EU- UNEP AFRICA LOW EMMISIONS DEVELOPMENT STRATEGIES

EU-UNEP AFRICA

LEDS PROJECT

LINKING CLIMATE ACTION AND SUSTAINABLE DEVELOPMENT

AFRICA LEDS Partnership
Advancing climate-resilient low emission development in Africa

LEDS GLOBAL PARTNERSHIP

European Commission

UN environment

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INTRODUCTION

Global calls to increase climate action ambition – that have sustained from COP22 to the most recent UN Secretary Generals Summit on climate change, need to be actualised, in consideration of prevailing socioeconomic realities and contexts of different regions. Africa stands out for its disproportionate vulnerability to the changing climate – both biophysically and socioeconomically. Biophysically, scientists estimate that over the past 100 years, temperatures across Africa have increased by an average of 0.5 – 2 degrees[1] and the impacts are life-changing. From changing weather patterns that reduce crop yields, to natural disasters which threaten lives, the fall-out of the changing climate is evident across this continent. Even though African nations are responsible for just 2-3% of global emissions[2], 65% of the African population is likely to be impacted by the consequences of climate change. While unmitigated climate change is projected to shrink the global economy by about 23%, average income in the poorest vulnerable countries – most of which are in Africa - will reduce by a massive 75%. Africa's disproportionate vulnerability brings in the socioeconomic aspects, where prevailing low levels of socioeconomic development have reinforced vulnerability. The World Bank records that the poor are disproportionately vulnerable to climate change because they lack the resources to quickly recover from its effects. The message in the continent is therefore clear – that efforts to combat climate change must align with accelerating socioeconomic growth to build resilience of populations. This is the context in which the EU-UNEP Africa LEDS project was undertaken and responded to.

Accordngly, this project supported countries in Africa in implementing their Nationally Determined Contributions (NDCs) to the Paris Agreement and in developing longer term LEDS in a manner that maximises both climate and socioeconomic benefit. Work was covered through two components and undertaken in partnership with seven countries - Cameroon, Cote d'Ivoire, Democratic Republic of Congo (DRC), Ghana, Kenya, Mozambique and Zambia.

Component 1 supported planning and implementation of Low Emission Development Strategies (LEDS) in partnership with Cameroon, Cote d'Ivoire and the DRC. Practical agricultural and clean energy actions demonstrated how implementation of NDCs, aligned with socioeconomic priorities, can unlock enterprise opportunities. Results were fed back to inform government-wide policy planning for NDC action prioritisation and implementation in the countries.

Component 2 focused on capacity building to enable analysis and modelling for LEDS action. Integrated models capable of forecasting the long-term climate and socioeconomic impacts of alternative NDC implementation trajectories were developed or enhanced in partnership with technical teams in each project country. These models were then integrated into policy decision structures through training and capacity enhancement of policy makers.

Component 1 and 2 informed policy action through inter-ministerial policy taskforces. These taskforces brought together decisionmakers from environment, sectoral and other development-focused ministries to ensure mainstreaming of low emission development action based on outcomes from the project.

Work in the above components informed continental peer exchanges and lessons sharing to catalyse replication and upscaling of the project products and results. The countries established the Accra Action Agenda on Low Emission Development Strategies to enhance collective action.

1 https://cdkn.org/wp-content/uploads/2014/04/AR5_IPCC_Whats_in_it_for_Africa.pdf
2 http://unfccc.int/files/press/backgrounders/application/pdf/factsheet_africa.pdf

KEY ACHIEVEMENTS

Component 1

- **In Cameroon**, work focused on greening and maximizing productivity of Cameroon's agro-value chains using clean energy, transport & ICT. Over 500 women, for the first time, have access to high value, low carbon agricultural practices. They can dry their cassava, using solar power, to increase its shelf life. They can process it into flour that enables up to five times greater value in the markets. Through improved drying and milling, cassava spoilage has been reduced by up to 30%. In addition, a micro hydro plant was developed in the country generating an annual 9000kWh of zero emission electricity relative to the BAU of using diesel generators. Overall, using clean energy over diesel and linking

Ngoulemakong Site-cassava solar processing

cassava to clean energy processing created 150% more jobs and $1800 in additional revenue compared to the BAU approach.

- **In Cote d'Ivoire**, work focused on converting agricultural waste to domestic energy briquettes and biofertilizer. Through this, the project enabled communities to use 6 - 40% less fuel and save their household incomes when they substitute charcoal & firewood with biowaste-briquettes. Use of organic fertiliser produced from agro-waste, is not only affordable and accessible, but also results in a 35 - 100% increase in yields.

Processed ricewaste briquettes ready for use

- **In DRC**, work focused on converting waste to domestic energy briquettes. Through this, the project showed that using biowaste – briquettes would be up to 3 times cheaper than conventional charcoal. Cumulatively, DRC could save up to 5000ha of natural forest if the paradigm of waste to briquettes is scaled out & replicated nationally.

Briquttes from pilot used for cookery

Processed briquettes from general waste

Component 2

- **In Mozambique** analysis activities found amalgamating agro-forestry and solar powered irrigation would sequester 70% more carbon relative to a BAU approach of expanding conventional fossil powered irrigation and slash and burn farming. Combining agroforestry with solar powered irrigation can produce up to 2 times higher returns/profitability for enterprises using the technology.

- **In Ghana,** analysis activities demonstrated that combining plantation forest with clean cookstoves will sequester 85% more carbon than BAU approaches. On the economic front, this combination is expected to generate over 6 million direct jobs and cumulative revenues of over $130 million out to 2030. On the social front, models forecast that adoption of clean cookstoves will reduce indoor air pollution and is projected to reduce deaths by over 1,400 per year by 2030.

- **In Cameroon** forecasts show that upscaling and replicating the NDCs implementation trajectory of greening and maximizing productivity of agro-value chains over the country's 5 agro-ecological zones will create **5 million** more assorted jobs relative to BAU approaches. These will be across multiple sectors. On climate aspects, this approach would ensure 8 times lower emissions than BAU.

- **In Cote d'Ivoire**, models showed that upscaling the use of agricultural waste to domestic energy and biofertilizer would reduce deforestation driven by charcoal & firewood harvesting by 50% as compared to BAU. On the socioeconomic front, use of organic fertiliser over mineral fertiliser would save over $300 per hectare farmed each year.

- **In DRC** modelling outputs showed that shifting to biogas & briquettes cook stoves over charcoal, firewood and kerosene BAU options would have environmental, social & financial benefits. Environmentally, such a shift would preserve forests - an area of 0.2ha each year. Socially, this would reduce indoor pollution to cut illness days by 0.52 days. Economically, at the household level, this shift would save up to 56% in average annual energy costs.

- **In Kenya** analysis activities and forecasts show that investing in clean cookstoves and agro-forestry will result in 2.9 million tons of charcoal saved annually which equates to approximately $ 1billion by 2030.

- **In Zambia** analysis activities and forecasts show that investing in agro-forestry and clean cookstoves in three project areas will add up to $15 million to GDP.

In all these countries, data from these operational level lessons was compiled to inform optimal policy trajectories for NDCs implementation that maximises both climate and socioeconomic benefits. The ground action results have been compiled into case studies and are being used to inform policy planning. The models have been integrated into policy decision structures to inform optimal investment decisions across key productive ministries critical to implementing NDCs and socioeconomic aims. Through this policy anchoring, governments are set to upscale these benefits nationally in their respective countries. Governments are also set to leverage the analytical tools to make more informed decisions in submitting second level NDC commitments to ensure they better align to accelerating realisation of the socioeconomic priorities.

PEER LEARNING AND EXCHANGES

- A Community of Practice focused on linking across the clean energy and agriculture sectors was established in partnership with the Africa LEDS Partnership to ensure project lessons and experiences are shared continentally through a network of regional institutions and partner activities. The Project also brought together non-participant countries – Benin, Nigeria, Togo and Uganda - with project countries to share lessons through an in-depth meeting at the culmination of the project. As a result, these diverse stakeholders called for replication of lessons across Africa through a ground-breaking declaration[3] "the Accra Action Agenda on Low Emissions Development Strategies (LEDS) For Africa[4]". We look forward to working with you towards ensuring your country leverages implementation of this declaration to unlock climate and accelerated socioeconomic benefits even as you also plan to submit second level post-2020 NDC commitments.

Testimonials from participating country parties

Cameroon

Mr HELLE Pierre, Minister of the Environment, Nature Conservation and Sustainable Development said "*The EC-UNEP Africa LEDS project was for us an opportunity to concretize Cameroon's commitment through the implementation of its CDN. It made it possible to use concrete examples from the field to illustrate the impacts of a responsible climate policy. It was also the opportunity to set up a task force for low-emission development in Cameroon, with the various ministerial departments and public and private institutions concerned. We sincerely thank this initiative, which leaves the country with a tool for monitoring the greening and digitization of environmental policies.*"

Ing. WAGNOU Valentin, Inspector N°1 MINEPDED said *"Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED) will play its full role in ensuring that each sector takes ownership of the results of the LEDS project, particularly the energy, agriculture, transport and ICT sectors. It is crucial for us to take ownership of LEDS models and modelling tools in order to focus our decisions on facts.*"

Prof. AMOUGOU Joseph, Director National Observatory on Climate Change (ONACC) said "*The LEDS project, in its entirety, allowed ONACC to see clearly how the Paris Agreement through the Cameroon NDC could be implemented in a concrete way. The intelligent aspect of the model developed will not only allow to analyse the impacts on GDP, employment, investments and greenhouse gas emissions, but also to make systematic forecasts through the collected data as instrument for decision making. Hence there is a clear need to develop a national strategy for collecting climate sector data that could be one of ONACC's main areas of work.*"

Côte d'Ivoire

Prof Joseph Séka SEKA, Minister of the Environment and Sustainable Development said "*The EC-UNEP Africa LEDS project, provided us with the opportunity to understand how we can practically implement our NDCs in a way that lowers emissions and creates socioeconomic opportunities for our country. By this, it provides the full package of building climate resilience covering both socioeconomic and environmental/ climate aspects. We are going to build on the great outcomes we achieved to ensure that we implement climate actions within an informed policy trajectory that informs maximized investments – all thanks to the analytical tool and the practical case studies this project has helped develop for our country.*"

3 https://www.unenvironment.org/news-and-stories/press-release/eu-unep-africa-leds-project-gives-birth-accra-action-agenda-drive

4 https://www.africaleds.org/attachments/article/175/THE_ACCRA_ACTION_AGENDA_ON_AFRICA_LOW_EMISSIONS_DEVT_31052019_1Added.pdf

Dr Eric ASSAMOI, Director of the fight against climate change said *"LEDS project, in its conception was for us, a great asset, a first approach in the implementation of the NDC, because it allowed us finally to design our NDC in a concrete and well-structured project in the case of pilot project that has implemented in the rice sector. So, for us, it's to see how we could design our NDC into projects that could eventually be scaled up."*

Mr. KOYA Jean Claude, Technical Advisor to the Minister of Planning and Development in charge of environmental issues and sustainable development said *"The Ministry of Planning as the Ministry in charge of national planning through the definition of the national development plan, the national prospective study and the national statistics, will play its full role so that each sector appropriates the results of the LEDS project in particular the sectors of energy, agriculture and industry. It is for us to capitalize not only the LEDS modelling models and tools but the integrated ones in the body of national governance tools."*

Ghana

Ag. Executive Director, Environmental Protection Agency said *"The aim of the project is to establish an analytical framework to facilitate long-term LEDS policy decision making and implementation consistent with Ghana's climate objectives and socio-economic development priorities as stipulated in the GH-NDCs and other LEDS plans."*

Kenya

Augustine Kenduiwo, Deputy Director in charge of Climate Change, Ministry of Environment and Forestry said *"Climate action and socioeconomic development seem to be difficult to achieve simultaneously – but through this project, Kenya is set to leverage implementation of its NDCs as an enabler of its socioeconomic priorities – the Vision 2030 and its derivatives like the Big 4. This will be highly valuable as we prepare to submit second round NDC commitments. We thank the EC and UNEP for their support and look forward to full uptake of this project products going forward."*

Zambia

Honourable Jean Kapata, M.P, Minister of Lands and Natural Resources said *"The results serve as a guide on what climate mitigation actions can be implemented to support the Zambia Nationally Determined Contribution and where socio-economic benefits can be derived."*

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