# AFRICAN

# GREEN STIMULUS PROGRAMME

#### ABOUT THE AFRICAN GREEN STIMULUS PROGRAMME

The African Green Stimulus Programme is an innovative African-led initiative developed to support the Continent's recovery response in a sustainable manner to the devastating socio-economic and environmental impacts of the COVID-19 Pandemic.

The Programme provides an overarching framework and on-line system which consolidates and coordinates existing and new Green Economy and Climate Change initiatives in Africa which have been grouped into twelve key areas under one umbrella.

The Programme proposes 1) immediate and urgent interventions, 2) short to medium term interventions and 3) longer term transformative interventions to support the sustainable growth, entrepreneurial development and employment opportunities in key green economy sectors whilst building resilience to future shocks in Africa.

The Programme aims to mobilise financial and technical resources to upscale and enhance the implementation of existing Blue and Green Economy and Climate Change initiatives, whilst identifying areas requiring new interventions to support Africa's Green Recovery.

The Programme is intended to bring about a unifying Continental response by enhancing and forging partnerships between Intergovernmental Organisations, African countries, the Private Sector and Non-governmental Organisations in the support of a comprehensive Green Recovery programme for Africa.

The African Green Stimulus Programme is intended to be dynamic and responsive to support African countries attainment of Africa's Agenda 2063 aspirations, relevant Sustainable Development Goals and the Paris Agreement targets, to deliver impactful at scale interventions in order to recover from the Pandemic, whilst transforming and catalysing Africa's sustainable development towards a low-carbon developmental trajectory by 2030.

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# LIST OF ACRONYMS

4IR	Fourth Industrial Revolution
AAA	Adaptation of African Agriculture
AAI	Africa Adaptation Initiative
ACEA	African Circular Economy Alliance
ACF	African Climate Fund
ACEN	African Circular Economy Network
ACRADP	African Climate Resilient Agricultural Development Programme
AEPP	African Environment Partnership Platform
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AFWC	African Forestry and Wildlife Commission
AGN	Africa Group of Negotiators
AGSP	African Green Stimulus Programme
AI	Artificial Intelligence
AMCEN	African Ministerial Conference on the Environment
AMCOMET	African Ministerial Conference on Meteorology
AMCOW	African Ministerial Council on Water
AMD	Africa's Maritime Domain
AREI	Africa Renewable Energy Initiative
AU	African Union
AUC	African Union Commission
AUDA	African Union Development Agency
AWASLA	Africa Water and Sanitation Local Authorities

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AWHF	African World Heritage Fund
CAADP	Comprehensive Africa Agriculture Development Programme
CAHOSCC	Committee of African Heads of State and Government on Climate Change
CE	Circular Economy
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
СОР	Conference of the Parties
COVID-19	Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)
CSA	Climate Smart Agriculture
CTCN	Climate Technology Centre Network
CWM	Community Wildlife Management
DFI	Development Finance Institution
EBA	Ecosystem-based Adaptation
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organisation
FLEGT	Forest Law Enforcement, Governance and Trade
GCF	Green Climate Fund
GE	Green Economy
GEF	Global Environment Facility
GW	Gigawatts
HFCs	Hydrofluorocarbons
ICLEI	International Council for Local Environmental Initiatives

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IPBES	Intergovernmental Science-Policy Panel on Biodiversity and Ecosystem Services
ICPs	International Cooperating Partners
ICT	Information, Communication and Technology
IDAWM	Irrigation Development and Agricultural Water Management
IEG	International Environmental Governance
IFC	International Finance Corporation
IGES	Institute for Global Environmental Strategies
ILO	International Labour Organisation
ΙοΤ	Internet of Things
IPCC	Intergovernmental Panel on Climate Change
IPLCs	Indigenous Peoples and Local Communities
IPSF	International Platform for Sustainable Finance
IRENA	International Renewable Energy Agency
ITW	Illegal Trade in Wildlife
LDCs	Least Developed Countries
LDN	Land Degradation Neutrality
M&E	Monitoring and Evaluation
MEA	Multi Environmental Agreement
MHEWS	Multi-hazard Early Warning Systems
NEPAD	New Partnership for Africa's Development
NCA	National Capital Accounting
NDC	Nationally Determined Contributions
OCIMS	Oceans and Coastal Information Management Systems
ODA	Official Development Assistance
OECPR	Open-Ended Committee of Permanent Representatives

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PACE	Platform for Accelerating the Circular Economy
PAGE	Partnership for Action on the Green Economy
PAWP	Paris Agreement Work Programme
PIGE	Partners for Inclusive Green Economies
PIDA	Programme for Infrastructure Development in Africa
REC	Regional Economic Communities
RFP	Regional Flagship Programme
SARS	Severe Acute Respiratory Syndrome
SBEC	Sustainable Blue Economy Conference
SBI	Subsidiary Body for Implementation
SBTA	Subsidiary Body for Technical Advice
SCP	Sustainable Consumption and Production
SD	Sustainable Development
SDGs	Sustainable Development Goals
SE4AII	Sustainable Energy for All
SEEA	System of Environmental Economic Accounting
SFM	Sustainable Forestry Management
SIDS	Small Island Developing States
SLCPs	Short-lived Climate Pollutants
SMART	Specific, Measurable, Attainable, Realistic and Time bound
SME	Small and Medium Enterprises
STC	Specialised Technical Committee
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNCTAD	United Nations Conference on Trade and Development

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UNDP	United Nations Development Programme
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNGA	United Nations General Assembly
VAT	Value Added Tax
VR	Virtual Reality
WEF	World Economic Forum
WHO	World Health Organisation
WMO	World Meteorological Organisation
WPCCAA	Work Programme for Climate Change Action in Africa
WWF	World Wide Fund for Nature

#### **EXECUTIVE SUMMARY**

The COVID-19 pandemic has exposed and exacerbated economic, societal and environmental challenges globally and especially in Africa. The ripple effects of the largescale worldwide disruption brought about by the Pandemic are expected to continue for many years to come. It is envisaged that the COVID-19 pandemic will affect resource availability far into the future and put further pressure on the African region's already severely constrained resources, reinforcing the need to develop safeguards, especially to protect the most vulnerable sectors of society including women and that youth that are the most adversely effected by the economic fallout of the pandemic. Worldwide, governments have been redirecting funds away from conservation and environment related activities and tourism revenue has plummeted, causing revenues of parks and nature reserves to dry up significantly. There has been a, sharp rise in rural poverty and the phenomenon of reverse migration caused by migrant labourers being forced to temporarily leave urban areas under lockdown, resulting in additional pressure on natural resources, wildlife and ecosystems. The Pandemic has exacerbated the multitude of inter-related crises that African and other developing countries are facing, including exacerbating already unsustainable debt levels, African countries urgently need stepped-up, new and additional and appropriate forms of financial support from other countries and partners.

At the same time, the recovery effort from the COVID-19 pandemic presents an unprecedented opportunity to reset the global economy on a pathway towards a more environmentally sustainable and low-carbon and inclusive developmental trajectory. It is therefore essential to ensure that Africa's economic recovery strategies are aligned to the United Nations 2030 Agenda on Sustainable Development and the Sustainable Development Goals (SDGs), the African Union's Agenda 2063, the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement and other Multilateral Environmental Agreements. The Pandemic has also underscored the importance of strengthening the nexus between public health, pollution abatement, climate action, biodiversity and ecosystems, desertification and land degradation, social equity and economic prosperity. In this regard, the African Green Stimulus Programme is designed to respond with urgency to support key sectors in Africa hardest hit by the Pandemic, such as ecotourism and the biodiversity economy.

The key objectives African Green Stimulus Programme are as follows:

- 1. to provide rapid response in support of key economic sectors hardest hit by the pandemic, such as ecotourism and the biodiversity economy;
- 2. to provide direction and support on medium term interventions of key sectors identified in the African Green Stimulus Programme to enhance their catalytic recovery;
- 3. to stimulate focus, build synergies, forge partnerships and enhance cooperation and coordination of existing climate change, biodiversity, desertification, land degradation and green economy programmes in support of the green recovery of Africa;
- 4. to enhance political ambition and support in scaling up implementation of existing and new projects and programmes in key areas through financial resource mobilisation, technical and capacity building support in support of the green recovery of Africa;
- 5. to support the development of longer-term transformative green economy of Africa.

In order to achieve the objectives of the programme, the following need to be put in place 1) immediate and urgent interventions, 2) short to medium term interventions of 2-3 years and 3) longer term transformative interventions to support growth of key green economy sectors and build resilience to future shocks in Africa towards 2030. This is envisaged to be achieved through facilitating investment in each of these key focus areas across the Continent, to support Africa's "Build back better (and greener!)" response to the Pandemic.

The proposed African Green Stimulus Programme comprises the following key areas:

- 1. *Improving Air Quality, enhancing Chemicals and Waste Management and promoting the Circular Economy* improving air quality as well as waste management, including marine litter and pollution, are priorities for Africa and managing additional chemicals and medical waste consistent with the circular economy has significant potential to improve the way in which goods and services are produced and consumed, reduce waste, create jobs, empower women, mobilize the youth and contribute to sustainable development.
- Conserving Biodiversity and Combatting the Illegal Wildlife Exploitation and Trade - addressing the threats facing Africa's biological resources, including alien invasive species management is critical. There is an urgent need to combat illegal and unregulated wildlife exploitation and trade considering that the COVID-19 Pandemic's origins and understanding the transfer of the virus from wildlife to humans to prevent similar future zoonotic transmission of diseases.
- 3. **Revitalising Eco-tourism and the Biodiversity Economy** the tourism industry globally has been hit hard by COVID-19 and Africa's ecotourism sector has been especially negatively impacted. Environmentally and socially responsible tourism that promotes conservation of biodiversity and natural heritage, needs to be revitalized. Furthermore, the biodiversity economy has direct linkages to ecotourism and has also been negatively affected by the pandemic. The rejuvenation of ecotourism could contribute significantly to the continent's recovery.
- 4. **Combating Land Degradation, Desertification and Drought** the populations and ecosystems in Africa's dry lands are some of the most vulnerable to humaninduced and natural shocks due to a range of socio-economic and environmental factors. Enhanced commitment to providing adequate resources to address the drivers of desertification, land degradation and drought are required.
- 5. **Enhancing Climate Action** scaled up, new and additional and appropriate financial resources and investment in large-scale transformative projects are urgently required to support the implementation of Africa's Climate Change programmes. African countries in updating their Nationally Determined Contributions (NDCs) to the Paris Agreement, should highlight the economic sectors with greatest potential for green recovery and job creation, which can rebound and develop sustainably through international investment and financial, technological and capacity building support. African countries need to also invest in Multi-Hazard Early Warning Systems and strengthen the provision of accurate and timely climate and weather information.
- 6. *Investing in the Blue Economy* the need to enhance the environmental contribution to the development of the blue economy of Africa, as well as to mitigate

the impacts of natural disasters such as floods and cyclones is imperative, as well as contributing to the livelihoods of people living in coastal and riparian areas. Harnessing the potential for improving productivity of the ocean environment, job creation, strengthening food and nutritional security, wealth creation opportunities and environmental sustainability towards sustainable blue economy development is also required.

- Scaling up Climate Smart Agriculture and Food Security Systems Africa's agricultural programmes for adaptation to climate change and building the resilience of farmers to climate related and economic shocks require additional support, including scaling up climate smart agriculture to enhance food security and agricultural livelihoods.
- 8. **Supporting Sustainable Management of Forests** support for African countries to achieve significant reduction in deforestation rates, while enhancing agricultural productivity, biodiversity conservation, sustainable management of natural resources and income of small-scale food and forest producers is required. Improved cross-sectoral collaboration in the fields of forestry, wildlife, agriculture, livestock, water, energy, tourism, and address issues related to the human-wildlife-livestock-ecosystem interface and sustainable value chain development is needed.
- Improving Water Conservation and Use enhancing the equitable and sustainable use of Africa's water resources for socioeconomic development through investing in improving management of water resources, such as river basin catchments, impoundments and lakes, enhancing water use efficiency as well as rain water harvesting and the modernization of irrigation systems to more water efficient systems is required.
- 10. *Investing in Renewable Energy* enhancing the roll-out of Renewable Energy initiatives is required to provide sufficient support to enable African countries to take bold action to leapfrog to the smart, people-centered renewable energy and energy efficient systems as well as value chains in terms of new and emerging markets and job creation. Investments in renewable energy and a diversified energy mix could as well shield African economies from future pandemics and economic crises.
- 11. *Developing Smart Cities and promoting Green Urbanisation* as Africa is rapidly urbanizing, there is a need to develop African sustainable urban models. The development of Smart Green Cities should support the incorporation of appropriate technology, ecological services and culture in urban models. This should result in increases in transaction efficiencies, improved transportation and mobility, deepening internet access and e-commerce; decentralization of distributed renewable energy; and the emergence of new services.
- 12. *Enhancing Information, Communication and Technology (ICT)* lessons learnt from COVID-19 have revealed gaps in the ICT systems, bandwidth and data access which has implications for Africa's transition to the fourth industrial revolution (4IR). This needs to be addressed, with additional investments in ICT infrastructure in Africa to fully and effectively engage with rest of the world in the digital era.

It is acknowledged that many of the identified priority areas are interlinked and have inherent synergies, and are not necessarily new initiatives, and this Green Stimulus Programme for Africa rather intends to elicit a more coherent and significantly enhanced Continental response

in order to achieve impactful at scale interventions towards a more sustainable, inclusive and low-carbon development pathway over the next decade. Thus, the Green Stimulus Programme for Africa seeks to enhance ambition and upscale implementation of existing green economy and Climate Change projects and programmes in Africa through consolidated resource mobilisation, technical support and capacity building as well as improved coordination and cooperation under the umbrella of this Programme.

In terms of coordination, the African Green Stimulus Programme (AGSP) proposes that a Coordinating Committee is established to oversee the implementation of the key areas in the programme. The purpose of the Committee will be to provide technical support and coordination of the entire Programme, and be responsible for monitoring and evaluation as well as reporting for the entire Programme. An on-line platform comprising a detailed portfolio of projects and programmes will be established for the AGSP, in order to ensure that the programme is dynamic and interactive, and that it can be accessed publicly and updated regularly.

The AGSP includes a focus on Financing, Resource Mobilization, Capacity Building, Research and Technology, Communication and Partnerships as key enabling elements of the Programme. The Programme will be able to deliver impactful results at scale, only when new, additional, adequate and predictable financial resources from both public and private entities are mobilised. Furthermore, for Africa to effectively respond to the challenges and opportunities for green recovery, there is an urgent need to build and strengthen capacities in all the proposed areas at various levels. Relevant research and evidence, and the development and transfer of appropriate technology forms an integral part of the African Green Stimulus Programme. This includes promoting linkages with the OneHealth Programme, a not-for-profit organization comprising a scientific reference centre and a network of independent, international stakeholders, in order to strengthen the synergies between environment and health issues. There is an urgent need for the deployment, diffusion and transfer of the relevant technologies, including African-developed technologies, based on principles of accessibility, affordability, appropriateness and adaptability, as well as to address barriers to technology transfer. It is also recognised that the Fourth Industrial Revolution provides significant opportunities to support and enable the implementation of this programme, which should be harnessed effectively.

The AGSP is primarily intended to make a significant contribution towards Africa's overall recovery from the devastating COVID-19 pandemic. Furthermore, the Programme seeks contribute to the goal of enhancing action for environmental sustainability and prosperity in Africa as called for in the Durban Declaration of the 17<sup>th</sup> Ordinary Session of the African Ministerial Conference on the Environment (AMCEN) held in South Africa in November 2019 and to support the attainment of Africa's Agenda 2063 aspirations and relevant Sustainable Development Goals. The AGSP also aims to contribute towards the operationalization of the provisions of UNFCCC and its Paris Agreement regarding finance, technology transfer and capacity building for African countries.

The Programme is designed to deliver impactful and at scale green economy interventions in order to transform and catalyse Africa's sustainable development on a low-carbon

developmental trajectory by 2030. Harnessing opportunities for attracting international support for the AGSP is key, as well as enhancing exposure of the AGSP within multilateral, pleuri-lateral groupings and key bilateral partnerships in which Africa participates.

#### **1.** INTRODUCTION AND CONTEXT

It is well known that Africa is richly endowed with abundant natural resources, which can be viewed as "natural capital" in economic terms. It is acknowledged that natural resource capital is critical for it has a bearing on the ability of the continent to achieve sustainable development. This cannot be overstated, given the inter-linkages that exist between Africa's natural resources and the region's socio-economic aspirations as well as its developmental imperatives. However, research and evidence also shows that many of the key natural capital assets continue to be used in an unsustainable manner, and this is compounded further by reliance on fossil fuels and the large-scale export of unbeneficiated raw materials.

The international drive towards disinvestment from fossil fuels and the low rates of return on Africa's raw materials relative to the high profits made on them elsewhere, places critical African jobs and sources of energy at risk and presents the challenge of how to deal with Africa's stranded assets. Africa is being called upon to embark upon a developmental pathway that no other region has taken, with wealth and development outside Africa being firmly based on historical modes of unsustainable exploitation of nature resources and reliance on heavily subsidized fossil fuels. Africa further has to grapple with the debt crisis, illicit financial flows and massive-scale illegal exploitation of its marine and terrestrial living resources to other regions facilitated by internal factors in Africa such as poverty and governance challenges as well as inadequate compliance and enforcement and the need to address the pervasive incentives that are associated with environmental crime. Furthermore, Africa's vulnerability is also exploited making it dumping ground for unwanted waste and a destination for the trafficking of second hand goods.

The confluence of current trends in population growth, changing lifestyles, urbanization and unsustainable economic activities are further increasing pressures on Africa's natural resources and the environment. Consequently, Africa's economic and social benefits derived from these resources have been dwindling over time, as the environmental base which sustains these natural capital assets is undermined. As a result of many years of unregulated overexploitation and insufficient governance and policies, Africa's once abundant natural resources are becoming severely threatened, which has significant implications for sustainable development of the Continent for present and future generations.

The abovementioned situation facing Africa has been gravely exacerbated by the current global health and socio-economic crisis as a result of the COVID-19 Pandemic. Declared a pandemic by the World Health Organization (WHO), Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) or COVID-19 is a global emergency, given its impact on the entire world population and the economy. The Institute for Global Environmental Strategies (IGES) points out that the COVID-19's rapid spread has had far-reaching implications on the everyday lives of people in nearly all corners of the world, and underlines the need for governments at all levels to coordinate cross-cutting and cross-boundary response and recovery programmes. The United Nations Secretary-General's Policy Brief on the impact of COVID-19 in Africa, further recognizes that, in addition to the health impact, the indirect consequences such as food insecurity, lack of medical supplies, loss of income and livelihoods, a looming debt crisis, as well as related security and political risks could be significant. It is recognized that beyond

the immediate crisis response, appropriate measures including targeted public, private, bilateral and multilateral debt relief will be needed to address risks of debt vulnerabilities in developing countries.

Ultimately, there are concerns that the COVID-19 pandemic poses a serious challenge to the achievement of Sustainable Development Goals (SDGs) as the world enters the UN Decade of Action and Delivery for sustainable development. It is anticipated that SDG implementation, which should be gaining momentum during this decade, will instead slow down resulting in many countries not achieving their targets. The reduction in social protection programmes means more vulnerabilities and significant job losses, particularly in the informal sector where job protection is weaker. Levels of inequality, already very high across Africa, will continue to increase due to the COVID-19 pandemic. Economic recession could exacerbate environmental degradation, as resources are diverted from efforts to protect and restore habitats. It could also worsen existing poverty traps. In essence, COVID-19 could reverse a decade of global progress on reducing poverty.

According to a report released by the African Union Commission in September 2020 entitled "*the Socio-economic Impact of COVID-19: An opportunity to build more endogenous and resilient emerging economies*", estimates for Africa's economic growth forecast for 2020 range from -2.1% in an optimistic scenario to -4.9% in a pessimistic scenario demonstrating that Africa may be in its first recession in 25 years. Furthermore, the COVID-19 pandemic has compounded already unsustainable debt levels and rising debt costs that were hampering the financing intended to drive progress for the Sustainable Development Goals (SDGs). Furthermore, African and other developing countries are facing a multitude of inter-related crises and urgently need stepped-up financial support to empower them to implement the 2030 Agenda on Sustainable Development and the Africa Agenda 2063 in full and in an integrated manner. The widening gap on financing for development will escalate and thus, least developing countries and developing countries in Africa will struggle to meet the SDGs.

The pandemic has also accelerated a trend whereby international support, especially for middle income African countries, has been in significant decline and grant based public sector funding is giving way to commercial arrangements with the private sector, in the form of loans. These loans are coming with ever higher levels of conditionality and co-financing, either excluding many countries from eligibility for support, or potentially exacerbating the debt trap which many countries are facing.

The informal sector, a key component of Africa's economy, has been disproportionately affected and putting in place the necessary support measures for this sector is of vital importance. Informal employment represents 90 per cent of total employment in low-income countries, 67 per cent in middle-income countries and 18 per cent in high-income countries. Women are more exposed to employment informality in low and lower-middle income countries, and are often in more vulnerable situations than their male counterparts.

The African Continental Free Trade Area (AfCFTA) is intended to promote intra-African trade on the African continent, enabling businesses to effectively adapt to the impact of climate change, while ensuring that its impact on the environment are minimised. This is an important

consideration for ensuring sustainable trade and promoting a united Africa, as the Continent will be one of the hardest hit by climate change. An area which is recognised to potentially yield benefits for African countries is to scale up the value-addition of natural resources which are being traded, prevent and combat the illegal trade in such resources, upscale industrialization on the Continent through sustainable natural resource use and governance, whilst promoting environmental protection. Implementing large-scale transformative green economy programmes across the Continent could significantly contribute towards the AfCFTA and support its sustainability. However, trading under the terms set by the Agreement to establish the AfCFTA, which was slated to commence on 1 July 2020, has been postponed due to the impacts of the COVID-19 Pandemic.

Globally, it has been reported that air pollution and greenhouse gas emissions declined in the short term, and natural systems showed signs of recovering during lockdowns and travel bans in response to COVID-19. However, it is reported that other pressures on the environment have emerged such as increased wildlife poaching, surges in medical waste and single-use plastic pollution, as well as the acceleration of projects with inadequate environmental safeguards in place. Through adopting a sustainable development paradigm, it is recognised that win-win results can be achieved by strengthening the nexus between public health, pollution abatement, climate action, nature conservation, social equity and economic prosperity. It is therefore proposed that these be embodied in what is termed a "green recovery". From an environment and sustainable development perspective, responding to the impacts of the COVID-19 Pandemic calls for change of focus, priorities and adapting to the new realities / new normal. Despite the enormous negative global impact of this pandemic, the recovery may present an opportunity to showcase the importance of nature-based solutions to the COVID-19 pandemic, considering that the origins of the Covid to human interactions with the environment.

The African Union (AU) Commission's 2020 report on the socio-economic impacts of COVD-19 proposes medium and long term policy actions in key strategic areas and emphasizes, *inter alia*, the mobilisation of the domestic resources, the modernisation of the agriculture, environment and climate change protection, building strong health systems, productive transformation, diversification and industrialization, infrastructure development, the operationalization of the AfCFTA, leveraging digitalization, in order to ensure inclusive and sustainable development on the Continent. The Pandemic has highlighted the importance of conserving natural resources, which will be more crucial post COVID-19, since more people may rely directly on natural resources to support their recovery, and environmental degradation may increase due to resource constraints. Furthermore, it is anticipated that the response to COVID- 19 may affect resource availability and put further pressure on Africa's constrained resources, highlighting the need to develop safeguards. Thus, post COVID-19, it is envisaged that the management of ecosystem services, biodiversity and climate change will become even more important.

The African Green Stimulus Programme seeks to contribute to the goal of enhancing action for environmental sustainability and prosperity in Africa as called for in the Durban Declaration of the 17th Ordinary Session of the African Ministerial Conference on the Environment (AMCEN) held in South Africa in 2019. It will also contribute to implementing the African Ministerial Declaration on Biodiversity adopted at the African Ministerial Summit on Biodiversity in November 2018 in Sharm El Sheikh, Arab Republic of Egypt and the Egyptian initiative to promote a Coherent Approach for Addressing Biodiversity Loss, Climate Change, and Land and Ecosystem Degradation endorsed by AMCEN in its Decision 17/1.

	Partners for Inclusive Green Economies		
The Partners for Inclusive Green Economies (PIGE) a collaborative effort between a number of UN Agencies and partners has identified Ten Priority Options for a Just, Green & Transformative Recovery from COVID-19. In summary, these cover the following:			
1.	The Green Economy Principles of Wellbeing, Justice, Sufficiency &		
2	Efficiency, Planetary Boundaries, and Good Governance		
2.	and green industrial strategies and green COVID-19 recovery plans to build long-term resilience and prosperity.		
3.	Structure fiscal stimulus and financial aid packages to accelerate the transition to a fair and green economy - not to undermine it		
4.	Recognise and value the role of nature in reducing risks		
5.	Build resilience to external shocks through investing in sustainable		
	infrastructure and service provision for energy, food, water, health and sanitation		
6.	Strengthen and broaden inclusive social protection mechanisms and advance human rights.		
7.	Accelerate the energy transition and tackle fossil fuel subsidies by		
	ensuring recovery accelerates and broadens the achievement of		
	Nationally Determined Contributions (NDCs) under the Paris Agreement.		
8.	Apply a gender-responsive lens to the recovery to effectively address underlying issues of gender inequality.		
9.	Prioritise small and informal enterprises to accelerate the private sector transition to greener practices.		
10.	Improve global cooperation and coordination by strengthening		
	shared governance in order to mitigate emerging economic and environmental risks		

The Partners for Inclusive Green Economies (PIGE) principles are underpinned by the premise that recovery should recognise the connections between human and environmental health, and go beyond merely responding to the Pandemic in a conventional manner, and instead focus on building resilience to risks, including climate change, biodiversity collapse and widening inequality. To achieve this, stimulus and recovery efforts should address the underlying causes of these systemic risks, through inclusive, practical and targeted reforms and investments which balance socio-economic and environmental priorities. It is considered important that Africa, as well as other developing countries incorporate and adapt the relevant elements of these guiding principles into their Recovery and Reconstruction Plans, depending on national circumstances.

As the COVID-19 pandemic unfolds globally and in Africa, the situation remains fluid and rapidly evolving responses are required. This calls for increased agility and heightened responsiveness from states and other agencies to intervene and contribute positively in a timely and meaningful manner. In this regard, an African Green Stimulus Programme is proposed and it is envisaged that it will comprise of immediate short-term recovery interventions, for example to support local communities, civil society, and small-scale enterprises to mitigate against lost jobs and revenue in green economy sectors; medium term interventions spanning 3-5 years to provide developmental support regarding the physical and social infrastructure that will support the green recovery of the key sectors; and long term interventions in the areas (5-10 years) of research, development and investment to improve the resilience of Africa to future shocks and natural disasters and contribute towards the sustainable development of the continent over this decade.

There is a need for Africa to seize the opportunities in the recovery from the COVID-19 Pandemic to transform the Continent towards a more inclusive and sustainable future. It is recommended that addressing biodiversity loss, desertification and land degradation, climate action, waste management and sustainable resource management amongst others, should be prioritized in the recovery phase in Africa. Furthermore, the unfolding impact of COVID-19 on Africa underscores the importance of enhancing the synergies between the environment and human health going forward. Strengthening environment and health linkages can contribute to the successful delivery of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals and related targets, and to advance integrated action, strategies, policies and regulations at the global, regional, national and local levels to improve environmental practices for healthier lives of Africa's population is important in this regard.

According to OneHealth, a not-for-profit organization comprising a scientific reference centre and a network of independent, international stakeholders, there is a significant increase in the emergence of infectious agents and the risk of new pandemics. This has clearly demonstrated that:

- previously unknown pathogens can emerge from a wildlife source at any time in any place and without warning, threaten the health, well-being and economies of all societies;
- there was a clear need for countries to have the capability and capacity to maintain an effective alert and response system to detect and quickly react to outbreaks of international concern, and to share information about such outbreaks rapidly and transparently; and
- responding to pandemic threats requires global cooperation and global participation.

Combined with the growing globalization of health risks and the importance of the humananimal-ecosystem interface in the evolution and emergence of pathogens, addressing this complex issue requires an integrated and holistic approach. The One Health concept is not limited to zoonoses and incorporates all pathogens which have an impact on Global Health Security, including food and water security.

Adopting a "green" stimulus programme, which has the potential to foster an enhanced and coherent approach for addressing biodiversity loss, climate change, and land and ecosystem degradation amongst others, with elements of resource conservation and efficiency, can lead to cost savings and stimulate economic growth, which are the cornerstones of crisis prevention and resilience. In order to foster local entrepreneurs and to enhance job creation within the Green Economy, it is recommended that an enterprise development approach is adopted to ensure uptake by non-state actors in developing practical solutions to the implementation of projects within the key programmes.

# Africa's Regional Flagship Programmes

The Regional Flagship Programmes (RFPs) were adopted at the 14<sup>th</sup> Session of AMCEN, held from 10-14 September 2012 in Arusha, Tanzania, as a means for Africa to contribute to the effective implementation of the outcomes of the United Nations Conference on Sustainable Development (Rio +20), which took place in Rio de Janeiro, Brazil in June 2012. The proposed Regional Flagship Programmes as well as project design and finance, technical support requirements and modalities of implementation have been developed for the following five Regional Flagship Programmes:

- 1. African Green Economy Partnership (AGEP);
- 2. Sustainable Land Management, Desertification, Biodiversity and Ecosystems-based Adaptation to Climate Change (LDBE);
- **3.** Partnership for Sustainable Consumption and Production (SCP) in Africa (PSCP-Africa);
- 4. African Programme on Sustainable Energy Development (APSED);
- 5. Africa Integrated Environmental Assessment for Sustainable Development\_(AIEASD).

This African Green Stimulus Programme aims to support the Continent's overall recovery programme from COVID-19 and to contribute towards the full implementation of the United Nations 2030 Agenda on Sustainable Development and the Sustainable Development Goals (SDGs), the AU's Agenda 2063, the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement and Multilateral Environmental Agreements. It is envisaged that this African Green Stimulus Programme will provide additional impetus to the realisation of the African Regional Flagship Programmes (RFPs). It is also recognised that the AGSP could contribute significantly towards achieving and enhancing sustainable trade within the AfCFTA over the next decade.

# 2. THE AFRICAN UNION AGENDA 2063 AND THE UNITED NATIONS 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

### 2.1 Africa's Agenda 2063

The *Agenda 2063: The Future We Want* is premised on the African Union (AU) Vision for Africa, to "*build an integrated, prosperous and peaceful Africa, an Africa driven and managed* 

*by its own citizens and representing a dynamic force in the international arena"* as the overarching guide for the future of the African continent. Agenda 2063 recognises the importance of developing Environmentally Sustainable and Climate Resilient Economies and Communities on the Continent. In terms of the Continent's aspirations, Africa in 2063 will be recognized globally as a continent respectful of its environment, ecologically conscious with well-established green economy and green energy. The future prosperity of Africa will be based on inclusive growth and sustainable development.

With respect to the environmental aspirations of Agenda 2063, Africa by 2063 will:

- Be transformed such that natural resources will be sustainably managed and African societies will consume and produce goods and services in a sustainable manner. National income accounts will be reformed to fully reflect changes in renewable and non-renewable natural resources wealth.
- Africa's biodiversity, including its forests, rivers and lakes, genetic resources, land, as well as degraded fish stocks and coastal and marine ecosystems will be fully conserved restored and used sustainably. Forest and vegetation cover would be restored to 1963 levels; land degradation and desertification would have been stopped and then reversed. All agricultural land will be managed in a manner that is environmentally and socially sustainable. African countries would have reduced and conserved by at least 90% loss of biodiversity and all natural habitats.
- Africa will be a fully water secure continent by 2030. New practices and technologies will be in place to ensure efficient use of water resources and develop new sources. About 90% of domestic waste-water will be recycled to supplement water for agricultural and industrial use.
- Climate resilient low carbon production systems will be in place, thus significantly
  minimizing vulnerability to climate risk and related natural disasters. This will, among
  others, lead to reductions in per capita deaths from climate change induced natural
  disasters by at least 75% through the comprehensive and robust disaster risk reduction
  and preparedness strategy put in place earlier. All agricultural and industrial activities
  will be climate smart and sustainability certified. An African Climate Fund (ACF) to
  address the continent's climate adaptation and mitigation concerns, including
  technology development will be fully operational and regional/continental sustainability
  certification schemes will be established.
- Renewable energy (wind, solar, hydro, bioenergy, ocean tidal waves, geothermal and other renewables) are envisaged to comprise more than half of the energy consumption for households, businesses and organizations by 2063. All urban buildings will be certified as energy smart and all urban mass transport will operate on renewable and low to zero emissions fuels by 2063 and the share of renewable energy to total energy production will have exceeded the 50% threshold. Regional power pools will be in place a few decades earlier, while continental power pools will be fully functional before 2063 thus making the continent well lit and fully powered.

• Functioning institutions, regulations, systems and processes will be in place by 2063 to govern the management and exploitation of trans-boundary natural resources, including water, forests, fisheries, biodiversity, genetic resources, energy and renewable and non-renewable resources.

These Agenda 2063 aspirations provide the context for the development of the African Green Stimulus Programme which is intended to support African countries' journeys towards realizing these aspirations.

## 2.2 2030 Agenda for Sustainable Development and the Sustainable Development Goals

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) were adopted at the United Nations General Assembly (UNGA) in September 2015. The 2030 Agenda for Sustainable Development is a commitment to eradicate poverty and achieve sustainable development by 2030 world-wide, ensuring that no one is left behind and to reach the furthest behind first. The adoption of the 2030 Agenda was a landmark achievement, providing for a shared global vision towards sustainable development for all. The 17 Sustainable Development Goals and 169 targets demonstrate the scale and ambition of the 2030 Agenda for Sustainable Development. These seek to realize the human rights of all and to achieve gender equality and the empowerment of all women and girls. They are integrated and indivisible and balance the three dimensions of sustainable development, namely: the economic, social and environmental. The Goals and targets were formulated to stimulate and guide global action between 2015 and 2030 in areas of critical importance for humanity and the planet. Thus, the SDGs and targets are framed around the five P's (People, Planet, Prosperity, Peace and Partnerships). There are six (6) SDGs with direct linkages to the environment, namely: Ensure availability and sustainable management of water and sanitation for all (SDG 6), Ensure access to affordable, reliable, sustainable and modern energy for all (SDG 7), Ensure sustainable consumption and production patterns (SDG 12), Take urgent action to combat climate change and its impacts (SDG 13), Conserve and sustainably use the oceans, seas and marine resources for sustainable development (SDG 14), and Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (SDG **15**).

With respect to the key areas of the African Green Stimulus Programme (AGSP), these are primarily aligned to achieving many targets of the environmental SDGs, although some of the areas also correspond to the targets of other SDGs, such as ending poverty, hunger and inequality. Most importantly, the AGSP is also intended to deliver on *SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development*, which is a very important issue for Africa, as many African countries require financial, technical and capacity building support through the means of implementation of the SDGs.

### 3. OBJECTIVES OF THE AFRICAN GREEN STIMULUS PROGRAMME

A Green economy is defined by UNEP simply as an "economy that results in improved wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities". The emergence and recognition of the positive role that developing the Green Economy can play internationally, especially amongst developing countries, has demonstrated that the Green Economy has enormous potential to transform and diversify the global economy towards a more sustainable low carbon development trajectory, facilitate investment, create entrepreneurial opportunities and employment. This is also the case for Africa, which has yet to fully tap into the opportunities which investing in the Green Economy has to offer.

Within the abovementioned context, the African Green Stimulus Programme has the following objectives:

- 1. to respond with urgency to support key sectors in Africa hardest hit by the Pandemic, such as ecotourism, waste management and the biodiversity economy.
- 2. to develop and support short and medium term interventions to enhance the implementation of key sectors identified in the African Green Stimulus Programme.
- 3. to streamline focus, build synergies and enhance coordination of existing climate change, biodiversity, desertification, land degradation and green economy programmes by consolidating and integrating these under identified key areas into one comprehensive Green Stimulus Programme for Africa.
- 4. to enhance ambition and support to significantly scale up implementation of existing and new projects and programmes in key areas through consolidated financial resource mobilisation, technical support and capacity building as well as forging partnerships.
- 5. to support the development of longer-term transformative green economy programmes which contribute towards realising Agenda 2063 aspirations, the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) as well as addressing the imperatives of the Paris Agreement.

### 4. INSTITUTIONAL ARRANGEMENTS AND GOVERNANCE AND COORDINATION

### 4.1 **Programme Coordination**

The establishment of an AGSP Coordinating Committee is proposed to oversee the implementation of the key areas in the programme. This Committee will provide technical guidance and coordination of the entire Programme. The Committee will also provide monitoring and evaluation (M&E) oversight and will be responsible for producing reports on the implementation of the AGSP to AMCEN and the African Union.

It is proposed that the Coordinating Committee comprises representatives of the following:

- African Union (AU) Chair
- Committee of African Heads of State and Government on Climate Change (CAHOSCC) Chair

- African Ministerial Conference on the Environment (AMCEN) Chair/Bureau members
- African Union Commission (AUC) Department of Rural Economy and Agriculture (DREA) and Department of Infrastructure and Energy (DI&E)
- African Union Development Agency (AUDA)
- United Nations Economic Commission for Africa (UNECA)
- United Nations Environment Programme (UNEP)
- United Nations Development Programme (UNDP)
- United Nations Industrial Development Organisation (UNIDO)
- World Economic Forum (WEF-Africa)
- African Development Bank (AfDB)
- Food and Agricultural Organisation (FAO)
- Regional Economic Communities (RECs)
- Nationally Determined Contribution (NDC) Partnership

This Committee will also provide Secretariat services for the entire programme and will be responsible for preparing reports for AMCEN and the AU.

It is envisaged that an *on-line platform* will be established for the AGSP, which will include a user interface, administrative portal as well as comprehensive information on the portfolio of projects and programmes within each Priority Area. The Platform will be designed to ensure that the programme is dynamic and interactive, and that it can be accessed publicly and updated on regular basis. The Platform will also serve as an interface between potential funders and investors and individual programmes and projects under the AGSP. It is expected that this AGSP Platform will be hosted and managed by a reputable African Intergovernmental Organisation and dedicated personnel will need to be appointed to manage the Platform for this component of the AGSP to be effective.





#### 4.2 Institutional arrangements and Governance

The following institutional arrangements for AGSP is proposed:

• *African Union Assembly* – to endorse the regular progress reports on the key areas

of the AGSP from CAHOSCC and adopt decisions on the programme.

- Committee of African Heads of State and Government on Climate Change (CAHOSCC) to provide oversight and high level leadership of the entire AGSP at Heads of State level.
- Specialised Technical Committee on Agriculture, Rural Development, Water and Environment (STC ARDWE) – to provide guidance to the AGSP on the key areas of work related to agriculture, water, environment, climate change and the blue economy and endorse these as the relevant body of the African Union.
- **Specialised Technical Committee on Infrastructure and Energy (STC I&E)** to provide guidance to the AGSP on the key areas of work related to renewable energy, infrastructure and tourism and to endorse these as the relevant body of the African Union.
- *African Ministerial Conference on the Environment (AMCEN)* to coordinate the work of the AGSP and prepare documents on key issues from the AGSP Coordinating Committee for presentation to the African Ministers of Environment.

# 5. **KEY PRIORITY AREAS**

# 5.1 Improving Air Quality, enhancing Chemicals and Waste Management and promoting the Circular Economy

This Key Priority Area links to SDG 3: Good Health and Well-being; SDG 8: Decent Work and Economic Growth; SDG: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Change; SDG 14: Life on Land; and SDG 15 Life Below Water.

Air quality addressing air pollution (including in-door air pollution) is one of the priorities of the World Health Organization's (WHO) work on environment and health issues, In this regard, the detoxification of our economies, to remove harmful substances from and/or mitigate their impact on the environment in which people live and work (e.g. addressing air pollution, reducing pesticides use, through the promotion of integrated pest management and organic and sustainable farming systems) has been highlighted as an important measure to contribute towards this.

Sustainable waste management forms part of a global action to protect the planet's natural resources and ensure a healthy and sustainable living through the protection of the environment. Through this effort to protect the environment this goal is therefore linked and responds to other priorities such as ending poverty and hunger, protection of water resources, sustainable agriculture, clean energy and others.

In Africa, land degradation, climate change, water pollution, deforestation, amongst others is already having devastating effects on the people. Addressing marine litter and plastic pollution is key global priority and an important issue for Africa. The AMCEN 17th Ordinary Session pledged Africa's support for global action to address plastic pollution, and to address the full life cycle of plastics, from production and design to waste prevention and management.

Effective waste management is considered an invaluable public health service, especially during the current COVID-19 pandemic. As an essential service, society is relying on the public and private waste services sector to collect waste and recyclables from homes, business and institutions. In the wake of the pandemic, the waste management industry will face the challenge of combatting the threat of accumulating waste.

During an outbreak such as COVID-19, many types of additional medical and hazardous waste are generated, including infected masks, gloves and other protective equipment, together with higher volumes of non-infected items of the same nature. Furthermore, this type of waste is now being generated outside of medical facilities as people use gloves and masks which become contaminated waste generated with no appropriate disposal of such waste. Poor management of this waste could cause unforeseen knock-on effects on human health and the environment. The circular economy provides opportunities to address waste management issues and promote sustainable consumption and production (SCP) whilst also promoting improved well-being especially during and after the pandemic.

Furthermore, repairing, refurbishing and reusing electronics is common, and in agriculture, composting has been practiced for many decades. However, such practices have slowly been replaced by the make-use-discard model of the linear economy, which has led to many cities being plagued by huge volumes of unmanaged waste. That waste has become hazardous and almost impossible to manage. In addition, imports of waste, including second-hand clothing and electronics, have made the waste issue an even greater problem, leading in some cases to the closure of certain industries. As new sustainable business models and technologies emerge, greater opportunities in agriculture, manufacturing, construction and waste management can be harnessed through the circular economy to create jobs, improve livelihoods and reduce poverty.

The concept of the circular economy (CE) is described as an industrial economy that is *restorative* by intention; aims to rely on renewable energy; minimises, tracks, and eliminates the use of toxic chemicals and eradicates waste through careful design. In a circular economy model, durable goods would be designed so that they could be repaired rather than replaced, and biological materials would be managed so that they could be returned to the biosphere without contamination. In this way the implementation of a circular economy is seen to be specifically based on both resource efficiency and eco-efficiency, and its purpose is to acquire a set of key measures to move towards a more circular, green, and sustainable economy. The circular economy provides an opportunity for growth without increased consumption. In a current economy resources are used and disposed back into the environment as emissions that contribute to pollution, while in the circular economy resources are reclaimed, reused or recycled as secondary raw materials for new products with energy being generated from any residual waste that cannot be recycled. Such an economy reduces pressure on the natural

resources and local supply chains, and contribute to sustainable economic growth.

The need to promote the implementation of SCP practices in Africa cannot be overemphasized. Sustainable consumption and production (SCP) means more efficient, better-informed and less resource-intensive consumption and production practices, while at the same time meeting the basic needs of the ever-increasing population. Recognizing the linkages between the circular economy and SCP can provide a means for green business to improve their processes of eliminating or minimizing waste into the environment in a variety of ways, including reducing, reusing, recycling, refurbishing and remanufacturing. The purpose of green businesses is to promote the implementation of SCP practices, thus minimizing its negative impact on the environment, society and the economy. A green business as an enterprise incorporates sustainability into its daily operations by addressing environmental concerns – for example, through efficiency in areas such as energy, water and raw materials, and sustainable waste management processes – while retaining profitability.

In order to ensure that green businesses are able to implement the SCP and CE objectives as required, support is required from Governments and the private sector to unlock and access green financing opportunities. Green financing refers to financial investments which flow into sustainable development projects and initiatives, environmental products and policies that encourage the development of a more sustainable economy. In this way, African countries have the opportunity to use circular economy solutions as part of the continent's developmental transformation as set out in Agenda 2063 of the African Union and in the achievement of the sustainable development goals.

Governments also have a critical role to play in fostering an appreciation for green products by both public and private consumers. Mechanisms to address supply and demand for such products include the development and improvement of sustainable public procurement policies; enhancing awareness of sustainable products through consumer information networks; supporting the formation of associations of producers of green or sustainable products; and supporting the development of standards and of certification for green products. In addition, there is need to develop and support initiatives to link micro-, small and mediumsized enterprises to markets for their products, including by providing appropriate economic and financial incentives. To achieve that, governments will need to strengthen related rules and regulations, which includes putting in place relevant compliance and enforcement measures to ensure that Africa does not become a dumping ground for substandard products.

Whilst several African countries are already implementing a variety of programmes which incorporate elements of the circular economy, the uptake of the Circular Economy in Africa is currently at an early stage of evolution. The fundamental challenge is to align the circular economy with national development plans and budget processes. Enabling and empowering workers to transform and update their skills and giving them access to cleaner, more efficient technology is a key concern for many businesses. Capacity-building and knowledge-sharing should be expanded to cover skills and technologies required for the private sector to implement the circular economy. In order to ensure the development and implementation of successful business models, awareness-raising among the general public is necessary. Public awareness of waste management in terms of open dumping, littering and waste segregation

needs to be improved, particularly in the context of the COVID-19 Pandemic. There is a need to extend training to government officials, focusing on the governance and policy environment, compliance and enforcement to enable them to support private sector development in implementing the principles of the circular economy.

In order to promote the uptake of the Circular Economy in Africa, the African Circular Economy Alliance (ACEA) was launched at the 23<sup>rd</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP23) in Bonn, Germany on the 16th November 2017. The ACEA aims to link and coordinate the various projects and programmes on the continent spurring momentum towards the transformation to a circular economy. This will happen by the creation of a continent wide leaders' network, "The Alliance", to advocate and implement Circular Economy strategies, programmes and projects across the African Continent and in turn to catalyse projects by aiding and creating coalitions to effectively implement projects. This Alliance aims to collaborate closely with the Platform for Accelerating the Circular Economy (PACE), a Global Project Accelerator and networking facility which is chaired by the CEO of Philips and the Heads of UN Environment and the Global Environment Facility.

Waste management is likely to be a priority for Africa as managing medical waste may require additional attention through the Basel Convention and UNEP's work on waste management and the development of an African Regional Circular Economy Framework. Upscaling the work of the *African Alliance on Circular Economy* to support the transition to a circular economy at the national, regional and continental levels has great potential to improve the way in which we produce and consume goods and services, reduce waste, create jobs, empower women for gender mainstreaming, mobilize the youth and contribute to sustainable development. The private sector and other non-state actors need to be encouraged to promote and invest in the circular economy to create employment and sustainable trade in and markets for green products and services.

Scaling-up of circular economy programmes in Africa has become essential, particularly in the context of the COVID-19 Pandemic. This should include joint action beyond existing programmes, such as Resource Efficiency and Eco-innovation in Developing and Transition Economies, SWITCH Africa Green, Partnership for Action on Green Economy, Operationalizing Green Economy in Africa, and the low carbon and climate resilient industrial development in Africa. The activities being implemented through such programmes are good entry points for scaling up circular economy practices, green business practices and green investments with the aim of creating jobs, increasing productivity and promoting gender-responsive interventions. Strategies to replicate and scale up the results from such interventions can collectively contribute to this process, but need support from and collaboration with development partners and the private sector.

## In order to achieve improved Chemicals and Waste Management and to promote the Circular Economy, the following is recommended:

• Develop and scale up programmes that address air pollution in indoor settings as well as urban areas.

- Develop and scale up programmes that address marine litter and plastic pollution, particularly in Africa's rivers and coastal zones.
- Scale up investments in Circular Economy Programmes at national, sub-regional and regional level.
- Develop government policies and programmes that support the improvement of Chemicals and Waste Management and implementation of the Circular Economy in Africa.
- Develop strategies to replicate and scale up successful Circular Economy interventions and mobilise support from and collaboration with development partners and the private sector.
- Increase investment in training and capacity development for the Circular Economy in Africa.
- Adopt best practices for safely managing health-care waste in line with the lifecycle approach, including assigning responsibility and providing sufficient human and material resources to segregate, recycle and dispose of waste safely.
- Ensure awareness, evidenced-based and consistently applied waste management practices in communities, homes, schools, marketplaces, and healthcare facilities will help prevent human-to-human transmission of pathogens.
- Manage medical chemicals and waste as part of the Circular Economy approach and to allocate adequate financial resources to support institutions dealing with waste management.

# 5.2 Conserving Biodiversity and Combatting Illegal Wildlife Exploitation and Trade

*This Key Priority Area is linked to SDG 12: Responsible Consumption and Production; SDG 14: Life on Land; and SDG 15 Life Below Water.* 

Biodiversity is the foundation of the ecosystems that influence human well-being through the products and services they provide. These include the supply of food, fresh water, wood and fuel; climate regulation; water purification; disease regulation; recreational services; spiritual services; the supporting of nutrient cycling and soil formation; and the provision of aesthetic value. Many people benefit from the utilisation of biodiversity, and as a result, biodiversity and ecosystem services underpin the global economy. The recent assessments by the Intergovernmental Science-Policy Panel on Biodiversity and Ecosystem Services (IPBES) show that the world is continuing to lose many species at an unprecedented rate. While biodiversity forms the very essence of life on earth, it is recognised that the plundering of the foundation of life and the high rate of biodiversity loss are not being given adequate attention globally.

Africa's rich biodiversity should be viewed as one of the key assets for the achievement of the Sustainable Development Goals and can be sustainably and equitably used to reduce inequality and poverty on the continent. The alignment of African Union Agenda 2063 goals, the Sustainable Development Goals and the post-2020 Global Biodiversity Framework, linked to the conservation of biodiversity and the contribution of nature to human well-being in Africa, facilitates the development of interventions that can achieve multiple positive outcomes. Africa

seeks to ensure that its environment and ecosystems are healthy and protected to support climate-resilient economies and communities' livelihoods.

In the context of the COVID-19 pandemic, the CBD and the World Health Organization (2015) report highlighted that many of the drivers of biodiversity loss – such as land-use change, intensive agriculture, climate change and ecosystem degradation — may increase the risk to humans from emerging infectious diseases. Current evidence is clear that the origins of emerging infectious diseases, including COVID-19 but also HIV, Ebola, Nipah, SARS, pandemic influenza and others, have been linked to the growing human impact on the environment. Acknowledging this fact is crucial if we are to address the root causes of pandemics. It is estimated that 60% of infectious diseases are zoonotic, meaning that they are spread from animals to humans, and 72% of these zoonoses originate from wildlife. The SARS-COV-2 is just the last in a long list of zoonoses believed to have originated from wildlife. Therefore, strengthening the linkages between environment and human health is vital.

Furthermore, the harvest and sale of wild animals and plants is a constant threat to the survival of many species, as well as occasionally posing a hazard to human society through viruses, as in the current case. Indeed, research suggests that increases in human exploitation of wildlife may lead to the further possibility of virus transmission from animals to humans. This should serve as a call to better manage our relationship with nature in general, and wildlife in particular. While international attention has sporadically been drawn to the illegal trade in iconic species of wildlife, such as African rhino or elephant, little attention is paid to the equally disastrous impact of illegal and legal trade in a wide range of less visible species of wild fauna and flora. Africa's rich plant life and reptiles, for example, are being harvested on a large and unstainable scale by the international nursery and exotic pet industries that are subject to little oversight and in many cases do not adhere to basic ethical standards. A holistic approach to IWT and legal trade is therefore required, addressing both the supply and demand side, as an approach that only addresses enforcement has not proved to be successful.

Although agriculture is also a main source of livelihoods, particularly in Africa, farming has also emerged as a major driver of biodiversity loss and a potential source of zoonosis, particularly in poor communities. The burden of reducing the impact of agriculture on biodiversity in disease hotspots cannot be left to local farmers, who tend to be poor small-scale farmers. The land-use-biodiversity nexus clearly needs to be addressed in a more holistic manner.

The Action Agenda targets restoration across all types of ecosystems – terrestrial, inland water, marine and coastal, and, as appropriate, urban ecosystems. It will be implemented at various scales - national, regional, subnational, including transboundary ecosystems and site levels using a land-and seascape perspective. It can be applied to address situations where: (a) ecosystems are already under ongoing restoration (strengthening or upscaling existing initiatives); (b) degraded and destroyed ecosystems have already been identified and considered for restoration (establishing new initiatives); and (c) degraded and destroyed ecosystems have not yet been considered for restoration (assessing new restoration opportunities). The Action Agenda covers a period of 12 years (2019-2030) and is consistent with the CBD 2050 Vision on Living in harmony with nature where "By 2050, biodiversity is

valued and conserved, restored and wisely used, sustaining a healthy planet and delivering benefits essential for all people". It is also aligned with the 2030 Agenda for Sustainable Development and Agenda 2063: The Africa We Want.

The overall goal of this Pan-African Action Agenda is to inspire, promote and facilitate regional and national ecosystem restoration initiatives across Africa with a view to reversing the loss of biological diversity and ecological infrastructure, combating land degradation and desertification, mitigating and adapting to the effects of climate change, enhancing resilience and improving peoples' well-being. Its main objectives include helping African Union Member States and relevant organizations and initiatives to, inter alia: promote, support and accelerate action in the planning, implementation and monitoring of ecosystem restoration activities at all levels; undertake actions to reduce, mitigate or reverse direct drivers of land ecosystem degradation; mainstream land and ecosystem restoration in relevant sectoral policies, plans and programmes; identify and implement specific actions to achieve agreed ecosystem restoration commitment and targets; communicate the ecosystem restoration efforts, results and benefits to increase active public support and involvement; and promote coherence and synergies between climate change, biodiversity and desertification and land degradation.

The contribution of Africa's biological resources and their services to sustainable development needs to be realized through promoting the opportunities offered by the biodiversity economy. The implementation of the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience as part of Africa's commitment to implementing the UN Decade on Ecosystem Restoration (2021–2030) needs be fast-tracked. Addressing the threats facing Africa's biological resources, including alien invasive species management is critical. This Pan-African Action Agenda will be implemented by all African Member States under the direction of the African Union. The African Union Development Agency will serve as the lead institution in facilitating, coordinating, monitoring and evaluating its implementation, in collaboration with Regional Economic Communities (RECs) and other institutions.

Access and benefit-sharing of biological resources is of particular importance to Africa, which is increasingly expected to bear the cost of ecosystem conservation. Some of its ecosystems are of global importance and benefit, yet the cost of their conservation is not shared. It is therefore vital that access and benefit-sharing be included in the post-2020 global biodiversity framework. Matters related to access and benefit-sharing extend beyond simple genetic resources and could include benefits accruing from in situ conservation of biological diversity, particularly in view of the costs of conservation, including the opportunity costs, given that the accrued benefits are shared globally.

Digital sequence information is also a matter of importance to Africa, particularly in the context of the access and benefit-sharing of genetic resources. Digital sequence information is central to the understanding of how the molecular basis of life has evolved and the ways in which genes can potentially be manipulated to provide new applications, for example for use in disease control, the formulation of new products or the forensic tracking of the geographical origin of products.

The long history of experience in community wildlife management (CWM) is often overlooked in the design of programmes and responses in conservation landscapes across the world, and

particularly in Africa. Effective engagement of Indigenous Peoples and Local Communities (IPLCs) in combating the illegal trade in wildlife (ITW) has been largely overlooked with heavyhanded, increasingly militarized responses being implemented. Effective CWM is a critical success factor in efforts to address unsustainable use and ITW. This approach is often dismissed as being ineffective.

A number of best practices in fostering community wildlife management have been developed and are often reflected in government policy commitments. However, there has been a consistent failure to implement key insights, particularly the devolution of rights by national governments to IPLCs to manage and benefit from wildlife conservation and sustainable use. Success in any site-level intervention against unsustainable use and ITW relies critically on the approach adopted and relationships built.

For Africa, one of the key outcomes is that greater support is required to ensure that wildlife trade is sustainable, legal, and traceable. There is a need to better engage local and indigenous communities and to recognize their need for adequate incomes and livelihoods. This is particularly important and has relevance for Africa and the developing world in general. These communities live on the frontlines of wildlife conservation and sustainable management and should derive benefits from the sustainable utilization of wildlife.

There is an urgent need for addressing illegal and unregulated wildlife exploitation and trade considering COVID-19 epidemic's origins and understanding the transfer of the virus from wildlife to humans to prevent similar future zoonotic transmission of diseases. Implementation of the African Strategy on Combatting Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa needs to be up-scaled. The operationalization of the African Convention on the Conservation of Nature and Natural Resources is required to enhance sustainable management of natural resources.

Conservation landscapes are traditionally funded through a combination of fiscal transfers (public sector), donor support, revenues from nature-based tourism activities and revenues from sustainable utilisation activities. Global and regional studies have confirmed that a significant funding gap exists for the financing and resourcing requirements of protected and conserved areas around the world. These landscapes are critical anchors in providing valuable ecosystem services upon which people, wildlife and economies depend.

Thus, a long-term approach that creates an environment of governance, policy and partnerships that support communities to be active participants in conserving wildlife is likely to have a significant impact. Establishing clear, secure and enforceable rights (including land tenure) for communities to sustainably use, manage and benefit from conservation and wildlife is a fundamental basis for effective community-based wildlife management. Policies often ignore the benefits of using land for wildlife, and favour agricultural, extractive or commercial development. This drives loss of wildlife and can restrict community rights and interests.

# In order to improve the conservation of Biodiversity and Combat Illegal Wildlife Exploitation and Trade, the following is recommended:

- Scale up investments in Wildlife Management Programmes at national, sub-regional and regional level and develop policies and programmes that support wildlife conservation and anti-poaching initiatives in Africa.
- Develop strategies to replicate and scale up successful wildlife conservation, combatting illegal wildlife trade interventions and mobilise support from and collaboration with development partners and the private sector.
- Increase investment in training and capacity development of wildlife conservation and anti-poaching programmes in Africa and enhance implementation of compliance mechanisms, law enforcement and effective policy reform and development to address illegal, unregulated and unsustainable wildlife trade.
- Effectively map the risks on wildlife trade and links to zoonotic diseases such as markets, hubs, routes, companies involved, species of concern, transport methods, exposure to domestic animals, and practices that increase risk.
- Monitor, assess and implement effective ecosystem conservation measures and programmes including protected areas and ecosystem restoration programmes that can reduce pandemics, and understand trade-offs where disease spill over risk may exist.
- Safeguard and ensure fair and equitable access and benefit sharing derived from genetic resources, including pathogens, to facilitate more equitable access to vaccines and therapeutics, and broader engagement by Africa in research programmes.
- Promote the innovation and adoption of technologies related to biodiversity conservation and ecosystem services in Africa.

### 5.3 Revitalizing Eco-tourism and the Biodiversity/Nature Economy

This Key Priority Area is linked to SDG 1: No Poverty; SDG 8: Decent Work and Economic Growth; SDG 12: Responsible Consumption and Production; SDG 14: Life on Land; and SDG 15 Life Below Water.

The Biodiversity or Nature Economy focuses on the businesses and economic activities that either directly depend on biodiversity for their core business or that contribute to conservation of biodiversity through their activities. The biodiversity economy includes bio-prospecting and wildlife, and encompasses the businesses, cooperatives and related economic activities. Economic opportunities offered by the biodiversity economy may be (a) direct opportunities, in which revenues and incomes are derived directly from biodiversity, such as through biodiversity-generated products and services, (b) indirect opportunities, in which actions to conserve and halt the loss of biodiversity generate other benefits, or (c) non-use opportunities. There are several key strategic priorities required to develop the biodiversity economy, which is comprised of business activities dependent on biodiversity, and those that contribute towards biodiversity-based businesses, as well as enhancing the entrepreneurship in the sector, thus contributing to value addition of biological resources and diversification of African economies.

Both the bio-prospecting and wildlife sub-sectors of the biodiversity economy demonstrate the potential for significant future development and growth, which is of great benefit for both the public and private sectors, as well as the economy of African countries. The biodiversity

economy is therefore a significant job creator, especially in the bio-prospecting and wildlife sector. Moreover, the sustainable growth of these two sectors requires private sector, government and community partnerships if it is to be successful.

Despite the rich biological diversity of Africa, relatively few species are economically utilized. Export and use of Africa's biodiversity, particularly plant resources and bee products, are not well documented. This may very well contribute to limitations in deriving benefits from our biological richness. Use of these resources in bio-prospecting offers the opportunity to create additional employment in the country, as shown by a number of notable industries that have developed within Africa using biological resources. The effective implementation of the legislative provisions on the use of indigenous biological resources; and the effective support of small business development in this field, is reliant on a sound knowledge and understanding of the bio-prospecting market sectors.

Furthermore, wildlife ranching has direct linkages to ecotourism, which refers to environmentally and socially responsible travel to natural or near natural areas that promotes conservation, which has low visitor impact and provides for beneficially active socio-economic involvement of local people. These are considered as key areas for the development of Africa's resources. The tourism industry globally has been hit hard by COVID-19 and Africa's ecotourism sector has been especially negatively impacted. Environmentally and socially responsible tourism that promotes conservation, needs to be revitalized as it has low visitor impact and provides for beneficially active socio-economic involvement of local people. Furthermore, the biodiversity economy has direct linkages to ecotourism and has also been negatively affected by the pandemic and its rejuvenation could also contribute significantly to the continent's recovery.

The impact of the COVID-19 Pandemic and the associated travel bans and lockdowns on the conservation and tourism sectors is particularly devastating in Africa as it is an important income generator and source of jobs in the rural economies of most conservation landscapes. Nature-based tourism receipts are vital revenue streams for conservation agencies. Protected and Conservation Areas and important natural heritage sites and landscapes are vital ecological and economic assets with significant potential to be catalysts for inclusive, climate-smart, rural economic development. The COVID-19 pandemic has had a negative impact on conservation budgets and effectiveness and significant impacts on the livelihoods of communities living in and around these areas. The concerted and coordinated efforts required to address this are articulated in four objectives, these being 1) to mobilise resources, 2) strengthen conservation-landscape level strategies to build back better, 3) advocate for sustainable use of natural resources and sustaining livelihoods, and 4) effectively engage with the CBD's ongoing process to develop the post-2020 Global Biodiversity Framework.

World Heritage Conservation and Sustainable Development is one of the key responsibilities of the United Nations Educational, Scientific and Cultural Organization (UNESCO), particularly the World Heritage Committee. The integration of a sustainable development perspective into the processes of the World Heritage Convention has the overall goal to support States Parties, practitioners, institutions, communities and networks, through appropriate guidance, to harness the potential of World Heritage properties and heritage in general, to contribute to

sustainable development, whilst protecting the Outstanding Universal value of World Heritage properties. However, despite the adoption of the Policy on World Heritage Conservation and Sustainable Development, there are various implementation challenges especially for the African continent, particularly in relation to the effective management of natural heritage. Most World Heritage Sites which are affected in Africa are natural sites, with 16 of the 54 sites on the List of World Heritage in Danger being in Africa and the majority at 12 out of the 16 being natural sites. This situation has been exacerbated by the impacts of the Covid-19 Pandemic in Africa, which needs to be urgently addressed.

Advancing the ownership of natural heritage sites by communities and harnessing the potential of World Heritage properties and heritage as a whole, in contributing effectively to sustainable development in Africa is an imperative for the long-term conservation of these sites. A pragmatic approach towards the effective balancing of conservation needs and socio-economic development within and around World Heritage properties is required. The African World Heritage Fund (AWHF), an inter-governmental organisation that was launched in 2006, has the mission to support the effective conservation and protection of natural and cultural heritage of Outstanding Universal Value in Africa. The AWHF requires additional support to finance the conservation and sustainable use of Africa's natural heritage sites and landscapes for the benefit of the Continent.

The COVID-19 pandemic has brought the financing gap for ecotourism and conservation into sharp focus, as all sources of funding for the sector are under severe pressure. This is exacerbated by the sharp reduction in revenues from nature-based tourism activities. It is critical that the model for conservation finance includes sustainable revenue diversification strategies. Emerging sources of finance include Conservation Trust Funds, Debt for Nature or Climate Swaps, and Payments for Ecosystem Services. New sources of finance that have been identified include Outcomes-based financing mechanisms, Green and Blue Bonds and Project Finance for Permanence.

The leveraging of new flows of capital to sustain conservation and natural heritage landscapes is an urgent priority which has to be effected at a significant scale. Private capital flows into the sector traditionally have fairly high transaction costs due to the relatively small and fragmented investment opportunities available. The lack of landscape-level investment promotion activities and lack of awareness of investment opportunities has contributed to the sector being unknown to large corporate or institutional investors.

The impact of COVID-19 on Protected and Conservation Areas across Africa is wide-ranging, and various scenarios point to a potential increase in unsustainable use and illegal wildlife exploitation trade in these landscapes. Economic factors, including poverty, are recognised as central drivers to illegal wildlife exploitation trade on the ground-level, but that economic inequality is also an important factor at a deeper structural level. Building robust opportunities for IPLCs to be heard and to exercise their rights at all levels is critical in promoting more effective and equitable wildlife conservation strategies.

Communities need realistic incentives to support and actively engage in biodiversity and natural heritage conservation. Empowerment of communities to manage their own resources

through strengthened land and resource rights can be a strong motivating force. Engaging women as direct beneficiaries and key stewards of natural resources is critical. Communities can benefit financially from wildlife through tourism and hunting activities, harvesting and trade in natural resources, wildlife-related employment and payments for ecosystem services. Resources need to be mobilised from traditional and new donors and investors to support critical initiatives aimed at stabilising conservation and natural heritage landscapes from immediate COVID-19 impacts and supporting "build back better" recovery efforts in the medium to longer term.

It is thus clear that concerted efforts are required across the continent to promote the innovation and adoption of technologies related to biodiversity and ecosystem services, including the adaptation of existing environmentally sound technologies to local conditions, in parallel with indigenous technological innovation. The role of information and communications technology should be emphasized to promote the biodiversity economy. The mechanisms to do so may include South-South cooperation to facilitate access to clean and efficient technology; enhancing the capacity of research institutions for data generation, storage and analysis, such as through regional and subregional centres of excellence; and the participation of the private sector in the development and adoption of technology in both urban and rural areas.

# In order to revitalize the Eco-tourism and the Biodiversity/Nature Economy, the following is recommended:

- Mobilise appropriate emergency funds to support rangers and wildlife conservation activities and build economic resilience though encouraging domestic tourism to increase revenue that supports wildlife conservation.
- Mobilise resources to support the recovery of the eco-tourism industry in Africa through additional conservation finance, including sustainable revenue diversification strategies such as Conservation Trust Funds, Debt for Nature or Climate Swaps, and Payments for Ecosystem Services.
- Mobilise additional resources to support the AWHF to finance the conservation and sustainable use of Africa's natural heritage sites and landscapes for the benefit of the Continent.
- Improve governance, policy and partnerships that support communities to be active participants in conserving wildlife and managing natural heritage sites.

# 5.4 Combating Land Degradation, Desertification, Sand /Dust Storms, and Drought and Resilience Building in the Dry Lands

This Key Priority Area has linkages to SDG 1: No Poverty; SDG 8: Decent Work and Economic Growth; SDG 13: Climate Action; and SDG 14: Life on Land.

Africa has the greatest potential in terms of its arable land which, if optimally managed, could feed its population and generate surplus for export and industrialization through agribusiness. The Continent could, in a few decades, become the breadbasket of the world and play a key role in the sustainable development of our planet. However, Africa is currently the Continent most affected by land degradation, desertification and drought. It is also the most affected by

poverty, food insecurity and hunger. It is recognised that there are significant synergies, interrelationships and feedback loops between climate change and land degradation, which together further exacerbate the negative impact of these phenomena on people and the planet. As a result, Africa is also the Continent which is most affected by the impacts of climate change. Therefore, the importance of agriculture for African countries and its role in maintaining food security and the priority of addressing agricultural issues from an adaptation perspective as well as harnessing possible adaptation co-benefits, should be recognised.

Addressing Land Degradation, Desertification and Drought are key issues for Africa's sustainable development. The United Nations Convention to Combat Desertification (UNCCD) currently has 195 Parties and all African countries are signatories to this Convention. The UNCCD provides a framework for countries affected by desertification, land degradation and drought to address the problem effectively on national and international levels. It is also the only one that makes combating desertification and land degradation, a priority for the Continent. The UNCCD's main objectives are to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach with a view to contributing to the achievement of sustainable development in affected areas. In order to achieve this objective, long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level are required.

The populations and ecosystem in Africa's dry lands are some of the most vulnerable to human and natural shocks due to diverse environmental factors. The social distancing measures put in place disproportionately affects these communities as they constitute some of the poorest and are mostly involved in informal activities for income generation and subsistence. It is imperative that measures to curb the spread of COVID-19 do not lead to the unintended consequences of cutting budgets for initiatives combating desertification in the dry lands.

Enhanced commitment to providing adequate resources to address the drivers of desertification, land degradation and drought and support of existing programmes such as the Great Green Wall for the Sahara and Sahel, strengthen the African Forest Landscape Restoration Initiative as well as the Southern Africa Initiatives is required. The value of land degradation neutrality and its potential to improve development and prosperity and to create decent jobs, including green jobs and other employment-generating opportunities, for vulnerable communities in degraded areas should be realized.

# In order to combat Land Degradation, Desertification, Sand /Dust Storms, and Drought and facilitate Resilience Building in the Dry Lands, the following is recommended:

• Scale up research and investment in the use of sustainable new technologies and approaches in tandem with Nature Based Solutions on land management to enhance

coherence and synergies and work with all stakeholders, in particular youth, women and people living with disability.

- Implement post economic recovery measures that will address social and environmental challenges bought by the pandemic through the rehabilitation, conservation and restoration of degraded landscapes.
- Mobilise for increased resources to support investments in Sustainable Land Management and Restoration in the dry lands of Africa during the recovery period as the inhabitants of the region constitute the most vulnerable in many aspects.
- Ensure that the urgency to combat COVID 19 is not at the detriment of land restoration. Rather, land restoration should be an integral part of the post COVID-19 plans.
- Enhance education and awareness raising initiatives or campaigns on Sustainable Land Management issues in Africa.

### 5.5 Enhancing Climate Action in Africa

*This Key Priority Area has linkages to SDG 1: No Poverty; SDG 8: Decent Work and Economic Growth; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.* 

Even though Africa has contributed the least to the global emissions of greenhouse gases, the continent is among the most vulnerable to climate variability and change. The situation is compounded by the interaction of multiple stresses including high poverty levels, high dependence on rain-fed Agriculture, coupled with low adaptive capacity. Climate change seriously threatens Africa's continued economic growth and livelihoods of vulnerable populations. The major concerns regarding Climate Change for Africa's key economic sectors with potentially disastrous consequences include; a heightened threat of food security, inadequate water resource availability, degeneration in natural resources productivity, diminished biodiversity, decline in human health viability, increasing land degradation, increasing desertification, and coastal zone recession.

There are also concerns that the COVID-19 crisis is likely to have dramatic consequences for progress on climate change mitigation. Whilst it is expected that global greenhouse gas (GHG) emissions will fall in this period by more than in any other year on record, the rate of decline expected in 2020, would have to be repeated, year after year, to reach net-zero. Instead, emissions are expected to rebound once mobility restrictions are lifted and economies recover, unless governments intervene. Some scientists believe that there are reasons to fear that once the COVID-19 challenge is addressed there will be an even more intense climate change emergency. The coronavirus crisis may also threaten local efforts to meet climate commitments as the focus shifts to deal with the pandemic. According to the UN Secretary-General, "...while COVID-19 is the most urgent threat facing humanity today, we cannot forget that climate change is the biggest threat facing humanity over the long term".

It is recognised that there is a need to raise ambition on Climate Action, to revive political momentum for action and to mobilise the means of implementation support required by developing countries to transition their economies and to boost ambition and rapidly accelerate

action to implement the Paris Agreement. Global Warming needs to be limited to 1.5°C by the middle of the Century and there is a need to enhance the Nationally Determined Contributions of all Parties to the UNFCCC, reduce greenhouse gas emissions by 45 per cent over the next decade, and to net zero by 2050. Transformative changes needed to support the implementation of these plans in the areas of energy transition; infrastructure, cities and local action; industry transition; resilience and adaptation; nature-based solutions; climate finance and carbon pricing. In order to realise this, there is a need to operationalize the provisions of UNFCCC and its Paris Agreement regarding finance, technology transfer and capacity building. The deliverables and initiatives that will be showcased need to be implementable, scalable and replicable and have the potential to get the world in line with the commitments of the UNFCCC and its Paris Agreement. Initiatives developed should also include a broad range of stakeholders, including private sector and civil society. The third focus will be on generating political momentum through enhanced social and political drivers as well as youth and public engagement.

Africa's programme on Climate Change is coordinated through the work of the African Group of Negotiators (AGN) under the UNFCCC at a technical level, AMCEN at a Ministerial level and the AU *Committee of African Heads of State and Government on Climate Change (CAHOSCC)* at Heads of State level. Therefore, CAHOSCC has a key role to play in providing leadership for Africa on Climate Change issues; coordinating Africa's positions in international engagements and encouraging the Continent to speak with one voice and promoting the unity of Africa on Climate Change issues; supporting the mobilization of resources for African Climate Change programmes; and playing an oversight on implementation of climate action in Africa.

Adaptation is a priority for Africa, and in response to this the *Africa Adaptation Initiative (AAI)* which reportedly requires USD 3 billion for its full implementation. The AAI is based on four pillars: (1) enhancing climate information services, (2) strengthening policy and institutional frameworks, (3) supporting concrete on the ground action and (4) climate finance and investment. These four pillars once completed will working tandem with one another. The main challenge facing the programme remains the securing of finance for implementing its objectives. The AAI Initiative aims to deliver tangible, timely, coordinated and implementable actions across the African continent, and also to support the African position in negotiations under the UNFCCC. In addition to endorsement by CAHOSCC, the Africa Adaptation Initiative has also received support from the UN Secretary-General, particularly in relation to the 2019 Climate Action Summit.

The Addis Ababa Action Agenda on sustainable financing, which is buttressed by similar highlevel studies - including the UNEP Inquiry Report on designing a Sustainable Financial System, as well as the 2<sup>nd</sup> Africa Adaptation Gap Report identified the provision of sufficient Climate Financing as key issue to enable adaptation programmes to be scaled up to the prerequisite level. To commence on this trajectory of market-driven financing, it should be noted that the African Continent already contributes 20% of its total current annual adaptation needs estimated at US\$15 billion. This means up to US\$3 billion of adaptation costs are financed domestically – through programmes of different ministries and sectors, including agriculture and energy. The strategy should be based on going beyond socially driven financing of environment and climate actions to investment financing and can start with building on the structure for risk sharing and diversification already existing in the continent. In addition, domestic adaptation financing should be invested in incentivising local, accessible and marketdriven finance structures like cooperatives and micro-finance institutions, to lend affordably to environment and climate action enterprises providing socioeconomic co-benefits – including risk-sharing facilities and cooperatives – to capitalise climate action enterprises.

*Climate Commission for the Sahel Region:* The Sahel region comprises 10 countries, including Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal among others. The Sahel has a combined population of 300 million, 33 million of whom are food insecure and 4.7 million under 5 years of age suffer from malnutrition. In the Sahel region of Africa, attaining sustainable peace is crucial to address the effects of climate change and to ensure that communities gain access to various opportunities. Temperatures in the Sahel are estimated to be 1.5 times higher than the global average, which contributes to its status as one of the most environmentally degraded regions in the world. The area is also plagued by floods and droughts which severely constrain people's ability to feed their families and earn a living. The Climate Commission for the Sahel region is chaired by the Republic of Niger.

*Climate Commission for the Congo Basin:* The Congo Basin Climate Commission is a body set up in November 2016 in the Moroccan city of Marrakesh to promote blue economy programmes and projects, helping to combat poverty among riparian populations and to mitigate the effects of the climate changes through a sustainable development. It is recognised that climate change and environmental issues need to be tackled through the concerted and combined efforts of the Congo Basin Member States and the rest of the planet. The Congo Basin Heads of State recognised the urgent need to sustainably safeguard the sub region's forest and aquatic ecosystems. With a population of 152 million inhabitants in 2015, according to UN estimates, and close to 10,000 tropical plant species, a third of which are endemic to the region, over 400 mammal species, 1000 bird varieties and 700 types of fish, this region is recognised as a global biodiversity hotspot. Furthermore, the Congo Basin is home to 220 million hectares of forests, which play a key role in regulating the global climate.

*Climate Commission for Island States and Ocean Economy:* Small Island Developing States (SIDS) are a distinct group of developing countries that face common social, economic and environmental challenges. These include small populations, high dependency on development assistance and international trade (especially commodities through preferential trade regimes), susceptibility to external shocks, high transportation costs and low connectivity, susceptibility to natural disasters and high vulnerability to the impacts of climate change. Of particular concern to SIDS in this regard are the risks associated with rising ambient temperatures and sea levels. The United Nations Conference on Trade and Development (UNCTAD) classifies 29 countries as SIDS. There are 10 in the Caribbean and the Americas, 12 in the Pacific, 5 in Africa and 2 in Asia. This represents a significant geographical dispersion and highlights the difficulties they face in forging common solutions to many of their inherent challenges. For example, while a similar template for marine management systems could be used by different small States, remoteness and geographic dispersion prevents the pooling of resources for their implementation.

Enhancing support on the development and domestication of the African Union's Climate

Change Strategy is vital to promote continental guidance on climate actions. Scaled up resources to support Africa Adaptation Programmes, including the Africa Adaptation Initiative (AAI) as well as the three Climate Commissions on Sahel, Congo and Island States and the High-level Work Programme on Climate Change Action in Africa (WPCCAA) with components on Gender and Women and Youth are required.

*African Nationally Determined Contributions* – the crosscutting nature of the Nationally Determined Contributions (NDCs) to the global effort to combat Climate Change as required by the Paris Agreement, has implications for multiple sectors, including the ministries of finance and planning, trade and industry, economic development among others. The implementation of the nationally determined contributions will have direct implications for the achievement of the SDGs, as well as structural reformation of Africa's economies both at the policy and at financing levels, in promoting low-carbon, and climate resilient development. Fiscal policies and public financing are powerful tools for incentivization of low-carbon development transition, and decisions for prioritizing climate resilience measures. The African NDCs should embody intersectoral linkages and benefits that require cross-sectoral planning and coordination at national level in creating the enabling policy environments for harnessing the emerging opportunities. Nationally Determined Contributions need to be costed or factored into the national budget, which requires adequate data, indicators, baselines and targets.

There is a clear distinction characterising the NDCs of most African countries principally along the axis of 'conditional' and 'unconditional' contributions. Following an analysis by the African Climate Policy Centre, UNECA, for adaptation, it was found that the conditional contributions constituted 58% while the unconditional contributions constitutes 42%. Similarly, for mitigation, conditional contributions were 66% and unconditional contributions, 34% respectively. Thus, that alone requires the allocation of additional financial resources for the implementation of unconditional contributions in the NDCs since these represent actions that the country pledges to undertake using their own means and resources. There is, therefore a great need to enhance the role of policy-makers to critically consider the policy implications as well as the financing obligations and opportunities associated with the implementation of NDCs in Africa, by enhancing coordination and synergies among the key stakeholders, and ensuring strong buy-in and alignment with national development priorities.

To ensure successful implementation of the NDCs in Africa, coordinated efforts are needed to ensure that those nationally determined contributions are properly mainstreamed into national development plans as well as sectoral plans, and that they are fully costed and captured in the national budgetary processes. Like any investment, this has significant benefits in building climate resilience of production sectors. According to a joint report prepared by AfDB, UNEP, UNECA and Climate Analytics, the direct and indirect costs of taking action on climate change will be high, but the costs of inaction will be much higher. Global efforts towards a low-emissions, low-warming scenario – as expressed in the Paris Agreement's long-term goals – could avert a large part of the most serious macroeconomic and development consequences for Africa. In order to support the preparation and implementation of NDCs in Africa, the provision of new, additional and sustained finance, technology transfer and capacity building should be provided by developed countries through public sources as per UNFCCC and its Paris Agreement provisions.

There are significant benefits in investing in climate actions under the NDCs by African countries that builds resilience. For instance, the World Bank estimates that investment in making infrastructure more resilient will require an additional 3% upfront cost but will increase returns on investment by 300%. However, mobilizing these resources will require significant policy and regulatory reforms which involve various national stakeholders, including ministries in charge of finance and budget, development planning as well as International Cooperating Partners (ICPs). It is recommended that African countries in updating their NDCs, should highlight the economic sectors with greatest potential for green recovery and job creation, which can rebound and develop sustainably through international investment and financial, technological and capacity building support. African countries should focus on the component of adaptation when elaborating their NDCs to enhance their resilience to multiple risks. Support on technology transfer, development of robust climate monitoring frameworks and capacity building are key to enhance climate actions in Africa, which should include all sectors specifically vulnerable to climate change negative impacts.

The NDCs present investment opportunities for African countries and for the ICPs. The mobilization of private investment can play a significant role in achieving their climate and sustainable development goals. Many developing countries are looking to identify effective options to engage the private sector, including working with international partners. In this regard, innovative financing is critical to address issues related to climate change and exploring alternative financing models such as green bonds can be critical in driving climate action and implementation. The need for policy harmonization is crucial to drive NDCs implementation and an enabling environment for investment. This is an important element as climate change issues are cross-cutting and need the involvement of many, if not all sectors and cannot be left only to the Ministries responsible for the environment.

The United Nations Economic Commission for Africa (UNECA) estimates that the total investment required for implementation of ratified NDCs across Africa (conditional and unconditional) exceeds US\$2.5 trillion. In order to realise the SDGs, which overlap with the NDCs, especially through SDG 13 on Climate Change, requires at least US\$1.2 trillion annually. Cumulatively, the direct financing needs for all the SDGs and NDCs is equivalent to the continent's entire GDP, translating to about US \$60 billion per country per year. Notwithstanding these large amounts of finance, Africa cannot rely on traditional public sources with official development assistance (ODA) having peaked at about US\$50 billion annually in 2018. The implication is therefore that financing must divest from liquid cash alone, because what can be raised through traditional public development financing is insignificant and continues to decline.

Furthermore, climate finance is regarded as different and separate from the traditional forms of development finance. Thus, climate finance has to be new, additional, adequate and sustained, which requires the full operationalization of the UNFCCC and its Paris Agreement provisions. Countries must therefore be engaged in a paradigm of leapfrogging from such traditional financing approaches based on international direct public finance and supported to establish structures for innovative, market-driven and blended financing approaches to enhance the support initiatives under the African Green Stimulus Programme. Therefore, the AGSP aims to enhance climate action through mobilising support for the development and implementation of the NDCs of African countries and promoting the integration of these into national development planning and financing processes.

**Responding to the effects of climate change and extreme weather** - to enable effective action to adapt to and mitigate the effects of climate change and extreme weather, African governments and individuals must have access to science-based knowledge that is regularly updated and derived from robust data. Africa has been experiencing an increasing frequency of severe extreme weather and climate events, including tropical cyclones, droughts and floods. However, according to the State of Climate in Africa 2019, published by the World Meteorological Organisation (WMO), Africa is facing the largest capacity gaps with regard to climate services globally. In this regard, it is recommended that the Continent builds its resilience against high-impact events through the establishment of effective Multi-hazard Early Warning Systems (MHEWS) and appropriate prevention and risk management strategies. The development of the MHEWS should be based on risk knowledge, detection, monitoring and forecasting, communication of actionable warnings, and preparedness at all levels and should complement other long-term prevention and resilience activities, in accordance with the provisions of the Sendai Framework for Disaster Risk Reduction. The African Ministerial Conference on Meteorology (AMCOMET) should provide the necessary strategic guidance in this regard.

### In order to enhance Climate Action, the following is recommended:

- Seize the opportunities in the recovery from COVID-19 to support the transformation of the Continent towards a sustainable, greener and climate friendly future through well-designed economic recovery stimulus to accelerate the mainstreaming of climate action into development.
- Create specific financing mechanisms for mitigation and adaptation to climate change to complement and enhance initiatives being pursued as part of the Financing for Development in the era of COVID-19 and beyond as part of the Addis Ababa Action Agenda.
- Build on and scale up existing projects, initiatives and frameworks at the continental level such as the Africa Adaptation Initiative (AAI), the Africa Renewable Energy Initiative (AREI), the Adaptation of African Agriculture Initiative (AAA), the Great Green Wall Initiative among others and focus on supporting priorities already identified in countries' national or sectoral master plans, and in particular climate change adaptation plans and the Nationally Determined Contributions (NDCs) of the Paris Agreement.
- Adopt and implement the ecosystem-based approach to enhance climate resilience at the local levels, while also contributing to improved livelihoods, and allow countries to build back better through an immediate response to the economic impact of the COVID-19 pandemic, while also contributing to reducing the impact of climate change and addressing biodiversity loss. Support is needed to enhance such actions.
- Promote the coherence and synergies between climate change, biodiversity, desertification and land degradation in order to enhance co-benefits.

- Ensure that green recovery initiatives have an equal balance between adaptation, mitigation and means of implementation in order to enhance climate action and develop green infrastructure to face future challenges.
- Enhance climate action through mobilising support for the development and implementation of the NDCs of African countries and promote the integration of these into national development planning and financing processes.
- Establish effective Multi-hazard Early Warning Systems (MHEWS), upgrade Africa's network of weather observation stations.
- Develop and implement appropriate disaster prevention and risk management strategies.

### 5.6 Investing in Africa's Blue Economy

This Key Priority Area has linkages to SDG 1: No Poverty; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 12: Responsible Consumption and Production; and SDG 15 Life Below Water.

The world's economic relationship with the ocean is evolving in important ways. As a setting for global trade and commerce, and as a source of food and energy, the ocean's contribution to the global economy is significant. During the 21<sup>st</sup> Century, it is likely to become an even greater economic force. The drivers are mostly varied, but have their origins in our growing familiarity with the ocean environment; new technologies that make it feasible and viable to harness ocean resources; longer-term growth and demographic trends; the quest for food security and alternative sources of minerals and energy; seaborne trade and rapid coastal urbanization, among others. Alongside established ocean industries, emerging and new activities including offshore renewable energy, aquaculture, deep seabed mining, and marine biotechnology have the potential to bring new growth opportunities and greater diversity in the oceans economy.

The "Blue Economy" refers to a marine-based economic development that leads to improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It includes:

- Reframing the oceans as "Development Spaces" that are subject to spatial planning.
- Making use of that planning to integrate "conservation, sustainable use, oil and mineral wealth extraction, bio-prospecting, sustainable energy production and marine transport".
- Incorporating the value of the oceans into economic decision-making.
- Establishing policies that favour low-carbon, resource-efficient, and socially inclusive development (mirroring the Green Economy framework in this regard).
- Prioritizing the use of the seas to benefit people, alleviate poverty, generate employment, and promote equity.
- Decoupling socio-economic development from environmental degradation.
- Improving relevant international law and governance mechanisms.

Africa is endowed with a vast network of aquatic resources and extensive interconnected oceans. The African lake zones cover approximately 240,000 km<sup>2</sup>, while its transboundary

river basins cover approximately 64 per cent of the continent's land area. The total length of Africa's coastline is some 26,000 km, making the African maritime domain extremely important for commercial, environmental, developmental and security reasons. There are more than 100 ports in Africa, 52 of which handle containers and transnational trade. The continent's maritime economy is estimated to represent some 90 per cent of its total commerce. For three-quarters of the African continent, the blue or ocean economy is its principal economy and, if well used, could be a potent engine for economic growth. The new and developing industries in a blue or ocean economy include aquaculture; marine renewable energy technologies for wind, wave and tidal energy; bioproducts (pharmaceutical and agrichemical); blue or ocean carbon (carbon storage in mangroves, seagrass and saltmarsh); and desalination.

The "blue economy" encompasses economic activities from marine and aquatic spaces in oceans, coasts, seas, rivers, lakes, groundwater, wetlands, floodplains and associated water resources. Therefore, the notion of the "Blue Economy" is inclusive of inland waters as well as oceans and coastal areas. Africa's inland waters, oceans and seas are under environmental pressure. Over the years, traditional maritime activities, such as shipping and commercial fishing have intensified, while new ones, such as aquaculture or offshore renewable energy, emerged. However, the rise in intensity of activities at sea is taking place against the backdrop of insecurity, various forms of illegal trafficking, degradation of the marine environment, declining biodiversity and aggravated effects of climate change.

In the past decades, direct aggregate losses of revenue from illegal activities in Africa's Maritime Domain (AMD) amount to hundreds of billions US dollars, not to mention the loss of lives as stated in the 2050 Africa Integrated Maritime Strategy. Recognizing the breadth of economic potential, extensive coastline and abundance of maritime resources, the African Union, in 2014, endorsed the 2050 Africa Integrated Maritime Strategy (2050 AIM Strategy), a long-term strategic vision for the development of Africa's blue economy. The strategy proposes developing a combined African Exclusive Economic Zone (EEZ), a strategic governance for the African Blue Economy. The notion of the Blue or Oceans Economy has its origins in the growing awareness of the environmental damage wrought on ocean ecosystems by human activity such as overfishing, habitat destruction, pollution and the impact of climate change. There is therefore a need to promote a more sustainable balance between economic growth and ocean health, which is one of the fundamental tenets of the development of the Blue/Oceans Economy.

Investment in the blue or ocean economy has the potential to contribute significantly to Africa's industrialization and economic development. Fresh water and marine fish contribute to the food security of over 200 million people in Africa and provide an income for over 10 million people. In May 2014, the African Union estimated the first-sale value of African fisheries (marine, inland and aquaculture) to be US\$19.7 billion per annum. It also estimated that there would be an additional US\$2 billion available annually for African economies if the fisheries sector were to be managed sustainably.

Africa needs to ensure that any exploitation of the deep seabed under the auspices of the International Seabed Authority, should include adequate environmental safeguards and a

share of proceeds for Africa, as this is an area beyond national jurisdiction that is the common heritage of humankind. Likewise, there is a need for sustainable and responsible management with African participation over other areas beyond national jurisdiction, notably the high seas.

The Government of the Republic of Kenya in collaboration with the Government of Canada and Japan convened a high level Sustainable Blue Economy Conference (SBEC) in Nairobi on 26 – 28 November 2018 under the theme "the blue economy and the 2030 Agenda for Sustainable Development, protecting the blue economy for future generations". The Conference provided an opportunity for both developing and developed countries to explore the priorities and challenges of establishing a sustainable blue economy and its contributions to the implementation of the 2030 Agenda for Sustainable Development including maritime and safety security. In addition, the innovative role of various stakeholders, including national and local governments, private sectors, civil society, regional and sub-regional groups as well as domestic and international financial institutions are playing in investing and formulating sustainable ways of exploiting Blue Economy were deliberated upon. The conference was predicated on two conceptual pillars, namely: Sustainability, Climate Change and Controlling Pollution, and; Production, Accelerated Economic Growth, Jobs and Poverty Alleviation. The implementation of the outcomes of the SBEC are relevant for this key priority area.

A sustainable blue or ocean economy holds great promise for contributing towards the success of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals. Despite the recognition that Africa's oceans are some of the richest environmental resources in the world, there remains a generally low consideration of their importance as a source of income for steering the growth of African economies. There is an urgent need to invest in the management of African oceans if the momentum of a blue or ocean economy is to be harnessed to contribute to national economies and the conservation of ecosystems. African countries urgently need better oversight and governance as well as enhanced resources to manage their national waters and EEZ effectively, to for example deal with exploration of the seabed and scientific research by private companies and foreign countries.

It should be noted that the African Union has developed Africa's Blue Economy Strategy to ensure that the sustainable blue economy becomes a significant contributor to continental transformation and growth through knowledge on marine and aquatic biotechnology, environmental sustainability, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport and fishing; and exploitation of deep sea mineral and other resources.

This Strategy is focused on the following 5 thematic areas that are considered critical for Sustainable Blue Economic Growth in Africa:

- 1. Fisheries, aquaculture, conservation and sustainable aquatic ecosystems
- 2. Shipping/transportation, trade, ports, maritime security, safety and enforcement
- 3. Coastal and maritime tourism, climate change, resilience, environment, infrastructure
- 4. Sustainable energy and mineral resources and innovative industries

5. Policies, institutional and governance, employment, job creation and poverty eradication, innovative financing

It is noted that there has been some progress in several African countries on the Blue Economy development, significant institutional and governance challenges remain, constraining the ability of Member States to effectively formulate and implement policies relating to growth and development of the blue economy in Africa. This would require strengthening of the institutional capacities of key national and regional agencies and organizations for the effective implementation of blue economy related functions. It would also entail capacity enhancement and incentivization of those entities and structures that are related to the key sectoral aspects of the blue economy, among others.

The need to enhance the environmental contribution to the development of the blue economy of Africa as well as to mitigate the impacts of natural disasters such as floods and cyclones is imperative, as well as contributing to the livelihoods of people living in coastal and riparian areas. Enhanced support for the implementation of the African Union Blue Economy Strategy for harnessing the potential for improving productivity of the ocean environment, job creation, strengthening food and nutritional security, wealth creation opportunities and environmental sustainability towards sustainable blue economy development is also required.

# In order to enhance investment in the Blue Economy, the following is recommended:

- Support the development and deployment of effective methods for the mapping, integrated assessment and valuation of marine and coastal ecosystem services for sustainable blue economies at national and regional levels.
- Support the development of guiding frameworks, technical capacity and pilot initiatives to support countries and develop sustainable blue economy financing mechanisms.
- Promote international cooperation and support for Blue Economy in African countries through enhanced partnerships and investment.
- Enhance the environmental contribution to the development of the blue economy of Africa, to address marine pollution as well as to mitigate the impacts of natural disasters such as floods and cyclones, thereby contributing to the livelihoods of people living in coastal and riparian areas.

### 5.7 Scaling up Climate Smart Agriculture and Enhancing Resilient Food Systems

*This Key Priority Area has linkages to SDG 1: No Poverty; SDG 2: No Hunger; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 12: Responsible Consumption and Production; and SDG 14: Life on Land.* 

Agriculture is Africa's main economic driver, with very few countries having diversified into other sectors like manufacturing and services. As a result, much of the intra-African trade envisaged by the AfCFTA will still be based on agricultural goods and services as the main offering of many countries. Agriculture on the other hand, is being negatively impacted by climate change, as increases in temperature will result in reduced yields, prevalence of diseases and extreme weather events such as drought and flooding. Agriculture also requires significant and reliable sources of water, which may become even scarcer as certain areas become drier.

The successful implementation of Climate Smart Agriculture (CSA) is crucial in the drive towards sustainable development. The objectives of CSA are aligned to the sustainable agriculture goal of production of food, and or other plant or animal products using *farming* techniques that protect the environment, public health, human communities, and animal welfare. The aim of CSA as an aspect of Sustainable agriculture rests on the principle that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. The challenges that Africa is facing particularly, food insecurity, rising food prices, water crisis etc. means that the need for transforming and reorienting agricultural development under the new realities of climate change has become an emergency. CSA is regarded as a critical approach towards driving agriculture that sustainably increases productivity, enhances resilience (adaptation), reduces/removes GHGs (mitigation) where possible, and enhances achievement of food security and development goals.

Two-thirds of the population of sub-Saharan Africa reside in rural areas, the majority being smallholder farmers. Furthermore, it is estimated that some 375 million young Africans will enter the job market in the coming 15 years. Of that number, some 200 million will be living in rural areas, mostly engaging in smallholder farming, in which they will simultaneously serve as stewards of increasingly scarce natural resources and on the frontline of dealing with the impact of climate change. Job creation for young people is an urgent and high-priority challenge for African countries. It calls for innovative thinking beyond traditional sectors. Smallholder farmers therefore play a critical role in addressing the challenges which currently prevent them from scaling up their participation in markets, including insecure rights to land and natural resources, lack of access to quality farm inputs and financial services, inadequate support from research and extension services, and high transaction costs caused by poor rural infrastructure. The challenges are even greater for women farmers, who constitute the majority of farmers in Africa. As a group, smallholder farmers are among the poorest and most marginalized in the world, and their direct dependence on natural resources for their livelihoods causes a cyclical loop between poverty and biodiversity loss.

Climate smart adaptation and resilience includes building resilience and enterprise profitability across lowland and hillside production systems using a range of Climate Smart Agriculture (CSA) approaches. CSA targets food security while achieving broader developmental goals under a changing climate. The approach aims to increase agricultural productivity and the resilience of farming systems while reducing greenhouse gases from the system in a sustainable way. This should include promoting practices that build climate resilience which include: diversification of farming systems to assimilate small and large livestock into the production and fertility management cycle; introduction of water-efficient and usually low-cost small-scale irrigation; soil and water conservation practices; renewed emphasis on hillside and highland irrigation schemes, which require only supplementary irrigation as opposed to lowland plains, which generally have severe rainfall deficiency and comparatively limited

resilience to climate change; and to mainstream CSA and watershed development approaches into regional and national agricultural investment plans.

Programmes for adaptation to climate change and building the resilience of farmers to climate related and economic shocks including scaling up climate smart agriculture to enhance food security and agricultural livelihoods are required. Mainstreaming adaptation and resilience in the Comprehensive Africa Agriculture Development Programme (CAADP) processes, implementation of the Adaptation of African Agriculture (AAA) Initiative as well as the development of the African Climate Resilient Agricultural Development Programme (ACRADP) will also be vital to boost Africa's sustainable and transformative growth. Emerging technologies such as the use of drones in farming to better predict the yield of the season and thereby enabling the country to mitigate low yields well in advance; and to use Climate Services and satellite imagery to predict climate events and to reduce vulnerability should be encouraged.

# In order to Scale up Climate Smart Agriculture and Enhancing Resilient Food Systems, the following is recommended:

- Provide small-scale finance and technical support to farmer women and men to establish sustainable agrosystems that add value to their agricultural production.
- Ensure the business community plays a positive and responsible role in the development of sustainable, nutritious food systems that support economic growth, respecting land rights and land governance systems.
- Develop a toolkit for Development of Remote and Rural Areas to improve living standards in remote and rural areas and reduce the gap in access to infrastructure and economic benefits, covering infrastructure, public and financial services, agriculture, education, and healthcare, including technological solutions.
- Promote urban and peri-urban agriculture, including urban-rural linkages
- Strengthen the food system to be more resilient to future shocks
- Scale up financing for climate change adaptation to support climate smart agriculture and health as well as support institutional policy and investments.

# 5.8 Supporting Sustainable Management of African Forests and Range Lands

This Key Priority Area has linkages to SDG 1: No Poverty; SDG 2: No Hunger; SDG 8: Decent Work and Economic Growth; SDG 12: Responsible Consumption and Production; and SDG 14: Life on Land.

African forests are home to an abundance of animal and plant life, although these are some of the world's most threatened ecosystems. African rainforests can be found spread across east, central, and west Africa and cover over 3.6 million square kilometers. Approximately three quarters of Africa's rainforest are located in central Africa. The African Countries that have Rainforests are Cameroon, Congo, Democratic Republic of Congo, Gabon, Ghana, Ivory Coast, Liberia, Nigeria. However, Africa's forest area is shrinking at an alarming rate, due to illegal logging and harvesting of forest species.

The Sustainable Forests Management (SFM) Framework for Africa (2020-2030) was developed to respond to conserving the forests of the region and recognises the following key areas:

- Advocating for, and profiling Africa's forests and wildlife in Africa: Efforts need to be geared towards the profiling of the forestry and wildlife sectors and their contributions to the SDGs and relevant sectors in Africa. In collaboration with key partners such as AUC, RECs, AFF, UN agencies, Non-Governmental Organizations (NGOs), Civil Society Organizations, Academia, Research networks and other partners in the region, the Commission could facilitate through a collaborative working group of experts the development of regular publications, reports or regional thematic outlook studies to: i) assess and highlight benefits and evidence-based contributions provided by forests and wildlife to the economy in the region; ii) underline strength of and opportunities to the sector and progress made in addressing the challenges and threats towards the achievement of the 2030 Agenda and Agenda 2063; and iii) develop key messages and define required action to address challenges.
- **Sustainable financing for forestry and wildlife programmes in Africa:** This should explore ongoing status of financing devoted to Africa's forests and wildlife sectors, current and future opportunities, and identify barriers/ challenges to access large investments in these sectors in countries. There is a need to identify and disseminate best practices to address the issues of sustainable financing, share experiences and improve engagement of resource partners through regional platforms and fora. This stream of work can be directly developed in collaboration with UNFF in support of the UN Strategic Plan for Forests 2030 and their planned capacity building activities, as well as with AUC, FAO and other potential partners.
- *Climate Change: Restoration of Forests for Resilience:* This is intended to focus on capturing, analysing, and disseminating lessons learnt, good approaches and information on ongoing programmes in the region that support sustainable management and restoration of forest, trees and wildlife resources. It will also consider nature-based solutions in response to climate change impacts on African communities, food security and production systems. In addition, it will showcase forestry and wildlife sectors' key role in accelerating the implementation of the Nationally Determined Contributions and building resilience of food systems, landscapes and livelihoods in Africa.
- Enhancing Action against Deforestation for Sustainable Development in Africa: This is aimed at supporting countries to achieve significant reduction in deforestation rates, while enhancing agricultural productivity, biodiversity conservation, sustainable management of natural resources and income of small-scale food and forest producers. This work will support actions aimed at enhancing cross-sectoral collaboration between different sectors including private and public in the fields of forestry, wildlife, agriculture, livestock, water, energy, tourism, etc. and addressing issues related to Human-wildlife-livestock-ecosystem interface and sustainable value chain development. This will be undertaken particularly by stocktaking, building on and up-scaling successful projects and initiatives such as those related to mainstreaming biodiversity in agricultural sectors, the One Health Approach, Forest Law Enforcement, Governance and Trade

(FLEGT), development of sustainable value chains for forest products and ecosystem services, among others. It will take advantage and build synergies with ongoing work under both UN Decades on Ecosystem Restoration and Family Farming, as well as, the Land Degradation Neutrality targets of the United Nations Convention to Combat Desertification (UNCCD) and Aichi targets under the Convention on Biological Diversity (CBD). Drivers of deforestation need to be analysed and lessons learnt on how to address the challenges posed by competing sectors will be captured and shared for scaling up. It will also look at enabling policies, and develop mechanism(s) for supporting cross-sectoral dialogues and partnerships in countries.

Promoting Forest and Wildlife education and professions. This aims to enhance
interest of the youth and young professionals in forestry and wildlife professions and
education. It will build capacities to tap opportunities from these sectors, as well as to
adapt to the new and emerging challenges in the sectors such as biodiversity, climate
change, information technologies, digitalization, etc. Particular attention will be given to
gender equality, women and youth empowerment in forestry and wildlife sectors.

# In order to promote Sustainable Management of African Forests and Range Lands, the following is recommended:

- Enhance the implementation of the African Union Sustainable Forest Management Framework to support African countries to achieve significant reduction in deforestation rates, while enhancing agricultural productivity, biodiversity conservation, sustainable management of natural resources and income of small-scale food and forest producers.
- Upscale resource mobilization and financing, devoted to the sustainable management of Africa's forests, identifying current and future opportunities, implementation of the Sustainable Forest Management Framework and overcoming barriers/ challenges to access large investments in these sectors in countries.
- Mainstream forestry and land management into the COVID-19 recovery and stimulus programmes at national, regional and global levels and the adoption of integrated and landscape approaches to natural resource management to yield the maximum benefit for all stakeholders.
- Maintain budgets earmarked for the forestry and land management and provide additional budgetary support to sectors to enhance sustainable management of these vital resources.
- Expand Forest and land restoration to provide jobs especially in the rural areas to kickstart the economies and strengthen the fight against climate change and biodiversity loss, whilst ensuring a supply of essential products, securing jobs and foreign exchange.
- Enhance collaboration, and put in place adequate institutional, policy and regulatory mechanisms to address the illegal exploitation and trade in forest products, in particular the Rosewood, in collaboration with partners, civil society organizations and local communities.

- Enhance the implementation of the initiatives such as Land Degradation Neutrality (LDN) targets and other Land Based Solutions through innovative financial instruments for restoration and rehabilitation of degraded landscapes to accelerate restoration of degraded land.
- Build and strengthen synergies between and across sectors to enhance the resilience of food and natural resource systems to guard against future pandemics.

#### 5.9 Improving Water Conservation and Use in Africa

*This Key Priority Area has linkages to SDG 1: No Poverty; SDG 6: Clean Water and Sanitation; SDG 8: Decent Work and Economic Growth; SDG 12: Responsible Consumption and Production; SDG 14: Life on Land; and SDG 15 Life Below Water.* 

Improving water conservation and use as well as governance are important developmental issues for Africa, where many areas are arid, and are experiencing water stress or scarcity. Inter-state governance of water resources is ensured through a number of transboundary agreements, with bilateral and multilateral commitments supporting integrated water management in the seven basins of Africa. Principle 4 of the 1992 Dublin Statement on Water and Sustainable Development ("the Dublin Principles") states that "water has an economic value in all its competing uses and should be recognized as an economic good. The Africa Water Vision for 2025: Equitable and Sustainable Use of Water for Socioeconomic Development has been designed to avoid the disastrous consequences of natural and human threats to African water resources and to stimulate and sustain growth for economic development and social well-being in the region. Through the declarations adopted by the African Ministers' Council on Water (AMCOW), African ministers responsible for water have agreed on commitments to accelerate the achievement of water and sanitation goals in Africa.

The main feature of the African water agreements of the twentieth century is the creativity with which they were formulated to meet the unique hydrological, economic, political and cultural settings of individual basins. African agreements relating to water have also tended to use multi-resource linkage, thus broadening benefits, including peace and the generation of hydo-power. A range of private initiatives to monitor and assess performance on the sustainability of water management and use have emerged at the local (company and community), regional (river), national and global levels. Other processes and tools have been developed for use by corporations or consumers, which could be promulgated through trade. In cases involving hydropower generated on rivers shared by more than one country, there is a further incentive for regional cooperation and trade. Mechanisms for managing demand for water should be assessed in the context of developing institutional mechanisms for water as an economic resource while facilitating sustainable use in the blue or ocean economy. A nexus approach is required to bring together the interlinked development agenda, given that different issue areas are generally intrinsically interconnected and thus need to be similarly governed.

Many countries in Africa are struggling to meet the objectives of water security, reliable supplies of water for productive activities and water safety, owing to extreme events, such as

floods and droughts. Analysis of governance frameworks reveals that the nexus between water resources management and the blue or ocean economy needs to be strengthened, and that water is treated as an isolated resource, with essential features, such as its connectivity to ocean resources, and its natural resources, including fisheries, should be articulated in governance frameworks.

In this regard, there is need to focus on promoting the Africa Water Vision for 2025 and the implementation of the Sharm-El Sheikh Commitments: Equitable and Sustainable Use of Water for Socioeconomic Development through investing in improving management of water resources, such as river basin catchments, impoundments and lakes, enhancing water use efficiency as well as rain water harvesting and the modernization of irrigation systems to more water efficient systems in the domestication, integration and implementation of the Framework for Irrigation Development and Agricultural Water Management (IDAWM) in Africa.

Scaled up investment in managing water quality of Africa's water resources and Ending Open Defecation in Africa are also required. It would further include making progress on the challenges of water and sanitation infrastructure financing for increased water access for resilience of the populace to foster the Sharm El-Sheikh Commitment on Water and Sanitation for achievement of SDGs in realization of Agenda 2063.

# In order to improve Water Conservation and Use in Africa, the following is recommended:

- Prioritize improving access to potable and clean water by communities, homes, schools, marketplaces and healthcare facilities in order to prevent human-to-human transmission of pathogens including COVID-19; and the adoption of a multi-sectoral approach to address COVID-19 across the spectrum of water and sanitation.
- Include Water, Sanitation and Hygiene (WASH) as core parts of COVID-19 Resource Mobilization to advance Africa Water Vision 2025, achieve Transformation Agenda 2030 on SDGs-Goal 6 in order to realise the aspirations of Africa's Agenda 2063.
- Increase roll-out of WASH Programmes to address emerging epidemics or pandemics to promote and motivate more frequent and regular hand hygiene by building a supportive environment to improve and sustain access to hand hygiene facilities and by using a multimodal strategy.
- Enhance the treatment of wastewater and sludge to minimize the risks of water-borne diseases including the potential presence of COVID-19 and to keep water supplies safe through education and awareness raising and strengthening monitoring systems.
- Encourage increased collaboration amongst African organisations and relevant water and sanitation institutions on data, knowledge and experience sharing among African States as well as learning from international experiences in the management of the Pandemic with respect to in water and sanitation.
- Scale up investment in managing water quality of Africa's water resources and Ending Open Defecation in Africa.

# 5.10 Investing in Renewable Energy in Africa

This Key Priority Area has linkages to SDG 1: No Poverty; SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 12: Responsible Consumption and Production.

In an era of accelerating change, the imperative to limit climate change and achieve sustainable growth is strengthening the momentum of the global energy transformation. The rapid decline in renewable energy costs, improving energy efficiency, widespread electrification, increasingly "smart" technologies, continual technological breakthroughs and well-informed policy making all drive this shift, bringing a sustainable energy future within reach. Climate change mitigation, reducing local air pollution, improving energy security and socio-economic benefits are among the key drivers for energy transition worldwide.

Renewable energy, in combination with rapidly improving energy efficiency, forms a cornerstone of a viable climate solution. Renewables are recognised as mainstream energy source in all nations globally. Enabling solutions are also becoming economically viable allowing renewables to be integrated to the grid. These developments have been boosted by consumers' goals to reach reliable, affordable and clean sources of energy. These trends will continue being enabled by a virtuous cycle as costs decline further and new approaches emerge to integrate more renewables to the energy system. Average costs of generation dropped to USD 0.056/kWh by end of 2017 with costs of many projects well below this average making solar PV one of the cheapest sources of energy. Solar PV and all other renewable power generation technologies that are now in commercial use are expected to fall within the fossil fuel-fired cost range, with most at the lower end or undercutting fossil fuels. These developments resulted in a record high installation of renewable generation capacity in 2018 of 171 gigawatt (GW), an increase of 7.9% compared to the renewable capacity installed in 2017. At the end of 2018, a total of 2,351 GW renewable energy generation capacity was in place globally. With these developments, renewable energy's share in total global electricity generation exceeded 25% by end of 2018. Wind and solar PV's share represents around 4% of the total generation. Much of the renewable power still comes from hydropower plants.

It well known that Africa's economic growth requires sufficient, reliable and accessible energy, which also requires improved resilience and sustainability. However, it is reported that nearly 60% of sub-Saharan Africa's (and nearly half of the continent's) population remains without access to electricity, representing the largest share among all world regions. Supply unreliability is a concern holding back economic development, with most countries facing frequent blackouts and often relying on expensive and polluting solutions.

Africa is fortunate to be richly blessed with renewable energy sources, including hydro, sun, wind and others, and African countries require sound planning to ensure the right energy mix. Endowed with these substantial renewable energy resources, Africa can adopt innovative, sustainable technologies and play a leading role in global action to shape a sustainable energy future. By pursuing the development of sustainable and clean energy, the Continent could meet nearly a quarter of its energy needs from indigenous and clean renewable energy sources by 2030 and increase the share of renewables in its total energy mix to as much as two-thirds by 2050. Clean, indigenous and affordable renewable energy solutions offer the continent the chance to achieve its economic, social, environmental and climate objectives.

Sustainable development and use of the Continent's massive biomass, geothermal, hydropower, solar and wind power have the potential to rapidly change Africa's current realities. Initiatives to promote decentralised renewables support healthier and more

prosperous communities while mitigating climate change and helping to preserve the environment and natural resources. Finding a sustainable way to meet growing energy needs is one of the core development challenges for the Continent. This will require strategic, resultsoriented partnerships with African organisations and development partners, in order to achieve concrete outcomes and impact in Renewable Energy. This is also premised on strong linkages to the regional programmes and initiatives, which have heightened synergies in the pursuit of Africa's energy transformation.

The International Solar Alliance secured commitments to mobilize up to US\$1 trillion in solar investments. It was recognised that at the launch of the *Africa Renewable Energy Initiative (AREI)* during the UNFCCC COP21 by the coordinator of CAHOSCC and its support by various partners, that the AREI has the potential to catalyse climate mitigation for development in Africa and US\$10 billion was pledged. The Initiative is intended to be a transformative and Africa-led effort to accelerate and scale up the harnessing of the continent's huge renewable energy potential. Globally, the renewable energy sector created 11.5 million jobs in 2019.

Enhancing the roll-out of AREI in order to mobilize Africa's potential to generate at least 300 GW by 2050 is required. The AREI needs to provide sufficient support to enable African countries to take bold action to leapfrog to the smart, people-centered renewable energy and energy efficient systems as well as developing value chains in new and emerging markets and enhance job creation in this sector. Investments in renewable energy and a diversified energy mix could as well shield economies in the case of future pandemics and economic crises. Renewable Energy investments are a key component of the Programme for Infrastructure Development in Africa (PIDA), and the next phase of the PIDA is intended to harness Africa's vast renewable energy potential in continental infrastructure planning to 2030 beyond the current emphasis on hydropower and geothermal resources. Partners such as International Renewable Energy Agency (IRENA) also closely co-ordinate work on the Clean Energy Corridors with the AREI.

It is predicted that Africa could meet nearly a quarter of its energy needs from indigenous and clean renewable energy by 2030 and modern renewables amounting to 310 gigawatts (GW) could provide half the continent's total electricity generation capacity. This corresponds to a sevenfold increase from the capacity available in 2017, which amounted to 42 GW. A transformation of this scale in Africa's energy sector would require average annual investment of USD 70 billion to 2030, resulting in carbon dioxide emissions reductions of up to 310 megatons.

Furthermore, accelerated deployment of renewable energy creates jobs and brings health benefits. The renewable energy sector today employs 11.5 million people worldwide. There is significant job creation potential from both investing in renewable energy and investing in the local supply chain associated with renewable energy. Further, introducing (and enforcing) improved energy efficiency standards for buildings (and retrofitting existing buildings) will trigger the construction industry and cost less than large infrastructure investments. It is reported that recovering with clean energy investment will create more jobs than investment in fossil fuels. Investments in clean energy create three and a half times the number of jobs as

the same size investment in fossil fuels. With far-sighted industrial policies and targeted skills development, millions of new jobs can be created in Africa. This would enable further economic benefits such as improved healthcare services, especially in the most remote areas. It would also further support the empowerment of women, who represent an estimated 35% of the renewable energy labour force and whose role will become more prominent, notably through the productive use of renewable energy.

As countries rebuild from the COVID-19 pandemic, countries are exploring on how they can 'Recover Better' and use this opportunity to prioritize clean energy investments in their recovery plans and stimulus packages - helping reset their economies and close energy access gaps. Key policies and enabling measures that countries should take as part of an ambitious 'recover better' strategy that will deliver resilient economic growth, new jobs, and sustainable energy for all over the long-term. Capacity building in Renewable Energy is a central priority in African countries. This should target policy makers as well as other energy stakeholders who could play a part in accelerating the deployment of renewables.

# In order to enhance investments in Renewable Energy in Africa, the following is recommended:

- Support African countries to pursue significant investments in renewable energy, energy efficiency, clean cooking and in the local manufacturing/assembly facilities that support these.
- Support African countries to pursue large-scale investments in renewables, including both centralized and decentralized technologies as part of their stimulus budgets in renewable energy (a combination of solar, hydro, wind and geothermal). These investments should also drive the development of the up-stream value chain, so that countries also build local manufacturing or assembly of equipment and associated appliances used in renewables.
- Support Governments in targeting direct and indirect investments to operationalize assembly plants and achieve economies of scale that can bring down the cost of renewable energy systems considerably. Direct investment includes loan guarantees or contributing capital for the upfront investment in assembly plants. Indirect investments that should be considered include reducing or eliminating import duties and valueadded taxes (VAT).
- Supporting African countries to also include programmes for promoting clean cooking in their stimulus budgets, targeting cleaner fuels and the supply chains needed to support the distribution of fuels and stoves as well as public education to increase uptake.
- Supporting the roll out of the Sustainable Energy For All (SE4All) programme in Africa and other large-scale renewable energy programmes, such as the AREI.

# 5.11 Developing Smart Cities and promoting Green Urbanisation

This Key Priority Area has linkages to SDG 1: No Poverty; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 12: Responsible Consumption and Production. More importantly, Sustainable Development Goal 11 calls for "making cities inclusive, safe, resilient and sustainable."

A smart city is an urban area that deploys different types of technology including electronic methods and sensors to collect a wide array of relevant data. Insights gained from analysis of this data are used to manage assets, resources and services efficiently; in return, that data is used to improve the operations across the city. This includes data collected from citizens, devices, buildings and assets that is then processed and analyzed to monitor and manage traffic and transportation systems, power plants, utilities, water supply networks, waste, crime detection, information systems, schools, libraries, hospitals, and other community services. The smart city concept integrates information and communication technology (ICT), and various physical devices connected to the Internet of Things (IoT) network to optimize the efficiency of city operations and services and connect to citizens. Smart city technology allows city officials to interact directly with both community and city infrastructure and to monitor what is happening in the city and how the city is evolving. The ICT is used to enhance quality, performance and interactivity of urban services, to reduce costs and resource consumption and to improve contact between citizens and government. Smart city applications are developed to manage urban flows and allow for real-time responses.

Developing Smart Cities therefore requires significant investment in ICT and related infrastructure to increase the operational efficiency, information sharing capabilities with the public and improve the quality of government services and citizen welfare. This is intended to drive sustainable economic growth and improve the quality of life for people by enabling local area development through the harnessing of technology to achieve smart outcomes. To provide for the aspirations and needs of citizens, smart cities require the comprehensive development of the entire urban ecosystem, spanning institutional, physical, social and economic infrastructure.

Promoting green urbanisation requires that water and air pollution prevention, waste management, spatial planning and mobility need to be managed. Sustainable development in urban areas, could include building knowledge hubs in order to facilitate sharing of policies and best practices for urban sustainability, to provide an interface for information exchange and communication between suppliers and users of environmentally friendly technologies and products. This will require major investments in environmentally friendly infrastructure.

Green urbanisation is intended to fundamentally transform existing urbanization patterns emanating from the traditional industrialization models, including spatial planning, towards a green urbanization approach, in order to attain sustainable development objectives. Recognised that the main spatial areas for green urbanization will occur predominantly in the existing urban clusters and metropolitan areas at county level and that both form and function of urban areas are undergoing profound changes. Innovative technical solutions to building and financing green-grey infrastructure for climate resilience – including coastal protection, rainwater harvesting, river restoration for flood management, constructed and/or restored

wetlands and horizontal levees – along with implementing digital technologies to better monitor the risks of extreme events. Estimates suggest that investments to conserve and restore coastal wetlands that reduce the risks of flooding could reduce losses that are paid out by the insurance industry globally by up to US\$20 billion annually.

As Africa is rapidly urbanizing, there is a need to develop African sustainable urban models. This should include green urbanization to support the transition of development from "high resource consumption, high environmental damage, and high carbon emissions" towards incorporating intangible resources such as knowledge, ecological services and culture in urban models. This should result in increases in transaction efficiencies, improved transportation and mobility, deepening internet access and e-commerce; decentralization of distributed renewable energy; and the emergence of new services.

The International Council for Local Environmental Initiatives (ICLEI) Local Governments for Sustainability is a global network of more than 1,750 local and regional governments committed to sustainable urban development. Active in 100+ countries, this initiative aims to influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient and circular development. This is done through peer exchange, partnerships and capacity building to create systemic change for urban sustainability. The ICLEI Africa programme has expressed its commitment to support African cities and regions to recover from the effects of the COVID-19 Pandemic by implementing new and innovative ways of working, and to share emerging good practices.

The C40 Cities Network is a network of the world's megacities committed to addressing climate change. The C40 Network supports cities to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change. The C40 Network connects 97 of the world's greatest cities to take bold climate action, leading the way towards a healthier and more sustainable future. Representing 700+ million citizens and one quarter of the global economy, mayors of the C40 cities are committed to delivering on the most ambitious goals of the Paris Agreement at the local level, as well as improving air quality.

# In order to enhance the development of Smart Cities and Green Urbanisation in Africa, the following is recommended:

- Increase access to financial resources to local governments and sub-national authorities, decentralization of decision-making and financing of territorial and local 2030 strategies.
- Develop concrete policies and regulatory frameworks to increase flow of development financing to locally defined SDG strategies.
- Improve the flow of international and domestic development and climate finance towards climate resilient infrastructure and development projects managed by local governments, by blending development assistance, semi-commercial and commercial funding to achieve environmental, social and financial returns, with technical assistance to local governments to prepare bankable projects for green urbanisation and smart cities.
- Support green urbanization programmes to incorporate intangible resources such as knowledge, ecological services and culture in urban models.

- Institute measures to improve transaction efficiencies, transportation and mobility, deepen internet access and e-commerce; decentralize distributed renewable energy; and the promote the emergence of new services.
- Support African cities and regions in their recovery from the impacts of the COVID-19 Pandemic by implementing innovative ways of collaborating, and sharing emerging good practices regarding smart city development and green urbanisation.

### 5.12 Enhancing Information, Communication and Technology (ICT) in Africa

This Key Priority Area has linkages to SDG 1: No Poverty; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 12: Responsible Consumption and Production.

The Fourth Industrial Revolution, or 4IR, the current and developing environment in which disruptive technologies and trends such as the Internet of Things (IoT), robotics, virtual reality (VR) and artificial intelligence (AI), is changing the way we live and work. As its most basic level, the Fourth Industrial Revolution relies on huge volumes of unstructured data, machine learning/artificial intelligence/robotics. The proliferation of low-cost sensors and exponential increases in computer processing power mean that data can now be easily and cheaply gathered from virtually any device, from household appliances to the largest industrial machines. In the Fourth Industrial Revolution, productivity and performance depend increasingly on intelligence.

In an environment where technology is having a transformative effect on many industries, companies that are not adequately preparing now for the Fourth Industrial Revolution not only risk falling behind, but also passing up the opportunity to influence the future. Industrial companies that invest in digital technologies are not only achieving significantly higher uptime, speed and yield; they are laying the groundwork for the application of advanced technologies, such as artificial intelligence. Being digitally enabled - which means having machines, robots and systems feeding data to the cloud - is an entry ticket into the Fourth Industrial Revolution and could contribute significantly in Africa's recovery from the COVID-19 Pandemic. For businesses in Africa, the 4IR is a tremendous opportunity to raise their competitiveness globally and to play a more important, decisive role in shaping the future of the Continent. For government, it offers innovative solutions to pressing infrastructure challenges and new possibilities for tackling societal issues related to education and employment. All previous industrial revolutions created many more jobs than were ever lost - chiefly through the creation of new industries and business models, however, this may not hold for the 4th Industrial Revolution, which inherently requires a different set of skills and machines may perform many of the job functions currently in existence.

Lessons learnt from COVID-19 have revealed gaps in the ICT systems, bandwidth and data access which has implications for Africa's transition to the 4IR. This needs to be addressed, with additional investments for Africa to fully and effectively engage with rest of the world in the digital era.

In order to enhance the development and deployment of Information,

#### Communication and Technology (ICT) in Africa, the following is recommended:

- Increase investment in digitalisation and innovative technologies, with a focus on: open, affordable and secure access to digital technology, including for vulnerable and marginalised groups; locally-relevant content and services; developing digital literacy and skills for all.
- Specifically target women, girls, people with disabilities and marginalized groups to address the digital divide. Promote the safe and secure use of digital technologies and a free, open, secure and inclusive internet.
- Governments and private sector to promote use of digital technologies to improve work processes and service delivery and e-services, including financial services.
- Invest in digital solutions for: health challenges and crises; climate and environmental challenges; food security crisis and food safety challenges; sustainable infrastructure and mobility; crisis-resilient services, e.g. education, disaster risk management; fostering open and democratic societies, responsible institutions and better governance.
- Support digital technologies and platforms to promote a digital economy and trading environment.
- Assess and measure inclusivity of digital economies and address critical gaps.
- Develop national guidelines and support networks for schools and institutions to adapt to digitalization, removing barriers to access to environmental technology and innovations
- Address the challenges associated with the need for a just, green and digital transition, including by investing in infrastructure, digital systems and institutions that are low-carbon and circular as well as resilient to climate, health and other risks.
- Make digitalization greener (e.g. reduce ICT energy and resource consumption, promote waste management).

# 6. FINANCING, RESOURCE MOBILIZATION, CAPACITY BUILDING, RESEARCH AND TECHNOLOGY, COMMUNICATION AND PARTNERSHIPS

#### 6.1 Financing the African Green Stimulus Programme

This section has linkages to SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development. SDG 17 calls for developed countries to implement fully their official development assistance commitments. SDG 17 also requires the mobilizing of additional financial resources for developing countries from multiple sources.

It is acknowledged that within the African Region, as in most other developing regions, green recovery investment needs are significant as direct government funding is limited, and variable amongst Member States. Financing mechanisms for the AGSP should build upon existing systems that support action on climate change. These systems include feasibility studies, strategic programming, capitalization, partnership management, project approval, policy assurance, financial control and performance measurement. In this regard, Africa needs to take direct and urgent responsibility in mobilizing finance to implement green recovery programmes in the relevant sectors of the economy.

For the African Green Stimulus Programme to deliver impactful results at scale, new, additional, adequate and predictable financial resources from both public and private entities to the climate-related funds, in particular, the Adaptation Fund, the Global Environment Facility, and the Green Climate Fund, and African Solidarity Trust Fund will be required. Innovative financial modalities that include financial streams from African countries and from partners such as the Africa-to-Africa funding window are required, including enabling contributions from development partners such as bilateral and multilateral resource partners, as well as partnerships with the private sector and other capital providers.

#### Financing mechanisms to support the AGSP should include:

- 1. Domestic financing including Member States budgetary allocations and private sector-based financing.
- 2. Developing regulatory standards that create a conducive environment for green economy within countries could support this. The use of taxes and market based tools to stimulate green innovations and investments could also be considered.
- 3. Direct Bilateral funding and Development Partners based mechanisms between Member States and specific Development Partner countries and or organisations.
- 4. Multi-lateral funding mechanisms especially the Green Climate Fund (GCF), Global Environment Facility (GEF), World Bank Climate Investment Funds, Adaptation Fund (ADF), African Development Bank and other sources of international finance and resources, which offer African countries support for green recovery programmes.
- 5. International market-based instruments including Green Bonds and SDG Bonds.
- 6. Develop an Africa Debt for Climate Initiative that will promote the implementation of mitigation strategies including reducing short lived climate pollutants, protecting and expanding forest conservation, and any other nature-based solutions.

The international community, through convening power, financial support, trade agreements etc., can provide important support to governments and the private sector to support the African Green Stimulus Programme. International cooperation could be focused on supporting the implementation of the priority areas, with a major role in mobilizing private finance.

#### The private sector could contribute to the AGSP through:

- Investment in newer clean energy technologies; low carbon transport sector; productive, inclusive sustainable agriculture and forestry; ecosystem protection and restoration
- Through market transformation policies, create innovative climate-action asset classes related to water reuse infrastructure for example by focusing on securing purchasing agreements for reuse water and quantifying cost savings and revenue flows from improved water use and energy efficiency.
- Increased investment in Public-Private Partnerships, and through other innovative instruments, and in climate.
- Greater investment in research and development to support key sectors of the AGSP.
- Support development, deepening and equitable outreach of digital technology, including for environmental, health and inequality challenges.

### 6.2 Capacity Building and Capacity Development

This section has linkages to SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development. SDG 17 also calls for enhanced international support for implementing effective and targeted capacitybuilding in developing countries to support national plans to implement all the sustainable development goals.

For Africa to effectively respond to the challenges and opportunities for a green recovery, there is an urgent need to build and strengthen capacities in all the proposed areas at various levels. This calls for actions that will promote and strengthen the capacity of the African Intergovernmental Organisations as well as Member States to implement green recovery programmes including:

- Empowering relevant capacity building institutions, regional networks and facilitating sharing of experiences, information and best practices.
- Enhancing communication, education and awareness-raising at all levels in relation to a green recovery.
- Facilitating the development of tools, methods and technologies in support of green recovery programmes.
- Supporting and strengthening participatory and integrated approaches in mainstreaming of green recovery into planning and decision-making processes.
- Supporting specific capacity building needs of African countries to address institutional and technical challenges and constraints at national and local levels.
- Accessing and harnessing international capacity building programmes and initiatives.
- Strengthening capacities of civil society; support for businesses; and improving environmental education is also important.

### 6.3 Research, Technology Development and Transfer

This section has linkages to SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development. SDG 17 also calls for enhanced North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms. SDG 17 also aims to promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms.

Relevant research and the development and transfer of appropriate technology forms an integral part of the African Green Stimulus Programme. There is need for the deployment, diffusion and transfer of the relevant technologies, based on principles of accessibility, affordability, appropriateness and adaptability, as well as to address barriers to technology transfer.

The 4IR provides a number of opportunities to improve environmental management in Africa and has the potential to contribute towards the AGSP as follows:

- In the area of food security, the innovation of driverless tractors, precision farming and "uberization" of farming equipment will reduce capital costs. More farmers must be supported to run farming operations without owning equipment to increase food production and positively impact on food security; to use drones in farms to better predict the yield of the season and thereby enabling the country to mitigate low yields well in advance; to use Climate Services and satellite imagery to predict climate events and to reduce vulnerability.
- In the Internet of Things, sensors are being deployed into water bodies to collect data pertaining to water flow, water quality and quantity. AI-assisted processing of information allows for the maximum use of big data to discover historical patterns, predict more efficiently, make more effective recommendations, and improved modelling and assessing across disciplines for sustainable production and development.
- In the Industrial Internet of Things, satellite technology provides more complete, current and accessible information on water supply and demand and as well as automated and enhanced land-use change detection which inform policy decisions and actions for improved land use.
- The 4IR can contribute to reducing carbon emissions and best solutions to protect our environment. An example includes, a live system of accounting for greenhouse gas emissions, using the current baseline information for Greenhouse Gas inventories.
- The 4IR can support and grow Africa's blue/ocean economy. Oceans and Coastal Information Management Systems (OCIMS), are providing a Core System and a suite of Decision Support Tools to enable improved management of the Continent's coastal and marine resources.

# Promoting research and access to technology for the African Region will be achieved through:

- Supporting research and institutional development to foster enhancement of endogenous technologies as well as the development and local manufacture of green technologies.
- Supporting appropriate technology cooperation, active development, transfer and adoption.
- Promoting harmonisation of policies for the development and transfer of green economy technologies among Member States.
- Establishing and strengthening of regional networks in support of the green recovery key intervention areas.
- Collaboration with international technology centres such as the Climate Technology Centre Network (CTCN), a UNFCCC institution that promotes the accelerated transfer of environmentally sound technologies for low carbon and climate resilient development
- Addressing technology transfer barriers, including rules of trade tariffs, intellectual property rights and technical trade barriers (standards, eco-labelling).

• Promoting development and transfer of appropriate technologies through green economic incentives.

#### 6.4 Partnerships

This section has linkages to SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development. SDG 17 also calls for enhancement of the global multi-stakeholder partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries. SDG 17 also aims to encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

One of the overall goals of the Programme is to forge partnerships amongst all stakeholders to enable collaboration on the key priority issues. Therefore, forging new partnerships and strengthening existing ones between member states, intergovernmental organisations, private sector and NGOs as well as financing institutions will be key to the implementation of the AGSP. In this regard, Public-Private Partnerships are an important component for ensuring the implementation of the AGSP key areas.

Furthermore, the Africa Green Stimulus Programme should not be seen in isolation, and is intended to take cognizance of existing programmes and contribute to these in order to bring these initiatives to scale. Synergies and complementarities between existing and new emerging initiatives are intended to be enhanced through the AGSP.

### 6.5 Communication, Advocacy, Marketing and Awareness-raising

A well-crafted communication and advocacy plan is essential to the successful implementation of the African Green Stimulus Programme. It will also facilitate information sharing, enhanced collaboration, attract further support and allow for feedback on the effectiveness of the Programme. The Programme must consider the role of other relevant institutions and stakeholders in its roll-out, which needs to be communicated effectively.

For this to be achieved the following actions need to be undertaken:

- Enhance the utilisation of the African Union, UNEP, UNECA, WEF regional media network to promote the AGSP;
- Maximize the advocacy and outreach of the AGSP through different communication channels including African media institutions and online social media systems;
- Produce promotional materials for the African Green Stimulus Programme awareness programmes;
- Promote public education and outreach programmes on Africa's Green Recovery for citizens, focusing on youths, women, and other vulnerable groups targeting both urban and rural areas;

- Enhance capacity of scientists, researchers, science communicators, media specialists and relevant professionals on packaging and disseminating appropriate African Green Recovery messages and key successes;
- Document and share best practices on Green Recovery initiatives in African countries as well as at the sub-regional and Continental level.

# 7 MONITORING, EVALUATION AND REPORTING

# 7.1 Monitoring and Evaluation

A Monitoring and Evaluation (M&E) framework is required to track the performance and impact of implementation of the AGSP. The monitoring and evaluation framework should include participatory identification of challenges, constraints, success factors as a basis for lessons learned and decisions on courses of action or change. In order to achieve this, a standardized monitoring, evaluation and reporting framework for programmes needs to be established.

## The M&E Framework for the AGSP should comprise the following elements:

- Harmonized M&E systems, format and reporting channels for each of the key intervention areas.
- Strengthened capacity of AU Member States in M&E of Green Recovery programmes.
- Developing mechanisms for recognition of excellence in Green Recovery response actions.
- Promoting replication and up-scaling of M&E best practices.
- Capability to facilitate regular reviews of Green Recovery programmes and their impacts on economy and society, and report through the established organs.

The entire African Green Stimulus Programme should be reviewed on a regular basis based on the outcomes of the monitoring and evaluation processes in order to refine programmes and targets.

# 7.2 Reporting

In terms of reporting on the implementation of the AGSP, it is proposed that the African Union Commission together with the African Union Development Agency and the AMCEN Secretariat will compile annual reports based on the outcomes of the Monitoring and Evaluation process, with inputs from the AU Member States. These will be tabled at AMCEN meetings, AU STC meetings, CAHOSCC and the AU Assembly as part of the high-level oversight of the AGSP. A standard template will be developed which will not pose onerous reporting requirements for each programme.

# 8 ENABLING CONDITIONS, ASSUMPTIONS AND RISKS

### 8.1 Enabling Conditions

The availability of sufficient resources for the implementation of the AGSP as well as buy-in and political will from African leaders is key and there is a need to ensure that the green recovery agenda is high on Governments' priority list. This could be achieved by linking green recovery programmes to Government priorities such as enhancing green jobs; improving agriculture and food security; improving peoples' health, the health of ecosystems, and the health of wild animals; reducing climate-related conflicts; and minimizing future disasters. Ownership of the Programme must rest with governments and the local communities.

The inclusion of a gender and youth component is important to address the needs of the most vulnerable groups in Africa. In addition, the involvement of Civil Society in this recovery programme is key to stimulate awareness among African Governments on the need to rebuild Africa's economy in a sustainable and inclusive manner. This calls for regional integration and adequate participation of all stakeholders at all levels.

The availability of appropriate data and information to support the implementation of this Programme is key. High quality, reliable and high-resolution data on key issues such as targeted priority areas will be required to enable the African Green Stimulus Programme to deliver impactful results. This is envisaged to be updated regularly and made accessible through the on-line digital AGSP Platform, which is a critical component of this Programme.

### 8.2 Assumptions and Risks

Addressing this humanitarian and health crisis emanating from the COVID-19 Pandemic is a clear priority worldwide. However, the impact of the crisis on livelihoods is already putting additional strain on the environment. As the global focus turns from the health crisis to economic rebuilding and recovery, concerns for the health of the planet risk being side-lined, which would result in the world being seriously off-track to meeting the 2030 Agenda and the SDGs. COVID-19 is a stark reminder of how ignoring biophysical risks can have catastrophic health and economic impacts at the global scale. If recovery efforts do not address the looming planetary crises – climate change and nature loss – a critical window of opportunity to avoid their worst impact will be irreversibly lost. Decisions on how to deploy the post-COVID crisis stimulus packages will likely shape societies and economies for decades, making it imperative to "build back better" and not return to an unsustainable and dangerous business-as-usual approach. There is emerging evidence that adopting green stimulus measures can generate even more effective economic and employment growth and build more resilient societies by aligning the global economy with planetary boundaries.

Responding to the profound social, economic and environmental crisis in the wake of the COVID-19 pandemic requires a fundamental resetting of the paradigm of how we live, produce and consume to achieve a resilient, carbon-neutral, nature-positive economy and halt biodiversity loss by 2030. This resetting of the development model needs both to decouple our well-being from excessive resource consumption, to reduce the amount of resources we need, thereby avoiding the degradation of ecosystems as much as possible, and to decouple resource extraction from unduly negatively impacting on ecosystems, the oceans and atmosphere.

Worldwide, research is demonstrating that the benefits and savings from protecting and restoring natural infrastructure can be substantial and these are likely to rise in the face of mounting climate risks, while providing important climate mitigation benefits as well. Biodiversity loss and ecosystem collapse ranked as one of the top five threats humanity will face in the next 10 years, according to the World Economic Forum's 2020 Global Risks Report. As the trend for greater transparency and accountability demanded by consumers, regulators and investors continues to rise, and as nature-related risks start to materialize, costs are likely to rise for the businesses in these systems which have not yet begun to include nature at the core of their enterprise operations. Unless the structural roots of this crisis are addressed, irreversible climate change, biodiversity loss and other environmental risks that harm the economy and human well-being will only worsen. Natural resource extraction and processing make up approximately 50% of the total GHG emissions and impact water stress and biodiversity, putting at risk the goals of the UNFCCC and its Paris Agreement and other Sustainable Development Goals.

Worldwide stimulus packages present both risks and opportunities, as public funds might focus on heavily on infrastructure investment. However – in the urgency to boost employment and economic growth – the risk is high that dealing with the impacts of Climate Change and environmental issues will not receive sufficient attention. A clear commitment to building back better and greener will be needed from government, business, civil society and communities, or what fragile pandemic recovery can be achieved will both lack the resilience provided by nature, and also face ever-increasing climate risks. This also poses significant risks to Africa, which is particularly vulnerable to the impacts of Climate Change and natural resource degradation.

In order for this transformation towards a low-carbon development trajectory to happen in Africa, significantly scaled up financial and technical resource mobilization as well as investment in the Green Economy is required. Enhancing current and future engagement and coordination of the green recovery programmes are key and could be achieved through collaboration amongst African Governments, African Regional Economic Commissions and with international partners.

Meaningful consultation with Member States and partners is important, and there should be a focus on the involvement of the youth in the recovery programmes to capitalize on their digital skills. Adopting a long-term vision with respect to this AGSP is also important to stimulate momentum towards the implementation of green economy and climate actions to restoring Africa's economy after this pandemic and enhancing resilience to future economic crises. Thus, the major risks regarding this AGSP include insufficient buy-in from the African Union, Member States, and other partners to adopt this as an important element to the overall and sustainable recovery programme of the African Continent.

### 9. CONCLUSION

It is clear that the world is at a critical juncture for the future of all human societies: we face an unprecedented global humanitarian and health crisis with the COVID-19 pandemic while time is running out to stave off the worst of the climate and other environmental crises, which are affecting Africa in a disproportionally worse manner.

The Green Stimulus Programme for Africa has the potential to contribute significantly towards Africa's recovery from the devastating COVID-19 pandemic. However, despite many efforts and progress in several areas, Africa lags in realizing the promise of the SDGs, and under prevailing trends, all the SDGs might not be achieved, particularly in the context of the Pandemic. The SDGs underpin both environmental sustainability and socioeconomic prosperity that are the core of the AGSP as well as the continental vision, Agenda 2063. The COVID-19 Pandemic compels the Continent to recognize the urgency to accelerate progress in instituting sustainable recovery programmes in order to get back on track to meet the SDG targets. Non-state actor engagement in the AGSP should be urgently activated and that the youth, Africa's most significant non-state actor constituency by numbers, should be engaged meaningfully in this process.

Most importantly, while several examples of successful Green Economy programmes exist across the continent, there is an urgent need to capitalize on these and to enhance their impact significantly. There is also a need to ensure that strategic-level decisions are informed by prevailing gaps and opportunities in the context of implementation which should be addressed through the enhanced coordination by the AGSP. This then calls for an effective feedback loop from grassroots actions in implementing decisions, back to inform policy positions; a system of coherent feedback and accountability. This will ensure that the AGSP serves to bridge specific gaps and leverage specific opportunities emanating from implementation experiences and emerging issues. Through this approach, the AGSP will inspire and mobilise actions that will define specific gaps and unlock precise and innovative opportunities for enhanced implementation as well as strengthen accountability.

Innovative financing sources should be explored and harnessed as a financing mechanism for environment and sustainable development in the continent. Environment and climate action should be approached as an enterprise opportunity, capable of profitability to guarantee longevity. Inclusive partnerships for implementation, should be continually reinforced. Through the above, tangible implementation of the proposed initiatives could be realised, which could unlock over US\$195 billion per year worth of SDGs implementation opportunities for Africa. The development and implementation of this Green Stimulus Programme for Africa should be fast-tracked in order to contribute meaningfully towards the broader African post-COVID-19 response programme.

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