- (i) Promotion and Development of smart agriculture,
- (ii) Development and enhancement of agro-sylvo-pastoral resources and value chains

#### 3.1.2.1. Promotion and Development of Smart Agriculture

Smart agriculture is the best form of adaptation and resilience for Sahelian populations. It consists in carrying out combined actions of agro-ecology, agro-forestry, and soil fertility management, with the aim of sustainably increasing agricultural productivity and production, maintaining activities, and generating income through the creation of green productive jobs. Smart agriculture is based on the integrated approach of agro-sylvo-pastoral speculation and land restoration actions in a multisectoral, eco-systemic and inclusive framework allowing the sharing of approaches such as the extension and dissemination of agroecology, Integrated Community Agricultural Farms (ICAF), Nutritious Gardens with impacts by promoting climate-smart practices such as Climate smart Villages.

### 3.1.2.2. Development and Enhancement of agro-sylvo-pastoral resources and value chains

The target aims at the adaptation and resilience of local communities and populations through the creation of livelihoods, productive green jobs, sustainable wealth, and prosperity.

The main objective is to develop and sustainably exploit the productive potential of agro-sylvo-pastoral and water resources at community and family level through Integrated Agricultural Production and Processing Systems (IAPPS).

IAPPS integrates the development of various agricultural activities, including horticulture, market gardening, poultry, sheep/goat breeding, fodder crops, beekeeping, fish farming, as well as the development of hydraulic and energy works, hydro-agricultural and irrigation systems and the improvement of communication routes. This integrated system facilitating access to energy and water should increase the productive capacities of speculation and crops by alternating rain-fed and off-season irrigated crops and facilitate the establishment of units for the conservation and processing of production and value chains and the development of industrial clusters.

#### 3.2. IPP. GREEN GROWTH AND RENEWABLE ENERGY DEVELOPMENT

#### Introduction

The energy deficit is a major obstacle to the socio-economic development of countries. The GGW area has a huge potential in renewable energy, particularly solar and wind power, but unfortunately under-exploited.

#### 3.2.1 Strategic Objectives

This program aims to create and strengthen renewable energy infrastructure, more specifically the acquisition of clean energy production tools and the implementation of priority actions.

#### 3.2.2. Major Strategic Targets

The major strategic targets are aimed at developing and strengthening resilient energy infrastructures to promote the green economy and the development of techniques and technologies adapted to large-scale renewable energy production.

#### 3.3. IPP. VULNERABILITY MANAGEMENT TO CLIMATE RISKS

#### Introduction

The Program is intended to reduce the impacts of climate change and risks and reduce the carbon footprint by focusing on green energy, particularly solar and wind power, to reduce greenhouse gas emissions.

#### 3.3.1. Strategic objectives

Identify, assess, and manage the vulnerability of various agro-forestry and pastoral and other ecosystems as well as various productive systems and infrastructure to reduce carbon footprint and achieve social and economic resilience and overall resilient development and ecological transition. Specifically, this will include:

Objs.01. To support States in determining the carbon footprint and bringing productive systems and development infrastructures into line with climate standards as part of the NDCs,

Objs.02. To train experts and planners in the assessment, integration and monitoring of climate-related natural hazards and disasters in projects and programs.

#### 3.2.2. Major strategic targets

- (i) Promotion and Development of Renewable Energies and Resilient Infrastructures.
- (ii) Assessment of the Carbon Balance of Soils and Productive Systems.

#### 3.2.2.1. Promotion and Development of Domestic Renewable Energies

In the Saharan-Saharan countries, on average, more than 60% of families have no energy alternatives other than biomass. This percentage, which is much higher in rural areas, is a source of strong anthropogenic pressure on natural resources. Thus, one of the major challenges in reversing this trend is to accelerate the substitution of biomass use by renewable energy and improved energy efficiency technologies.

The availability and self-sufficiency of energy, mainly clean energy, to cover the mainly domestic energy needs in rural areas (lighting, processing and conservation of agricultural products and cooking) and ultimately those of economic activities require the implementation of community development actions for clean energy (ADCEP) at the scale of the UCIDD for the proper and sustainable coverage of energy needs.

This Major Strategic Target is intended actions to mitigate and reduce the carbon footprint in development activities, provide clean energy and promote the most carbon-efficient options in the choice and operation of socio-economic infrastructure and domestic energy. Thus, the green investments of this target are oriented towards activities to raise awareness of energy conservation, the harmful effects of deforestation and the degradation of vegetation cover, which account for 11% of greenhouse gas emissions, but also the development of alternative energy sources including solar and wind energy, bioenergy, improved stoves and solar cookers and improved carbonization technologies. The multifaceted impacts are social, environmental, and climatic in nature, by enabling the respect of the fundamental right of local communities and populations in the regions to access energy and the drastic reduction of the strong pressure on biomass, in particular forest resources through the use of firewood and charcoal.

## 3.2.2.2. Energy efficiency and assessment of the carbon balance of soils and productive systems

Climate action, in addition to adaptation and resilience, also intends to mitigate by reducing the carbon footprint to limit greenhouse gas emissions in the various interventions, particularly

in productive systems, and to better contain global warming and sequestration activities through the development of carbon sinks and compensation systems. To this end, the carbon balance resulting from the periodic assessment of stocks and the development of production systems are useful for monitoring the efforts made in the NDCs and allow to better meet the parameters of the conservative measures in green projects. In this context, activities in the Member States should focus mainly on updating carbon footprints and on training and upgrading in this area.

#### 4. ESTIMATE AND PLANNING OF FINANCING NEEDS

Table 4 below gives the costs and indicative annual financial planning and structuring of the target sources of anticipated green financing as well as the main global impact indicators (GII).

#### PF 02. CLIMATE ACTIONS AND GREEN ECONOMY(CAGE)

Climate urgency is a central issue in any action for the development and management of natural resources. Thus, the time for action to manage the various climate impacts has become an imperative, particularly in the arid and semi-arid terroirs of the Sahel-Sahara zone. Economic and health resilience, the main objective of countries in the next decade 2021-2030, necessarily involves controlling vulnerability to climate risks. The Climate Actions for Adaptation and Resilience to Climate Change focus mainly on the promotion and development of innovative low-carbon practices and techniques through the establishment of Climate-smart Family Farming Villages (VCAFs) to accelerate the adaptation and resilience of grassroots communities and populations, particularly women and youth.

PRIORITY ACTION PROGRAMS (PIP)	MAJOR STRATEGIC TARGETS (MSTs)	KEY INDICATORS/EXPECTED IMPACTS	FINANCING (x100US\$)
PIPO3: Adaptation and Resilience to Climate Change through Green Growth	Development and Enhancement of the potential of agro- sylvo-pastoral resources	50% of terroirs are resilient to Climate Change  At least 50% of rural electrification is provided by renewable energy.	576 000
	Promotion and development of agro-ecology and resilient agro-sylvo-pastoral production systems	Good control of low-carbon production practices in 50% of the agro-sylvo-pastoral production systems of the terroirs.	192 000
Total PIP3			768 000
PIP.04 Strengthening of energy infrastructures of countries  Total PIP.04	Green Economy Promotion  Development and strengthening of resilient energy infrastructure	60% of households have access to improved domestic energy (bio-digesters, improved stoves, solar cookers).  Installation of solar and wind energy infrastructure in countries	600 000 1 800 000 2400 000
PIPO5: Management of Vulnerability to Climate Risks	Promotion and Development of Renewable Energy and Resilient Infrastructure	Coverage of more than 60% of domestic energy needs for more than 500,000 rural households in 2025 and 700,000 in 2030	1204200
	Promotion and development of smart agriculture	Establishment and operation of 100 Climate-Smart Family Farming Villages (VCIAF), accelerating the resilience of 40% of women and young people in the areas where they are located.	240 840
	Energy efficiency and carbon footprint assessment and production systems	Diagnostic audit at the end of each five-year cycle of climate risk management systems and mechanisms throughout the GGW States	
		60% coverage of domestic energy needs by renewable energies	160 560
Total PIP05			1605 600
S/Total CAGE		-	4 773 600

## PF.RESILIENT ECONOMIC DEVELOPMENT AND SECURITY (REDS)

#### Introduction

The evaluation of the socio-economic and demographic profiles at the end of the first decade of GGW implementation has shown that the main issue of the Sahel is crystallized on the major challenges of socio-economic development and security, aggravated by a strong demographic growth with a strong youth component. This multifaceted problem leads to low productivity of agricultural systems and the anthropogenic parameters of the degradation of natural resources by the strong pressure and fierce competition on these natural resources. Thus, the first response to this issue is endogenous socio-economic development that is resilient to climate change and based on agricultural production, the enhancement of agro-sylvo-pastoral systems and the optimization of their value chains, the development of renewable energies and the reduction of vulnerability to ecological and climatic risks.

Agriculture appears in Africa as a booster of integral development and generator of solutions to priority socio-economic emergencies such as food security, promotion and development of green jobs and acceleration of access to domestic needs, agro-food systems and basic social services, by acting mainly on the following levers:

- increasing arable land and soil fertility by restoring large areas of degraded land.
- the development and enhancement of natural resources, value chains and agri-food systems through integrated smallholder production and processing,
- the promotion and development of Intelligent Agriculture and Early Warning and Response Systems (EWRS),
- the availability of improved agricultural, forestry and pastoral seed and gene banks.
- the strengthening of rural equipment and infrastructure and maintenance services,
- the empowerment and improvement of women's access to land and finance

#### 1. Strategic objectives

The Priority Actions of the major strategic targets of the REDS Portfolio must lead to social and economic resilience in the terroirs. The global objective is to achieve, by 2030, socio-economic development that is resilient to Sustainable Development Goals, in particular the eradication of precariousness, food and nutritional insecurity, the creation of green jobs and prosperity through the development and enhancement of promising local and cross-border opportunities, human development by improving the access rate to basic domestic needs and social services, including water, education, health and clean energy, as well as security and conditions for the creation of productive green jobs and the implementation of policies to encourage people to return to their homelands.

Achieving such sustainable impacts in the terroirs relies on the control of local natural resources in terms of quality, quantity, and legality through the Diagnostic Audit of Local and Transboundary Development Opportunities (LTDO), in particular natural resources, value chains and land heritage.

The diagnostic audit is fundamental to better define the Strategic Local Development Orientation Plan (SLDOP) of the terroirs and the main support for the development of Local Development Opportunities (LDO), development actions and efficient governance of the terroirs' natural resources.

#### 2. Global indicators

It is also expected from this Portfolio, the growth of agricultural production for an annual contribution to the agricultural GDP of the member country of at least one (1) point, as of 2023 of the cycle 2021 -2025 and 3 to 5 points in 2030, the creation in the decade of more

than three million (3. 000,000) of permanent productive green jobs, including 30% of women's entrepreneurship and the Return to terroir Incentive Program (RTIP), and access to domestic needs and basic social services for more than one million (1,000,000) rural households.

#### 3. Priority Programs (PP)

The REDS, Resilient Economic Development and Security Portfolio is divided into four (04) Priority Programs (PP) of impacts:

- IPP. Development and enhancement of promising local opportunities,
- IPP. Food and nutritional security,
- IPP, Promotion and Development of Productive Green Employment,
- IPP. Improved access to basic domestic needs and social services,

## 3.1.IPP. DEVELOPMENT AND ENHANCEMENT OF PROMISING LOCAL OPPORTUNITIES Introduction

The Sahelian terroirs have a great potential in terms of land, forestry, and pastoral resources, as well as significant water reserves, huge deposits of renewable energy and ecosystem services, and a strong demographic dividend. These valuable assets, which are real niches of economic opportunities and investment mobilization, must constitute the basis and pillars of the endogenous, non-extroverted and inclusive socio-economic development to which local Communities and Populations aspire.

The exploitation and enhancement of this potential for local development opportunities (LDO), as part of a Strategic Orientation Plan for Local Economic Development (SOPLED), must be based on the identification, characterization and evaluation of these LDO and their value chains by means of a quantitative, qualitative and legal diagnostic audit of resources at the local and cross-border levels. In addition to the diagnostic audit, the Multi-State Program for the Development Impacts and Economic Resilience of Local Areas also targets the development and enhancement of local products and eco-systemic services and the optimization of value chains and the exploitation of the industrial hubs generated, in order to establish added value in terms of prosperity, food and nutritional security and the creation of productive green jobs.

Agricultural exploitation appears in Africa and particularly in the GGW Member States as an enhancer and an urgency in the integral development of an active population of about eighty (80) million in the GGW areas, representing about one fifth (1/5) of the total population of four hundred (400) million inhabitants of the Member States in 2019, with an average rural population growth rate of about 2.7%. The strong youth component is certainly a comparative advantage that can derive added value from the judicious exploitation of the demographic dividend but makes social demand stronger and more urgent in terms of income generation, employment, and socio-economic infrastructure.

Projections in the mainly Sahel-Saharan GGW terroirs, establish an average rate of population growth () of 2.7% and active populations of 46,933,469, i.e., 6,289,000 rural households in 2025 and 53,620,995 inhabitants and 7,185,000 households in 2030.

Agriculture and related trades have always been the niches of employment, financial income, food and nutritional security and sovereignty in the Sahelian terroirs. In the urgent need to establish social and economic resilience, particularly in the terroirs, agricultural production systems that are adapted to operational constraints in terms of development of small and medium-sized farms, adaptation to climatic impacts, needs for improved equipment, tools and outputs are one of the solid levers towards resilient economic development. Outputs are primarily crop areas, pastoral land, seeds and genes, processing infrastructure and endogenous financing and foreign green investments to support local development initiatives.

The optimization of integrated value chains and the development of agricultural processing systems as well as the enhancement of agri-food systems and industrial hubs generated are assets to drive the emergence of industrial development.

#### 3.1.1.strategic objectives

In the GGW terroirs, socio-economic development must be inclusive and shared across all social strata. It is built on the local heritage and the sociological and ethnological realities typical of the terroir, through the implementation of a local economic development plan (Scheme for the Development and Local Economic Development of Terroirs).

The SDLED involves defining the reference situation of the Natural Capital through a diagnostic audit of the different components of the Natural Capital and other opportunities. It is a question of ensuring the identification and development of strategies for the exploitation, transformation and enhancement of value chains and industrial hubs. The operational strategy is first based on the diagnostic audit, then the elaboration and implementation by participatory approach of a Strategic Orientation Plan for Economic and Social Development (SOPESD).

The SOPESD is based on a pilot phase of opportunity tests on the various Local and Transboundary Development Opportunities (LTDOs) and then the exploitation, transformation and enhancement of LTDOs and industrial hubs generated in the various agricultural, pastoral, forestry, energy and tourism sectors by techniques eager to reduce the carbon footprint, through local initiatives and the mobilisation of the private sector.

The global strategic objective is to promote all aspects of resilient and sustainable economic development and security and to achieve by 2030 all the global impact indicators (GII) of socioeconomic development and security that will generate jobs, food and nutritional security and peace in the GGW area.

This more specifically applies to:

- carry out the Audit and Map Local and Transboundary Development Opportunities in the GGW corridor areas and then having the audit report validated in each State.
- elaborate and implement a 2030 Strategic Orientation Plan for Economic and Social Development (SOPESD) for the community base. The POSDES describes the key integrated activities of opportunity testing and subsequent exploitation, processing and enhancement of products, value chains and industrial hubs and ecosystem services, for each community territory (UCIDD),
- implement multi-state impact programs relating to the development of productive systems and the processing of products and value chains, as well as the development and exploitation of the industrial clusters generated, the promotion of local family and community initiatives and the involvement of the private sector.

#### 3.1.2. Major strategic targets

- (i) Audit of Local and Transboundary Development Opportunities,
- (ii) Development of socio-economic infrastructure and resilient production systems

#### 3.1.2.1. Audit of Local and Transboundary Development Opportunities

The objective of the diagnostic audit is to develop a Framework Document for the identification and analysis of the natural resources and ecosystem services status in the GGW area and transboundary zones. It focuses on the quantitative and qualitative characterization, identification of the legal status and economic value of the various components of Natural Capital, including pastoral and agricultural land at local and transboundary levels, and the business opportunities they provide as Local and Transboundary Development Opportunities (LTDOs). The technical protocol of the diagnostic audit of LTDOs is outlined in the box below.

Box3: Technical protocol of the diagnostic audit

Priority Action 1. Reference Situation of Natural Capital Components

(Biological, water and land resources, ecosystem services, social infrastructure (education, health, water and sanitation, energy, economic and communication etc.) (2020-2021)

Step 1.1: Identification, characterization, and analysis studies

(i) Background, mapping, qualitative and quantitative characterization, and analysis

(ii) Legal status and framework

(iii) Identification of Local and Transboundary Development Opportunities (reports)

Step 1.2. Study approval session

Priority Actions 2. Scheme for Development Local Economic Development (SDLED) 2021-2022

Step 2.1: Strategic Orientation Plan for Local Economic Development (SOPLED)

(i) Suitability tests, LTDO pilot units and value chains

(ii) Global Report, Business Plan and SDLED

Step2.2. SDLED approval session of each national component (2022)

Priority Action 3: Evaluation of the diagnostic audit and SDLED (2025)

Step 3.1. Evaluation reports of the Diagnostic Audit and SDLED

(i). Evaluation by an independent firm

(ii) Updating of the audit and SDLED framework documents for the 2026-2030 cycle

(iii) Implementation of the updated 2026-2030 SDLED

## 3.1.2.2. Development of socio-economic infrastructure and resilient productive systems

Socio-economic infrastructures in terms of health, education, energy... and very weak productive systems will be strengthened and will become the basis for the development of the terroirs.

The activities will be targeted at the creation and or rehabilitation of infrastructure but also a support for the management and maintenance of the structures created.

#### 3.2. IPP. FOOD AND NUTRITIONAL SECURITY

#### Introduction

The Multi-State Food and Nutritional Security Priority Program (PP) is a characteristic of the impact project, which fits perfectly with those of SDG02. It focuses mainly on fostering, sustainably, the reduction of hunger, food, and nutrition security throughout the GGW terroirs. Achieving such impacts requires improving productivity through greater soil fertility, availability of good seeds and genes, growth and diversification of production and processing of various products and optimization of value chains and industrial hubs generated from agro-food systems in the various agricultural value chains.

The key measures mainly concern the promotion and development of integrated family farming in the main traditional agro-sylvo-pastoral production sectors by ensuring the availability of improved seeds, agricultural and small-scale irrigation equipment and materials, the necessary technical supervision and the establishment of appropriate processing units and marketing points in the areas concerned.

#### 3.2.1. Strategic objectives

The global objective and the achievement of the Global Impact Index are intended for food and nutritional security and sovereignty of the various social strata of the terroirs through the growth and diversification of production chains through the strengthening and development of innovative agro-sylvo-pastoral Production Systems.

The specific objectives are mainly

- to develop the conditions for productivity and green growth, in particular the agricultural recovery of restored land and its exploitation through the optimization of climate-smart techniques and practices, water control and the availability of improved seeds, materials and appropriate equipment,
- to strengthen the productivity and diversification of production and processing systems as well as the improvement of the conditions of preservation and packaging of products,
- improve the availability and accessibility of food in sufficient quantity and quality.

#### 3.2.2. Strategic major tartgets

Strengthening and development of innovative agro-sylvo-pastoral production systems

#### 3.2.2.1. Strengthening and Development of Innovative production systems

The modernization of production systems in the terroirs is a guarantee of food self-sufficiency and the development of new niches for wealth creation through the exploitation, processing and development of agro-sylvo-pastoral potentials (family farming, livestock, agriculture, forest products) thus ensuring the increase of diversified household incomes and the achievement of food security.

#### 3.3. IPP. PROMOTION AND DEVELOPMENT OF PRODUCTIVE GREEN JOBS

#### Introduction

The goal is to create the framework and opportunities for the generation of sustainable and productive jobs open to young people and women through activities of restoration, production and processing of agricultural products and exploitation of eco-systemic services.

#### 3.3.1. Strategic objectives

The global objective is to derive from the process of green transition to green growth all opportunities for wealth creation and the generation of sustainable productive employment, particularly in the development and growth of agricultural value chains.

Specifically, this will involve:

- Promoting agricultural trades through the promotion and encouragement of rural entrepreneurship in the production and processing of agricultural products,
- Create favourable conditions for the return and settlement of young people in the areas by facilitating and supporting private initiatives.

#### 3.3.2. Major strategic targets

### 3.3.2.1. Development of Start-ups and rural entrepreneurship for encouraging the return to the land

This strategic target will include the supervision and support to start-ups (agro-industry, processing units of local products) initiated for the development of youth, women, and migrants in the GGW areas through the use of new technologies in the areas of agro-sylvo-pastoral production, eco-systemic services, craft products.

#### 3.4. IPP. IMPROVING ACCESS TO DOMESTIC NEEDS AND SOCIAL SERVICES.

#### Introduction

At the national level of the GGW countries, the terroirs represent the most disadvantaged areas and concentrate the most populations affected by precariousness and/or the coverage rates of basic needs and services, and the HDIs are among the lowest at the national level. In these areas, social demand is the highest, where every day is a day of quest for survival.

The Priority Program with basic impact on the coverage of the populations' social needs and services is based on focused actions in the areas of social demand, in particular food self-sufficiency, access to water and sanitation, energy, health and education services and security, which are still considered a urban luxury.

Priority actions will focus on the creation and dissemination at the local level of health centres and pharmaceutical depots, the promotion of mobile clinics, the construction of classrooms, training and learning centres and water and energy infrastructures (boreholes, wells equipped with solar pumps, solar units and...).

#### 3.4.1. Strategic objectives

Achieving increased access rates for all to basic domestic needs and services (education, drinking water, clean energy, community health, community infrastructure, security and prosperity) and ultimately a significant improvement in the global average Human Development Index (HDI), currently among the lowest in the world, and the achievement of Sustainable Development Goals (SDGs) 2 and 3 in particular.

#### 3.4.2. Major strategic targets

Development of socio-economic infrastructure and resilient productive systems

- Water and Sanitation,
- Development of domestic energy and bioenergy,
- Community Health and Health Prevention.
- Development of Socio-Economic and Communication Infrastructures.
- Expansion of the school map and support for training in agriculture and maintenance of rural equipment and materials.

## 3.4.2.1. Development of socio-economic infrastructures and resilient productive systems

This target is intended for the mobilization of green investments oriented towards the creation and upgrading to climate standards of socio-economic infrastructures and the development of productive systems with a low carbon footprint and resilient to climate risks. The ambivalent approach reconciles the elements of the Development/Climate binomial to ensure resilient inclusive economic development in the terroirs.

Activities will focus on the rehabilitation, creation, and management as well as maintenance of social and economic infrastructures and production and processing units.

#### 3.4.2.2. Optimizing the access of Water and Sanitation services

Water availability is a limiting factor in the arid zones of the Sahel and a crucial problem in meeting domestic water needs, especially for drinking water and sanitation. It also limits agricultural, forestry, pastoral and sustainable land management activities as well as economic and social development activities.

The inventory, mobilization and integrated management of surface and groundwater resources for the domestic needs of grassroots communities and in agro-sylvo-pastoral activities are priorities in the GGW areas. Therefore, the priority actions in this target area will focus as a priority on the creation, rehabilitation and maintenance of water access and storage structures and infrastructures, including boreholes, pastoral wells, retention basins, mini-dams and other hillside reservoirs, as well as the revitalization of fossil valleys. In order to ensure continuity in the supply of water and the normal functioning of structures, hydraulic infrastructures and hydro-agricultural systems, warehouses and maintenance services for rural materials and equipment are created in the terroirs.

#### 3.4.2.3. Community Health and Health Prevention

The availability and effectiveness of a quality health system at the grassroots level is one of the conditions for improving the rate of acceptable health coverage and resolving maternal and child health problems of access to medicines in communities in the GGW terroirs. In order to ensure health coverage in these communities, efforts will be made to improve, rehabilitate, create pharmaceutical depots and health centres and any other innovative initiatives in the field. These activities will be associated with raising public awareness through local information campaigns on vaccination programs, maternal and child health and education on health and public hygiene.

#### 3.4.2.4. Development of socio-economic and communication infrastructures

Socio-economic infrastructures are a fundamental element in the development of the regions through access to socio-economic services, especially the improvement of the quality of life of the populations through the safeguarding of health systems, access to education, the development of communication channels for partners, water supply and various basic services, notably the promotion of exchanges through forums and the media (advertising spots, TV, website, etc.).

The establishment of these infrastructures are profitable investments that reflect the importance for the integrated development of the terroirs and given the low access rate of the populations to

these infrastructures to help and encourage innovative rural projects developers on local products.

#### 3.4.2.5. Expansion of the school map and support for training in trades

School enrolment, literacy and retention rates for girls are very low in the GGW area where the realities of transhumance are dominant. The introduction of school mapping is an alternative for access and retention of children and young people in school with the development of vocational training and environmental education programmes, while campaigning for a better settlement of the population.

## 3.5 FRAMEWORKS FOR CONSULTATION, DIALOGUE AND CONFLICT PREVENTION AND FOR SECURING PROPERTY IN THE TERROIRS

#### Introduction

One of the objectives of the IGMV resides in its appropriation by the grassroots communities. The development of consultation frameworks is in this sense a fundamental tool. In its concept, the PAGGW has developed the creation of Community and Integrated Sustainable Development Units in the regions, which are powerful levers of local governance, conflict prevention, particularly land conflicts and the securing of property.

#### 3.5.1 Strategic Objectives

Set up local guidance and decision-making bodies by structuring and leading inclusive frameworks for information, consultation, and conflict prevention in order to improve local governance of local and cross-border natural resources.

#### 3.5.2 Strategic Targets

The strategic targets consist of:

- to develop a leadership and a better organization of the populations.
- create through innovative mechanisms, the empowerment of populations and communities to be able to manage their land.

#### 4. ESTIMATE AND PLANNING OF FUNDING NEEDS

Table 5 below gives the costs and indicative annual financial planning and structuring of the target sources of prospective funding as well as the main Global Impact Indicators (GII).

#### PF 03. RESILIENT ECONOMIC DEVELOPMENT AND SECURITY (REDS)

One of the keys to the success of the GGW Initiative is the implementation of concrete actions with high added value on the well-being and security of the Populations and the Local Socio-Economic Development of the territories, through the promotion of rural production systems, the optimization of value chains, the establishment of production units and processing of local products with the involvement of the private sector, coverage of basic social needs and services (education, water, energy, health), through the promotion of renewable energies, as well as, training of young people and the development of entrepreneurship, in order to accelerate and amplify job creation, food security, poverty reduction, the installation of the culture of peace and the reduction of conflicts.

PRIORITY ACTION PROGRAM (PIP)	MAJOR STRATEGIC TARGETS (MSTs)	KEY INDICATORS/EXPECTED IMPACTS	FINANCING (x100US\$)
PIPO6: Development and enhancement of local and Transboundary opportunities	Audit and enhancement of local and transboundary development opportunities	Establishment of the reference situation of Natural Capital and diagnosis of local and transboundary economic development opportunities (DELTO) throughout the eleven (11) Member States	365 220
	Development of socio-economic infrastructures and resilient production systems	Establishment and operation of 3000 Integrated Community Agricultural Farms (ICAF)	852 180
		50-60% increase in the agricultural production of the terroirs	
		Creation of at least 200 production and processing units	
	Promotion of local products and eco-systemic services and optimization of their value chains	Optimization of about ten GGW value chains and mobilization of the national and international private sector in the development and enhancement of GGW business opportunities	1217400
Total PIP.06			2 434 800
PP07: Food and Nutritional Security	Strengthening and development of innovative agrosylvo-pastoral production systems	60% of households in the regions ensure their food and nutritional security	564000
Total PIP07			564 000
PIP 08: Promotion and Development of Productive Green Jobs	Development and financing of rural entrepreneurship and encouragement of a return to the land	Financing of about twenty "agroecology" projects for the return to the land	660 000
		Creation of 10 million jobs, reversal of youth migration flows and increase and empowerment of more than 40% of local women.	540000
		Development of ecotourism through the creation of 25 tourist sites and creation of at least 500,000 jobs	
Total PIP 08			1 200 000

#### Great Green Wall Initiative /2021-2030 DPIP Decennial Priority Investment Plan

PIP 09: Improving Access to Basic Domestic Needs and Social Services	Development of Socio-Economic and Communication Infrastructures	Construction and rehabilitation of rural tracks	502 848
	Community Health and Health Prevention	60% of households have access to health services	237 456
	Water and Sanitation	80% of households have access to safe drinking water and hygiene services.	488 880
	Expansion of the school map and support for vocational training	60% of young people (boys and girls) are enrolled and kept in school, especially girls.	167 616
Total PIP 09			1 396 800
PIP 10: Development of consultation frameworks and safety of people and property in the region	Management of social conflicts	Reduction of social conflicts in the region  Information, education and communication of populations  Creation of transhumance corridors  Strengthening relationships and exchanges between communities  Improvement of social cohesion in the communities in the terroirs	60 000
Total PIP 10			60 000
S/Total REDS			5 655 600

## PF. STRENGTHENING OF SCIENTIFIC AND TECHNICAL CAPACITIES (SSTC)

#### Introduction

The implementation of the Great Green Wall initiative is continental and has an eco-systemic, holistic, and multi-sectoral approach. It integrates various types of scientific and technical expertise which requires in the operational governance structures, in charge of strategic planning, proven skills to ensure the assistance and advisory support to the actors, especially those at the grassroots level.

The evaluation of the first decade of actions has identified the needs and priority targets for training and development in the next decade 2021-2030 and justifies the urgency of setting up a set of priority programs with impacts on the "Strengthening of scientific and technical capacities" component.

#### 1. Strategic objectives

The portfolio is characterised by the development of training, research, and dissemination activities of the Resilient Terroirs Development Support Centres (CADRT). The CADRTs represent a multifunctional platform for services, advice, demonstration of knowledge and good practices (traditional and scientific) and transfer of technologies and innovations to local populations through training and exchanges of experience. More specifically, it is intended to develop the Training, Research and Development Support Program (PAREFPE) (Training, Research and Development Support Program) as well as the organization of meetings to facilitate exchanges and the sharing of experiences. There is also, the strengthening of skills in the field of Monitoring & Evaluation allowing the availability of data in all sociological, ecological and climatic profiles, land use systems and effective techniques and technologies for Soil Defence and Restoration (SDR) as well as the exploitation and enhancement of the natural potential of the GGW.

#### 2. Global indicators

The global indicators include:

- Strengthening of scientific and technical skills through training and development of GGW agents and actors through the creation of CADRTs.
- Improvement of the Logistic capacities of each of the member countries by increasing by 50% the volume of equipment and materials required for the agro-sylvo-pastoral production and catering systems.
- the establishment of inclusive governance of natural and land resources of the terroirs through the structuring and functioning of Local Management Committees and the legal and organizational formalization with local communities.

#### 3. Priority Programs

The Portfolio is structured around the following three (3) Priority Impact Programs (PIPs):

- IPP. Research, Development and Valorization of Local Knowledge (R&D/VSL),
- IPP. Support for Research, Training and Development (PAREFPE),
- IPP. Mobility and Scientific and Technical Networks (MORESCITECH)
- IPP. Knowledge management,
- IPP: Reinforcement of Logistic, Scientific and Technical Capacities (RECALOST),
- IPP. Centers d'Appui au Développement des Terroirs (CADT).

## 3.1 IPP. RESEARCH& DEVELOPMENT AND ENHANCEMENT OF LOCAL KNOWLEDGE

#### Introduction

Research and Development (R&D) as well as innovation through the enhancement of local knowledge are important pillars in the choice of the most appropriate techniques, practices, and models for the implementation of the Great Green Wall. Moreover, the participatory approach instituted in the GGW places the terroirs and their sociological and ethnological realities at the centre. This terroir approach, characteristic of the GGWI, also relies on local practices and knowledge strengthened by the results of research and innovation to better refine the identification and implementation of projects and in particular, in the choice of species, cultivation practices and product processing and conservation techniques.

#### 3.1.1. Strategic objectives

The strategic objective of the Priority Program is fundamentally intended to strengthen the adoption of the acquired and simplified results of research, innovation, and the development of traditional knowledge by the actors in the field. The Program will lead to the application of the "Participatory Concept and Adaptive Research" through the popularisation and dissemination of the research and innovation products beneficial to the populations' local initiatives.

#### 3.1.2. Major strategic targets

The program is based on the following MSTs:

- Improvement and innovation of local techniques and technologies through scientific research,
- Exchange of experiences between actors and beneficiaries,
- Development of local productions through research.

#### 3.1.2.1. Improvement and Innovation of local techniques and technologies

This target is intended for the development of the research and innovation results and data to improve local techniques and practices derived from well-managed local knowledge throughout the community populations. These techniques and local knowledge are natural resources management, in particular restoration techniques, agroforestry, agro-ecology, development and protection of agricultural, forestry and pastoral systems as well as production, conservation and processing of local products.

### 3.1.2.2. Exchanges and dissemination of experience and research data between actors and beneficiaries

The main objective of this major strategic target is to undertake the enhancement of the products of research and innovation and local knowledge, to improve techniques and practices in the various fields of action of the GGWI, in particular the techniques of sustainable management and protection, production, packaging, conservation, transformation and development of products.

The major actions will focus, on the one hand, on the collection and organization of relevant results and data and their archiving at the level of the Resilient Terroirs Development Support Centers (CADRT) or, otherwise, within the GGW national structure and, on the other hand, the organization of meetings for sharing and popularizing information and results between researchers, technicians and grassroots actors and beneficiaries, through seminars and visits to the CADRT's areas or fields of experimentation. The CADRTs located in the various UCIDDs (terroirs) are the driving force of technical support and popularisation of local economic development actions. They are hubs of information and various technical skills.

#### 3.2.IPP. RESEARCH, TRAINING AND DEVELOPMENT SUPPORT(PAREFPE)

#### Introduction

Support research, training and development are important components in the implementation strategy of the Great Green Wall Initiative. Indeed, scientific information and expertise in the key areas of the Great Green Wall's major strategic axes, notably sustainable land management, strategic planning, monitoring-evaluation with particularly the management of applied geomatics and cartography, climate management as well as the development of impact projects are at the centre of the levers and acceleration mechanisms for the achievement of the objectives and impact indicators of the GGW Priority Projects.

This objective will be achieved through support to thematic research teams, mobility of researchers and faculty members, graduate training of master or doctoral students and the development of innovative techniques and practices for GGW actors and beneficiaries.

#### 3.2.1. Strategic objectives

The global objective is to develop efficient Research & Development (R&D) in order to have reliable scientific data, innovative techniques, and high-performance expertise in the various compartments necessary for the implementation of the GGW. The main objective is to develop rural development activities, to analyse environmental profiles, in particular the characterization of Natural Capital, biophysical and human dynamics of climate risk management and mechanisms of adaptation and resilience to climate and ecological impacts, and to capitalize on them in the operationalization of the Great Green Wall and national policies.

#### Specifically:

- Organizing and structuring targeted thematic research actions with laboratories, research centres and training institutions and creating a Platform for Technical and Scientific Support and Technological Innovations (PTSSTI) on dryland development,
- Suggest, through international calls for applications at Member State level, financial support in terms of research grants for students and young researchers and grants for the equipment of laboratories and research centres,
- To set up an international jury, for the award of two prizes for the best scientific contribution or technical innovation relevant to the Great Green Wall and for the best women's group or group of young people from the terroirs in reforestation and land restoration or in the processing and promotion of GGW products.

#### 3.2.2. Major strategic targets

- Training and upgrading of actors on targeted themes,
- Strengthening the cooperation of education and research institutions in the GGW area

#### 3.2.2.1. Training and development of actors on targeted themes

The major actions relate to the development and implementation of training plans for students and PhD students and the strengthening of skills of GGW actors and beneficiaries on themes of interest to the GGW. They also include the provision of institutional support to educational and training structures and grassroots groups and movements, particularly youth and women, to facilitate the organization of awareness campaigns and education for environmental citizenship.

## 3.2.2.Strengthening the cooperation of education and research institutions in the GGW area

There is no development without taking into account the results of research. Research Centers and Universities, which are often not sufficiently involved in the implementation of programs and projects, must play their roles of in situ and ex situ collaboration with sectoral departments. It is necessary to act in the sense of materializing the concept of "GGW National Alliance" by developing cooperation between training and research institutions and their direct involvement in the implementation of projects and programs.

## 3.2.2.3- Support for Training in Agricultural Trades and Maintenance of Rural Equipment and Materials

One of the constraints to the implementation of the GGV is the strengthening of the capacities and skills of the actors. To this end, a training and research program has been developed.

## 3.3.IPP. MOBILITY AND SCIENTIFIC AND TECHNICAL NETWORKS AND INNOVATIONS

### Introduction

The Priority Program (PP) on Mobility and Scientific and Technical Networks intends to strengthen scientific and technical skills and to promote cross-fertilisation through the mobility of researchers in the GGW area and the creation of scientific and technical networks. Therefore, it fosters the development of scientific and technical partnerships, the sharing and exchange of scientific and technical data and information, the results of innovations and the transfer of skills useful for the implementation of the Great Green Wall.

### 3.3.1. Strategic objectives

The main objective is to create an area for the exchange of scientific and technical information and technological innovations and therefore, strengthen the synergies necessary to better structure, develop and make available the required expertise in the various thematic sections of the GGW.

### 3.3.2. Major strategic targets

The Major Strategic Target includes the creation of Platforms for the Exchange of Techniques and Innovations (PETI) between researchers, institutions, and partner research laboratories.

## 3.3.2.1. Creation of Platforms for the Exchange of Techniques and Innovations

Priority actions in this target are the creation of international networks of laboratories and training institutions in the GGW area, the establishment of a Platform for scientific and technical cooperation, the establishment of exchange and training programs through research on GGW, the development of a charter and the concept of intellectual property as part of sharing information, data and research results and the development of a mobility program for students and teacher-researchers.

As part of the support for research and training, the establishment and strengthening of cooperation between training institutions and research laboratories in the GGW space is very useful to expand the training and thematic research offers through multidisciplinary teams from several backgrounds. The diversity of approaches and centers of interest of

the training institutions and thematic research laboratories involved is fundamental to the emergence of fruitful reflections from various schools and specific eco-geographic, sociological, and ethnobotanical contexts.

Among the Priority Actions, priority should be given to the facilitation and support of meetings of heads of institutions as well as the signing of inter-university cooperation agreements, providing for the mobility of teachers and researchers as well as the reception of students and doctoral students in the training and research programs of doctoral schools and the supervision of theses, in co-supervision.

## 3.3.2.2 Setting up and structuring a Platform for Technical and Scientific Support and Technological Innovation

The establishment and structuring of platforms targeting specific themes are of paramount importance for the implementation of the GGW. This will provide a general framework of coherence and will allow to exploit the contribution of the different targeted partners. Technical and scientific support and technological innovations will notably be achieved through the creation of dedicated platforms through the implementation of GGW Alliances at national, regional, and international levels.

### 3.4.IPP. KNOWLEDGE MANAGEMENT

### Introduction

The findings indicate that knowledge management on land and environmental degradation, despite capitalization efforts undertaken in recent years, is still lagging behind the needs. Knowledge management and organizational learning are increasingly recognized in the international development community as important avenues for more effective development assistance to address the weaknesses of operational mechanisms/platforms for promoting inter-project and program exchanges and operational mechanisms for knowledge and information sharing. This includes relevant project experiences, good practices, research results, etc.) which will help define specific modalities for collection/production, storage/capitalization, and share/dissemination.

### 3.4.1. Strategic objectives

Improve access to best practices and information on GGW monitoring as part of the integrated natural resource management, climate change and disasters.

### 3.4.2. Strategic targets

- Strengthening of GGW Focal Points at the national level in order to have a multi-stakeholder knowledge management strategy and approach.
- Strengthening the capacities of PAGGW for the operationalization of the Platform for Partnership and Scientific, Technical and Financial Cooperation (PPSTFC), and its expansion to all other stakeholders.
- Promotion of knowledge management and capacity building as well as processes such as sustainable land management with a landscape approach.

The creation of a knowledge management platform that could play a unifying role by synergizing the various African centers working on similar topics and by building bridges between international sources.

- Updating the regional communication plan to make PAGGW's activities visible at the global level. This is a communication on the relevance and achievements of the GGW so that the citizens of the world understand that much effort has been made in this Sahelian zone to alleviate the suffering of populations suffering from climate change, desertification.

As part of knowledge sharing for the benefit of producers and other actors in the field, it is important to support in each country the creation of at least one information, education and training center on best practices for adaptation/mitigation to climate change. This center would serve as a framework for raising the awareness of different groups of actors: local authorities such as municipal councillors and mayors, departmental and regional councillors, professional agricultural and livestock organizations, and schoolchildren in rural areas.

## 3.5.IPP. STRENGTHENING OF THE LOGISTICAL, SCIENTIFIC, AND TECHNICAL CAPACITIES

### Introduction

The implementation of the GGW requires, in particular for operational activities, significant technical and logistical resources that are no longer available in the state structures for intervention and supervision of the rural world, in particular the forestry, agricultural and pastoral services. These intervention structures, once the driving force of development at the grassroots level, have become obsolete and inefficient due to a lack of heavy equipment, materials and human resources in line with the expertise and evolution of techniques and technologies needed to meet the challenges.

The operational activities of sustainable management, protection and conservation of natural resources and biodiversity, in particular against bush fires and animal raving, as well as those of production and processing through a battery of wealth-generating activities at the State level, require logistical and technical capacities that are not available in the Member States. Through the RECALOST program, the DPIP intend to strengthen the capacities of States through institutional support to GGW national structures in terms of equipment and various materials and training and development programs for agents and actors of the structures involved in the implementation and support activities for GGW, particularly those in agriculture, water and forests, hydraulics, livestock, community health, decentralization and plant protection.

### 3.5.1. Strategic objectives

The main objective is to reduce the logistical, technical and scientific gaps of the national structures involved in the implementation of the GGW in order to make them more efficient and able to support the main priority activities for the implementation of the Great Green Wall.

The capacity building program will be carried out through targeted institutional support in terms of heavy equipment, field material and appropriate technical infrastructures and thematic training and development programs for the agents and actors of the intervention structures.

Specifically, the objectives are to

- equip the intervention structures for the implementation of the GGW with appropriate equipment, materials, and technical infrastructures, in support of the GGW's priority activities,
- strengthen human resources and their appropriate technical and scientific skills and expertise in logistics maintenance.

### 3.5.2. Major strategic targets

The implementation and Global Impact Indicators (GII) of the RECALOST Program are based on the following three Major Strategic Targets:

- Institutional support in terms of equipment, materials, and technical infrastructures appropriate to the intervention structures,
- Strengthening technical and logistical maintenance capacities.
- Technical support to Local Development Initiatives.

### 3.5.2.1. Institutional Support in equipment, materials, and technical infrastructure

As part of the holistic and multisectoral approach of the Great Green Wall, the technical intervention structures which play a key role in the implementation of the programmatic components need logistical and technical capacity building through institutional support in logistics mainly oriented towards the GGW:

- (i) the implementation of major projects:
- digging retention basins: creation in each UICDD of a basin for the development of fish farming, aquaculture, and market gardening.
- development of ponds for the benefit of farmers.
- creation of water points for the populations.
- forest management to increase the production of non-timber forest products (NTFPs).
- (ii) Water and Soil Conservation (WSC) and Defense of Soil Restoration (DSR) activities to increase production capacity.
- (iii) bank protection for the rehabilitation of water bodies,
- (iv) the acquisition of heavy machinery and equipment for carrying out the project:
- All-terrain vehicles (4x4, Unimog...).
- Heavy machinery (tractors and accessories, Caterpillar for the establishment of new plantations and the creation of tracks for the fight against bushfires).
- Solar kits for rural electrification.
- Installation of greenhouses to create suitable conditions for the development of income-generating activities.
- Installation of complete irrigation systems for the development of all production systems.
- (i) training of producers and field technicians in logistical maintenance.

## 3.5.2.2. Strengthening of technical and scientific skills and in logistical maintenance

In addition to the obsolescence, or even absence of equipment, materials and other field logistics, the national structures of intervention and supervision of rural development are also faced with the need to strengthen technical and scientific skills in various fields of rural engineering and logistical maintenance of agents.

The strengthening of skills mainly concerns the following fields:

- (i) Forestry, Agroforestry, Agro-ecology, Horticulture, Agriculture and Pastoralism,
- (ii) Restoration, Conservation, Protection, Land Development,
- (iii) Village hydraulics, management, and control of hydro-agricultural developments,

- (iv) Management and control of hydro-agricultural developments,
- (v) Rural constructions,
- (vi) Logistics maintenance.

Priority actions on this strategic target concern the elaboration and implementation of on-demand training and development plans in various fields of rural engineering for the agents and actors of the member countries involved in the implementation.

## 3.5.2.3. Support for the encouragement of local development initiatives and resilience to climate change

The participatory approach towards local communities and populations and their involvement in the endogenous development efforts of their terroirs is an essential element in the achievement of impact indicators in the priority actions of Local Economic Development.

The global objective and the expected result in this target is to optimize private initiative, both at community and family level through the development and promotion of entrepreneurship and active involvement in local economic development actions and optimization of the climate change resilience capacities of the local communities of the terroirs. To this end, it is essential to encourage, support and supervise women's groups and youth associations, particularly in the mobilization of financial and human resources and the acquisition of logistical capacities and technical skills useful for the creation and development of Local Productive Initiatives in strategic areas of wealth and job creation.

The Priority Actions are oriented primarily towards the implementation of Funds to stimulate entrepreneurship and rural micro-finance, dedicated to local initiatives (RMEIF) which could be one of the hubs of FARDEL and the strengthening of technical skills, to support the design, innovation, implementation and monitoring of Local Development Initiatives (DRLI). The ILDREs are oriented towards the production, processing, and marketing of local products of natural resources and their value chains, mainly from agriculture, horticulture, fishing, breeding, poultry farming, forestry, beekeeping, ecotourism, and culture.

During the five-year period 2021-2025, the priority focus will be on:

- (i) supervision, training, and advisory support measures:
- Strengthening access to water, energy, and sanitation needs.
- The establishment and operation of climate-smart villages for integrated agriculture,
- The creation of improved agricultural seed and gene banks,
- The creation of cereal and fodder banks.
- Training and supervision of fruit and vegetable producers.
- Adoption of monitoring and early warning systems,
- Advisory support for the functioning of Local Development Committees,
- The organization of marketing and fair-trade channels,
- Introduction to entrepreneurship and micro finance.

### (ii) support and mentoring for the following LDIs:

- the creation of ICAF and Multipurpose Gardens,
- the production, preservation and processing of fruit and vegetables.
- the production, preservation, and processing of NTFPs and PFLs
- the development of the poultry sector,
- the development of pastoral sectors,
- cereal and forage crops,
- the development of medicinal, cosmetic, and nutritional plants,
- the development and exploitation of local tourist, craft, and cultural products.

## 3.6.IPP.TERROIRS DEVELOPMENT AND RESILIENCE SUPPORT CENTRES (CADRT)

### Introduction

The Terroirs Development and Resilience Support Centres (CADRT) is a new local organisational framework, developed as part of the Great Green Wall Initiative, whose core business is centred on terroirs. It is based on a concept similar to that of the rural expansion centre of the 1980s, which was a real structural hub and nerve centre for terroir development actions.

The main objective is to strengthen the participatory approach of grassroots actors, in order to better support them in the processes of development and resilience of their terroirs. The CADRT is multi-modular and brings together on the same site the skills and opportunities required for the development of the terroir. It is designed as a friendly, open space for direct contact between grassroots actors, technicians, and researchers. Its vocation is to support at the local level awareness raising, training, learning, experimentation, and demonstration, as well as the incubation of Local Initiatives for Development and Resilience to Climate Change (LIDRCC).

The CADRT is also a dynamic Platform for dialogue and exchange to facilitate social cohesion and generational dialogue and for the dissemination of local knowledge and good practices and scientific research to foster the transfer of appropriate GGW-labelled technologies and innovations to LIDRCCs. It is located at the core or epicentre of the UCIDD and has infrastructures for reception, training, communication and the (Platforms for Research and Experimentation of Innovations and Improved Technologies) PREITA) through demonstrative testing facilities in greenhouses or open spaces, rainfall stations and a conservatory for biodiversity and local techniques.

### 3.6.1. Strategic objectives

The main objective is to create the conditions and the ideal framework of proximity between the actors, small producers and technicians for advisory support and supervision through the creation of a multi-modular hub equipped with human resources and infrastructures for reception, training and improvement, communication and test and demonstrative testing facilities to enable the transfer of appropriate technologies and innovations.

### 3.6.2. Major strategic targets

The creation and operation of the CADRTs are aimed at the following major strategic targets:

- Creation and operation of the infrastructures of the Terroirs Development and Resilience Support Centre (CADRT),
- Support for Local Initiatives for Development and Resilience to Climate Change (LIDRCC),
- Strengthening the capacity of the coordination and operational governance structures of the GGW Initiative.

### 3.6.2.1. Creation and operation of CADRT

This strategic target is intended, on the one hand for the physical implementation of the Infrastructures, Equipment and Furniture of the various components and annexes of the CADRT, in particular the reception, Training & Development structures, the Research and Experimentation Platforms and the recruitment of the necessary human resources.

The projections target the establishment, operation, and animation of at least 10 CADRTs per member country during the 2021-2025 and 2026-2030 cycle.

Thematic research and demonstrations on testing facilities mainly target techniques and innovations to improve productivity and conservation of agricultural, pastoral and forestry resources through the improvement of fertility through substrate, seeds and species suitability, production environment and eco-geographical conditions as well as the control of hydro-climatic forecasts.

## 3.6.2.2. Support for Local Initiatives for Development and Resilience to Climate Change (LIDRCC)

Logistical, technical and financial support is aimed at strengthening and promoting Local Development and Resilience Initiatives, mainly those targeting the restoration and recovery of degraded land, the development and conservation of biodiversity in line with Sustainable Development Goals 2 and 15. In particular, the social and economic resilience of communities through adaptation and resilience to climate change, the fight against poverty and food insecurity, the strengthening of agricultural productivity and the development of integrated value chains and peace and social cohesion.

The adaptation and resilience and the fight against poverty and food insecurity and malnutrition component, which is perfectly in line with the achievement of Sustainable Development Goals 1 and 2, is mainly based on the development, protection and conservation of natural resources in the areas, the development of Income Generating Activities (IGA) and the improvement of access rate to domestic needs and basic social services and the strengthening of technical and logistical capacities in local smallholder initiatives.

Therefore, these various forms of support fit into the global framework of the operational priority of local economic development and the transformative vision towards the emergence and development of Rural Production and Sustainable Development Hubs of the GGW Terroirs Initiative.

## 3.6.2.3. Strengthening the capacities of the coordination and governance of the GGWI

This target intends to strengthen the logistical and intervention capacities of regional, national, and local GGW structures.

The Priority Actions focus mainly on institutional support in terms of field materials and equipment, various accounting processing software, computer hardware and internet connection, as well as programs to strengthen the technical and scientific skills of GGW staff and experts. The capacity building programs focus on Monitoring & Evaluation in the field, strategic planning, project development and monitoring, new rural engineering techniques.

### 4. ESTIMATE AND PLANNING OF FUNDING NEEDS

Table 4 below provides in the annual financial planning, the indicative financing needs and the structuring of the target sources intended for the Portfolio (RECASTECH).

#### PF 04. STRENGTHENING SCIENTIFIC AND TECHNICAL CAPACITIES

Development requires the enhancement of research results and scientific innovations, local knowledge, and the involvement of research institutions. It is a transversal portfolio that allows to strengthen the technical and scientific skills of the grassroots and other actors in charge of the implementation.

PRIORITY ACTION PROGRAMS (PAP)	MAJOR STRATEGIC TARGETS (MSTs)	KEY INDICATORS / EXPECTED IMPACTS	FINANCING	
,		A Y	(x100US\$)	
PIP11: Research, Development and Valorization of Local Knowledge (R&D/VSL)	Improvement and innovation of local techniques	Annual support to the research equipment and infrastructures of three (03) research institutions	42900	
3, ( ,	and technologies through scientific research	Creation of at least 15 centers for the selection and treatment of quality seeds.		
	Exchanges and dissemination of experiences and research data between actors and beneficiaries	Support to the Organization every two (2) years of a national seminar or workshop in each Member State for the outreach of effective techniques and technology among local actors or meetings (B2B) between researchers, project idea bearers, local actors, economic promoters, and fund managers.	23100	
Total PIP11			66000	
<b>PIP12:</b> Support for Research, Training and Development	Strengthening the skills of actors	Training and development of GGW agents and actors on targeted themes	14400	
		Annual support for the training of 30 students and the research/innovation of 05 young research teams	14400	
		Improvement of the technical intervention skills of the human resources of the GGW structures.	43200	
Total PIP 12			72000	
PIP 13: Mobility and Scientific and Technical		Structuring and facilitation of three scientific research networks	5400	
Networks (MORESCITECH)	Creation of Training, Development and Innovation Platforms for agents, students, and	Annual support through about ten excellence grants for mobility and exchanges of experts, researchers, and teachers between research institutions.	25200	
	research teams	Support for the annual organization of an international scientific conference on themes of interest	5400	
Total PIP 13			36000	
PIP14 : Knowledge Management	Inclusive access to knowledge	Creation of at least fifteen (15) operational platforms for the exchange and sharing of knowledge in the GGW	135000	

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		Annual support for the dissemination and promotion of the most relevant GVG research and innovation results	45000
Total PIP 14			180000
PAP15: Strengthening the Logistical, Scientific and Technical Capacities of the Member States of the Great Green Wall	Strengthening the Logistical Capacities and Technical Skills of the Actors	80% coverage of the needs in terms of rural materials and equipment and technical capacities of the GGW structures.	736320
		90% of the actors identified in the use of materials and equipment are trained	
Total PIP 15			736320
PIP16: Support Centers for Resilient Land	Creation of Technical and Technology Centers in the regions	Establishment and operation of 15-20 Support Centers for Resilient Land Development	270785
Development		Strengthening technical support to States and Local Authorities and the adoption of the Great Green Wall by the Communities and local populations	
Total PIP16			270785
TOTAL SSTC			1361105

# P.F. INFORMATION, COMMUNICATION, MARKETING AND ADVOCACY (ICMA)

### Introduction

Information, Communication, Marketing and Advocacy constitute an important Portfolio in the implementation of the PIP. It will facilitate the international positioning of the Initiative and the Agency as well as the mobilization of resources. An Operational Information and Communication Mechanism (DOIC), an operational mechanism for inclusive communication and advocacy for the positioning and promotion of the Agency's Activities and Programs as well as their expected impacts through the GGW, has been established. The DOIC is a regional environmental monitoring and decision support system, implemented to strengthen the visibility, credibility, and adoption of the GGW Vision, Objectives and Programs. The DOIC supports and strengthens the actions and commitment of local actors and beneficiaries, as well as those of state decision-makers and scientific, technical, and financial partners.

### 1. Strategic objectives

The objectives of this Portfolio are to create regional multi-stakeholder informationsharing platforms to help monitor and inform on climate hazards, vulnerabilities, and global impacts in the Sahel and to disseminate lessons learned from successful adaptation and mitigation restoration experiences in the region.

### 2. Strategic indicators

The strategic indicators are, in general terms, the implementation of the Operational Information and Communication System, which provides a consistent and functional information system for better visibility of the Agency.

### 3. PRIORITY PROGRAMS (PP)

The ICOMAA Portfolio comprises the following two PP Priority Programs:

- IPP. Monitoring and Evaluation and Information Management
- IPP. Communication, Marketing and Advocacy (COMAA)

### 3.1.IPP. MONITORING & EVALUATION AND INFORMATION MANAGEMENT

### Introduction

Access to relevant information in real time on the status and types of projects on the ground and their impacts on the emergencies of the populations and their environment is crucial in the development of the different technical itineraries of the Great Green Wall Initiative.

The collection, use and sharing of information in terms of monitoring guides decision-making, planning and types of actions relevant to the implementation of programs and projects underway in the field. Access to technical and scientific information (metrological data, climatic and ecological risks, appropriate techniques, etc.), also to grassroots actors, is equally fundamental in supporting local Communities and Populations in subsequent decision-making.

The Monitoring / Evaluation and Information Management Priority Program is based on two (02) Major Strategic Targets:

- Information system, observatory, early warning, and response,
- Mechanism for publishing and disseminating information.

### 3.1.1. Strategic objectives

The global objective is to ensure regular, real-time monitoring of the progress of activities in the field and the resulting impacts and to make the necessary reorientations at the appropriate time. To this end, it is a question of creating dynamic Databases, the availability of relevant

information to decision-makers, national actors and local and regional authorities and communities at the grassroots level in appropriate formats. Specifically, this includes:

- To strengthen or create a Planning, Monitoring, and Information Service (SPSI) within each GGW structure, with skilled human resources and logistical means for collecting, processing, and storing data in compatible formats,
- Strengthen and make functional the Information System, Observatory, Early Warning and Response (SIOBAP), with the various central and sub-infrastructures,
- To undertake a training program for the actors at the grassroots level, in the use of field information and climatic and ecological forecasts in their planning and field activities through the Early Warning / Response module of SIOBAP.
- Periodically publish information on the implementation status of the GGW and high-level scientific contributions on issues related to the approach and strategic objectives of the Great Green Wall Initiative, through the Magazine "The Intercepts of the GGW" or other scientific and technical publication platforms.

### 3.1.2. Major strategic targets and indicators

Communication, Advocacy and Marketing are important components in the adoption, international positioning, and mobilization of partners in the implementation and financing of the Initiative. The Information and Communication Operational Mechanism (DIOC) put in place in 2016 for this purpose by the Agency is currently better structured and greatly enhanced by the adoption in 2018 of a Strategic Communication Plan (SCMP), a Resource Mobilization Strategy (RMS) and a Charter of Ethics and Governance as well as various advocacy frameworks including a Women's Green Platform, a Green Youth Caravan and a network of ambassadors and program champions.

One of the relevant responses to the low mobilization of financial resources during the decade 2011-2020 is mainly based, in the perspective of financing the present 2021-2030 DPIP, on vigorous communication and advocacy actions towards the States and technical and financial partners, in particular the private sector, for a more concrete and sustained commitment to the achievement of the GGW.

### 3.1.3.1 An operational and communication device set up through:

- An information system, Observatories, Early Warning and Response (SIOBAP) composed of three (3) main units:
  - The Information and Management System Unit for the acquisition, management, and dissemination of data to the Member States.
  - the Observatory Unit for data collection and storage.
  - the Early Warning and Response System Unit for the prevention of environmental risks and the responses to be provided through appropriate solutions.

### 3.2. IPP. COMMUNICATION, MARKETING, AND ADVOCACY

The following achievements are planned:

- at least two (02) documentary films and commercials per year on the GGW.
- Holding each year one (01) edition of the Green Youth Caravan and a Youth Forum of the GGW. The mobilization of the youth of Member States is one of the pillars in the implementation of the

GGW by exploiting the demographic dividend as a comparative advantage and opportunity. The strategic objective of awareness and mobilization of youth is to enhance the potential of youth around issues of local development, peace, social cohesion, solidarity, and mutual assistance and to engage in issues of environmental sustainability, local development, social cohesion, and the fight against migration flows.

- Establishment of National Committees involving at least 60% of women actors and beneficiaries of the GGW and the Executive Council of the Women's Green Platform (WGP/GGW) and holding annual sessions and activities of the Platform at the national and regional levels. In the fight against desertification and poverty and the endogenous local economic development of the Great Green Wall, women and young people constitute one of the essential links in the process. The Green Platform of women around the GGW Acting Today for Tomorrow, must be one of the supports in the process of mobilization of resources and actors and the implementation of Income Generating Activities (IGAs). The Women's Platform constitutes a structured and operational framework for consultation, awareness, dialogue, and advocacy/lobbying at the regional and national levels to effectively contribute to the achievement of inclusive and equitable development for women in the GGW area.
- Structuring and functioning of two (02) networks of ambassadors and program champions and holding an annual advocacy forum for technical and financial partners and the private sector. The Network of Ambassadors and Program Champions (RESAC) of the GGW, is a Platform of high-profile personalities and voice bearers that relies on leadership and interpersonal relationships to strengthen advocacy towards decision-makers, technical and financial partners, and the positioning of the Agency with governments and international institutions. The objective is to inform and educate these targets for a more marked support and a stronger involvement in the mobilization of human resources and investments of the 2021-2030 DPIP. The Priority Actions will focus on the expansion of RESAC to Heads of State and Heads of regional institutions and the improvement of the structure of the Advocacy.
- Publication and wide distribution each year of a special thematic issue and two (02) regular issues of the PAGGW Magazine "Intercepts of the GGW". The development of NICTs currently offers multiple possibilities to convey information to the targets. These include in particular the outreach of the Internet and the Agency's website and Facebook page, even at the level of local communities to reduce the digital divide and make information available.
- Structuring and functioning of the GGW National Alliances (NAs). The GGW Initiative is about bringing together all relevant sectors and actors. The National Alliances around the GGW, whose concept has been defined, are the best approach for pooling resources.

### 4. ESTIMATE OF FUNDING NEEDS

Table 7 below gives the estimated costs and the structuring of the target sources of the financing sought as well as the main global impact indicators (GII).

### PF 05. INFORMATION, COMMUNICATION, MARKETING, ADVOCACY SYSTEM (ICMAS)

Monitoring / Evaluation is an important component in the implementation of the GGWI and allows, after the establishment of the baseline situation, to monitor the status of achievements and impacts, to ensure the monitoring and evaluation of performance indicators and to judiciously adapt the approaches. The PF ICMAS also intends to set up and exploit innovative communication tools for a wide dissemination and appropriation of the Initiative by all stakeholders and beneficiaries.

PRIORITY ACTION PROGRAM (PAP)	MAJOR STRATEGIC TARGETS (MSTS	KEY INDICATORS/EXPECTED RESULTS	FINANCING (x100US\$)
PIP17	Management Information Systems, Observatories, Early Warning and Response (SIOBAP)	Strengthening the skills of regional and GGW national structures in Monitoring and Evaluation and control of information systems, materials and equipment for Information Systems and Early Warning	
: Monitoring and Evaluation of Natural Capital and		Creation of at least 15 LED observatory antennas/GGW impact antennas;	
Information)  PPAP13:		Strengthening of the governance and decision support framework in the management of Natural Resources through a high-level meeting on the subject	78000
Total PIP 17			78000
PAP18: Communication, Marketing and Advocacy (COMAA)	Publication and dissemination of information	Publication and wide dissemination each year of a special thematic issue and two (02) regular issues of PAGGW's magazine "Intercepts of the GGW".	
		At least two (02) documentary films and commercials per year on the GGW	
	Green Youth Caravan.	One (01) edition of the GGW Green Youth Caravan and Youth Forum is held each year	
	Women's Green Platform	Women's Green Platform Establishment of National Committees involving at least 60% of the women actors and beneficiaries of the GGW and of the Executive Council of the Women's Green Platform (WGP/GGW) and holding annual sessions and activities of the Platform at the national and regional levels.	744 000
	Network of Ambassadors and GGW Champions Program	Structuring and operation of two (02) networks of ambassadors and program champions and holding an annual advocacy forum for technical and financial partners and the private sector.	
Total PAP18			744 000
S/Total ICMA			822 000

### Summary Table of Indicators

Table 8. Summary of Ma	in Global Impact Indicators (GII) and Specific Impact Indicators (SII) in the 2021-2030 DPIP
PORTFOLIOS  PF. Sustainable Management and Development of Land, Water Resources and Biodiversity	Cycle 2021-2030  GII: 80 million hectares of degraded land, restored with adapted plant species with high food, nutritional and economic values and recovered in agro-sylvopastoral production systems, 30 million of which will be restored by 2025 and 50 million by 2030, sequestering 250MtCO2 and reducing the carbon footprint by 60%.  SII: - Satisfaction of at least 50% of land needs - 40% water resources mobilized - Creation of 10,000 high-capacity drill holes that strongly contribute to the achievement of ODD6 targets - 30-50% increase in national agricultural production, - 30% increase in the current rate (5%) of access to land for local women, - Establishment of 35 equipment and material centers and 30 training and maintenance service stations per country
PF. Climate Action and Green Economy	GII: Revitalization and resilience to climatic impacts and reduction of vulnerability to climatic and ecological risks of at least 70% of the terroirs, SII: - 25% increase in energy efficiency, - substitution of about 60% of traditional energy sources - clean energy for 500,000 rural households, - at least 50% of renewable energies increasing the average rate of rural electrification - creation of at least one hundred (100) Climate-Smart Villages - creation of at least two (2) prospective structures for integration with ecological risks
PF. Resilient Economic Development and Security	GII: Contribution of at least one (1) point to agricultural GDP in 2025 and 3-5 points in 2030. One (1) million rural households with access to basic social services, of which 30% are women.  SII:  - Carrying out the diagnostic audit to obtain a good baseline situation, - establishment of about 3000 Integrated Community Agricultural Farms (ICAF) - 50-60% increase in agricultural productivity, - creation of 200 processing units, - Construction and rehabilitation of rural tracks and transhumance corridors Increasing the rate of access to drinking water for 80% of the population.

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	<u> </u>
	- 60% access to health and hygiene services.
	- Optimization of about ten agricultural value chains,
	- Creation of 10,000,000 productive green jobs
	- Empowerment of 40% of the women of the terroirs.
	- Reduction to 5 inhabitants per household (currently about 7 inhabitants);
	- Evolution of 10% of the HDI parameters,
	- 10% increase in per capita income and
	- 50% reduction in social conflicts.
PF. Strengthening	GII: Establishment of a Platform for Services, Advisory and Transfer of Technology and Best Practices
of Logistical	
Capacity and	Creation of 15-20 Operational Centers of Support for Resilient Land Development (CADRT).
Scientific and	
Technical Skills	- Annual support of about ten excellence grants,
	- Annual support to 3 research institutions, 30 students and 5 research teams in the framework of the training and development of
	GGW actors.
	- Implementation of 15 exchange and sharing platforms
PF. Information	GII: DOIC established and operational
Communication,	
Marketing and	SII:
Advocacy	- Setting up of 15 local economic development observatory antennas, - Setting up a network of GGW Ambassadors
_	- Setting up a network of GGW Ambassadors - Annual production of 2 documentary films on the GGW,
	- Annual organization of a green caravan and a youth forum.
	- Quarterly publication of the magazine "Intercepts of the GGW.

## PLANNING AND FUNDING NEEDS OF THE 2021-2030 DPIP

### Introduction

The assessment, planning, identification of sources and the Strategy for Mobilizing Financing and Investment Needs of the 2021-2030 DPIP are based on the analysis of indicators and constraints outlined at the end of the decade of action 2011-2020. They also integrate the prospective of the post-2020 context, date of entry into force and operationalization of most of the provisions, mechanisms and financial measures supporting the 2015 Paris Universal Agreement on Climate Change at the financial level, and nationally determined contributions (NDCs) of the countries take into account on the one hand the experiences acquired through the efforts initiated by the Member States and those of the international community through the various programs and projects implemented. To this end, the necessary standards for cost planning for adaptation and mitigation are considered based on previous actions. The distribution of allocations for countries is made in accordance with the areas of the GGW national component of the overall route of the Great Green Wall.

The standards used are those generally applied in the implementation of the Great Green Wall. The planning considers the different Portfolios declined in Priority Programs of Flagship Actions and Specific Sub-Programs distributed by cycle (2021-2025) and 2026-2030) and this, by country and by year, the distribution by country has been based on the regions covered as well as the critical mass of population.

### 1. Global needs by priority impact programs (pip) portfolio

The analysis of the distribution of financial needs indicates a net predominance of the three main portfolios for 89.37% of the overall cost of the DPIP(US\$17,708,758,000) including Sustainable Land and Water Management, Climate Action and Green Economy, and Resilient Economic Development and Security. This is justified by the importance of actions related to land restoration, climate change adaptation and local economic development.

The distribution by Portfolio indicates the following aspects:

- Sustainable Management and Development of Land and Water Resources and Biodiversity: For an amount of US\$ 5,096,453 000 representing 28.78% of the global amount with a predominance of Land Restoration and Development and Protection of Biodiversity for US\$ 3 732 427 000 (73,24%). This is due to significant actions related to land reclamation. This item is followed by the mobilization of water resources for US\$ 1 364 026 000(26,76%).
- Climate Actions and Green Growth: This portfolio has an overall cost of **US\$ 4 773 600 000**, **i.e.**, **26,96%**, which is dominated by actions for the Promotion and Development of Renewable Energy and Resilient Infrastructure (50,28%), Adaptation and Resilience to Climate Change and Transition to Green Growth (16,09%).
- Resilient Economic Development and Security: Estimated at **US\$ 5 655 000 000 (31,94%)**, it concerns in particular actions to improve access to domestic needs and social services (43.05%), promotion and development of productive green employment and incentives to return to the land through accelerated rural entrepreneurship (21,22%), as well as the development and enhancement of promising local opportunities: agro-sylvo-pastoral resources and eco-systemic services and optimization of their value chains (26.93%), food and nutritional security (9,99%), the framework for consultation (1.06%).
- Strengthening Technical and Logistic Skills: At a cost of **US\$ 1 361 105 000 (7,69%).** This portfolio is focused on the actions of strengthening logistical capacities of countries (54,10%), establishment of CADRT, knowledge management (13,22%)Research, Development and Enhancement of Local Knowledge (8,85%%), Mobility and Scientific and Technical Networks (2.64%) and Support for Research, Training and Development (5,29%).

- Information, Communication, Marketing and Advocacy: This portfolio, with a budget of US\$822 000 000 representing 4.64% of the overall budget, aims at operationalizing the Information, Observatory and Early Warning and Response System (21,17%) and the Marketing and Advocacy Communication actions (78,83%).

The amount of seventeen (17) billion dollars sought to cover the financing of the priority programs of the DPIP represents less than 0.17% of the annual contribution of one hundred (100) billion US dollars provided for in the Paris Agreement for climate management and 0.016% of Socially Responsible Investments (SRI). SRIs are sustainable development funds with a high environmental, societal and climate impact, estimated in 2018 by the OECD at more than US\$5 trillion. In addition, the allocation and disbursement of a part (5 to 10%) of each of the multiple financial commitments as budgetary support of States to the GGW Initiative, various international agreements, regional in particular (NDCs, NDT and CAADP ...), in the form of contributions or shares of States to the financing of this DPIP would facilitate the coverage of the financial needs of the DPIP.

### 2. Five-year planning and financing needs by portfolio (2021-2030)

Table 9 provides a summary and five-year planning of the overall indicative financing needs.

Great Green Wall Initiative /2021-2030 DPIP Decennial Priority Investment Plan **Table 9:** Structure, five-year planning, and target sources of funding needs by Portfolio in the period 2021-2030

PF. 01 Sustainable Management and Development of Land and Water Resources a Biodiversity (SMLWRB)  PIP1. Land Restoration and Development and Biodiversity Protection  PIP2. Mobilization and Integrated Management of Water Resources and Watershed Development  Total SMLWRB  P.F. 02 Climate Action and Green Economy (CAGE)  PIP 03: Adaptation and Resilience to Climate Change through Green Growth  PIP 04 Strengthening of countries energy infrastructures  PIP 5 Managing Vulnerability to Climate Risks  930 000  FOR Total CC/GE  PIP 05. Development and enhancement of local and transboundary opportunities	5-2030 nd Protect 271 108 40 158 711 266 32 000 00 000	3 732 427 1 364 026 5 096 453	% / PF  73.24  26.76	%/PF/Global
PF. 01 Sustainable Management and Development of Land and Water Resources a Biodiversity (SMLWRB)  PIP1. Land Restoration and Development and Biodiversity Protection  PIP2. Mobilization and Integrated Management of Water Resources and Watershed Development  Total SMLWRB  2 385 187  P.F. 02 Climate Action and Green Economy (CAGE)  PIP 03: Adaptation and Resilience to Climate Change through Green Growth  PIP 04 Strengthening of countries energy infrastructures  1 800000  PIP 5 Managing Vulnerability to Climate Risks  930 000  Total CC/GE  3 066 000  1 7  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities	nd Protect 271 108 40 158 711 266 32 000	3 732 427 1 364 026 5 096 453	73.24	7,7,1,5,5,5,1
Biodiversity (SMLWRB)  PIP1. Land Restoration and Development and Biodiversity Protection  PIP2. Mobilization and Integrated Management of Water Resources and Watershed Development  Total SMLWRB  P.F. 02 Climate Action and Green Economy (CAGE)  PIP 03: Adaptation and Resilience to Climate Change through Green Growth  PIP 04 Strengthening of countries energy infrastructures  PIP 5 Managing Vulnerability to Climate Risks  Total CC/GE  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities	271 108 40 158 <b>711 266</b> <b>32 000</b>	3 732 427 1 364 026 5 096 453		
Biodiversity Protection  PIP2. Mobilization and Integrated Management of Water Resources and Watershed Development  Total SMLWRB  P.F. 02 Climate Action and Green Economy (CAGE)  PIP 03: Adaptation and Resilience to Climate Change through Green Growth  PIP 04 Strengthening of countries energy infrastructures  PIP 5 Managing Vulnerability to Climate Risks  Total CC/GE  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities	40 158 <b>711 266</b> <b>32 000</b>	1 364 026 5 096 453		
Resources and Watershed Development  Total SMLWRB  P.F. 02 Climate Action and Green Economy (CAGE)  PIP 03: Adaptation and Resilience to Climate Change through Green Growth  PIP 04 Strengthening of countries energy infrastructures  PIP 5 Managing Vulnerability to Climate Risks  Total CC/GE  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities	711 266 32 000	5 096 453	26.76	
P.F. 02 Climate Action and Green Economy (CAGE)  PIP 03: Adaptation and Resilience to Climate Change through Green Growth  PIP 04 Strengthening of countries energy infrastructures 1 800000 60  PIP 5 Managing Vulnerability to Climate Risks 930 000 60  Total CC/GE 3 066 000 17  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities	32 000			
PIP 03: Adaptation and Resilience to Climate Change through Green Growth  PIP 04 Strengthening of countries energy infrastructures 1 800000 60  PIP 5 Managing Vulnerability to Climate Risks 930 000 60  Total CC/GE 3 066 000 17  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities 1 276 800 11				28,78
through Green Growth  PIP 04 Strengthening of countries energy infrastructures  1 800000  60  PIP 5 Managing Vulnerability to Climate Risks  930 000  60  Total CC/GE  3 066 000  17  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities				
PIP 5 Managing Vulnerability to Climate Risks  930 000  67  Total CC/GE  3 066 000  17  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities  1 276 800  1 2	00 000	768000	16,09	
Total CC/GE 3 066 000 17  P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities 1 276 800 11		2 400 000		
P.F. 03 Resilient Economic Development and Security (REDS)  PIP 06. Development and enhancement of local and transboundary opportunities  1 276 800  1 276 800	75 600	1 605 600	33,63	
PIP 06. Development and enhancement of local and transboundary opportunities 1 276 800 11	707 600	4 773 600	1	26,96
transboundary opportunities			1	
DID 07 Food and Nutrition Cognity	158 000	2 434 800	43.05	
,	40000	564 000	9,97	
PIP 08: Promotion and Development of Productive Green Jobs 600 000 60	00 000	1 200 000	21,22	
PIP.09. Improved access to basic domestic needs and social services 664 800	32 000	1 396 800	24,70	
PIP.10: Development of consultation frameworks and safety of people and property in the region 24 000	36000	60 000	1,06	
Total REDS 2 889 600 2 7	766 000	5 655 600	ľ	31,94
P.F. 04 Strengthening Scientific and Technical Capacities (SSTC)			ı	
PIP11 Research, Development and Valorization of Local Knowledge (R&D/VSL)	42000	66000	4,85	
PIP.12. Support for Research, Training and Development 26400	45600	72000	5,29	
PIP13.Mobility and Scientific and Technical Networks (MORESCITECH) 14400	21600	36000	2,64	
	.02000	180000	13,22	
PIP.15. Strengthening the Logistic, Scientific and Technical Capacities of the Member States of the Great Green Wall  480000	56 320	736320	54,10	
PIP.16: Support Centers for Resilient Land Development 126 000 1	44 785	270 785	19,89	
Total SSTC 748 800 65	12 305	1 361 105	İ	7,69
P.F. 05 Information, Communication, Marketing and Advocacy (ICMA)				
Information Management	02 000	174000	21,17	
PAP18 Communication, Marketing and Advocacy 360000 2				1
Total ICMA 432 000 3:	88000	648000	78,83	
Total General 75	88000 <b>90 000</b>	648000 <b>822 000</b>	78,83	4,64

### 3. DPIP monitoring and evaluation plan

The PIP Monitoring & Evaluation Plan is based on the principle of Results-Based Management (RBM). M&E will be undertaken at the regional level by PAGGW and by the GGW national structures at the national level. It will be based on a participatory approach to assess the outputs and levels of achievement of results of each of the PIP programs and projects including progress, difficulties encountered and performance in implementation. A results framework will indicate the roles and responsibilities of the different actors involved in the data collection on the defined indicators.

The National Agencies in charge of implementation in the respective countries will be required to report on the status of implementation of their action plans through periodic technical and financial reports (quarterly and annual). The PAGGW in its role of regional coordination will carry out a six-monthly follow-up and will ensure the quality of the data and information from the countries and their production within specific deadlines. There will also be financial monitoring, with a financial audit at the end of each year by an external auditor.

Evaluations will be carried out at the mid-point and at the end of each cycle of the Plan, jointly with the PAGGW, the Member States and the technical and financial partners:

- The mid-term evaluation will be carried out at the beginning of the third year of each cycle. The mid-term evaluation will be carried out at the beginning of the third year of each cycle. It will allow the assessment of the results obtained, propose future directions, and provide guidelines.
- The final evaluation will be carried out six (6) months before the end of the cycle.

The final evaluation will be effective six (6) months before the end of the cycle. It will enable to determine the relevance, consistency, efficiency, and effectiveness of the implementation of the Investment Plan, the sustainability of the effects obtained and the impact of the actions. It will also examine the achievement of indicators and the causal relations of the results obtained, making it possible to draw lessons and benefit from successful experiences.

### 4. Assumptions and risks

The 2021-2030 DPIP benefits from several comparative advantages linked to the implementation of the Great Green Wall on major actions perfectly mastered. However, the assumptions of potential risks are as follows:

### 4.1. Intensification of climatic hazards

An intensification of climatic hazards with the drop in rainfall leading to low agricultural production and productivity, the drop in water levels in lake and river ecosystems, and the rise in temperatures are all risks to the success of the PIP.

### 4.2. Political risks and insecurity in the Member States

There is growing insecurity in the Sahel Region. One of the reasons for this insecurity is the precariousness in which the populations live. The resolution of this issue requires local economic development that benefits the populations. If this development is not achieved, insecurity will continue to increase.

### 4.3. Health risks

As was observed in 2020 with the Corona virus pandemic, for which countries were not prepared and with no means to handle the situation.

### 4.4. Financial risks

These risks are mainly related to the capacity to mobilize financial resources.

In the implementation of the GGW, Member States have made efforts. These States are going through periods of economic recession with the international economic situation, which may hamper the subsidies offered to the national structures of the Great Green Wall. In addition, several funding announcements have been made but not materialized on the Great Green Wall corridor.