

EBAFOSA

Ecosystem Based Adaptation for
Food Security Assembly



GHANA ACTION PLAN 2016 -2017



EBAFOSA GHANA – ACTION PLAN TO SUPPORT GHANA’S NATIONALLY DETERMINED CONTRIBUTIONS (GH-NDC)

Based on the national context, a set of 31 mitigation and adaptation actions have been put forth in Ghana’s Nationally Determined Contributions (Gh-NDC). The decision to include both mitigation and adaptation in the Gh-NDC was in line with Ghana’s medium-term development agenda (GSGDA), the anticipated 40-year Socio-economic transformational plan and the Universal Sustainable Development goals. Seven priority economic sectors have been proposed for implementation in the year period 2020-2030. The implementation of the actions is expected to bring about low carbon climate resilience through effective adaptation and greenhouse gas (GHG) emission reduction. The Ecosystem Based Adaptation for Food Security Assembly (EBAFOSA) is a Pan African Organization whose target for policy and ground actions to facilitate sustainable ecosystem based adaptation (EBA) agro-industrialization powered by clean energy is directly in consonance with Ghana’s NDC goals. Hence EBAFOSA mandate in Ghana should be tailored to include enabling Ghana operationalize its NDCs. Specifically, target sectors of Ghana’s NDCs that can be aligned to EBAFOSA roles and functions include; agro-forestry and reforestation to enhance Ghana’s forest sinks and enhance ecosystems and adaptation capacity, clean energy expansion where clean energy powered agro-industry minimizes sources and sustainable land use in agriculture. Furthermore, equitable social development through effective agro-industrialization linkages would create jobs and income opportunities along the entire agro-value chain. In achieving these milestones, the role of EBAFOSA- Ghana can become very essential.

Ghana's NDCs priorities aligned to EBAFOSA	EBAFOSA-Ghana's roles and strategy	EBAFOSA Initiatives	Time frame	Expected results - Articles of Paris agreement satisfied
MITIGATION				
Sustainable Energy Security -Decentralized renewable energy	<ol style="list-style-type: none"> EBAFOSA target for policy and ground actions to establish EBA-Based agro-industrial zones powered by clean energy, with decentralized systems being the most economically viable in rural areas convenes relevant stakeholder partnerships to actualize Comprehensive database of policy level and operational actors from private sector, academia and development partners engaged in decentralized clean energy systems 	<p>EBAFOSA will support the national double energy efficiency improvement strategy and work with other stakeholders and interest groups to implement the National Energy Policy.</p> <p>EBAFOSA will work to support the sustainable energy plan</p>	October 2016 – December 2018	Direct electricity cost saving Reduction in electricity demand Savings of \$300 avoided power factor surcharge Phase out ozone depleting substances
Gh-NDC Policy actions	Ghana's emission reduction goal is to unconditionally lower its GHG emissions by 15% relative to a business-as-usual (BAU) scenario emission of 73.95 MtCO2e2 by 2030	Phase 1 <ol style="list-style-type: none"> Mapping out relevant planned & ongoing individual and institutional initiatives in country at both policy level and ground actions by government, private sector, academia, NGOs, development partners critical to implementing the INDC priorities 	September 2016 –MARCH 2017	We expect energy efficiency improvement to 5%

Ghana's NDCs priorities aligned to EBAFOSA	EBAFOSA-Ghana's roles and strategy	EBAFOSA Initiatives	Time frame	Expected results - Articles of Paris agreement satisfied
<p>Integrated Solid Waste Management based on reduce, reuse and recycle principle</p>		<p>2. Reach out, mobilize and register into EBAFOSA database the mapped out stakeholders / initiatives</p> <p>3. Scale up renewable energy penetration education and awareness creation</p> <p>4. Provide training and awareness creation to promote clean rural households lighting</p> <p>5. Advocate for the expansion and adoption of market-based cleaner cooking solutions</p> <p>6. Advocate for sustainable mass transportation</p> <p>7. Advocate, train and educate the Ghanaian masses to promote sustainable utilization of forest resources through the adoption of the REDD+ principles</p>		
<p>ADAPTATION</p> <p>Sustainable Land Use and Food Security</p> <p><i>Agro-forestry and reforestation</i></p>	<p>Modern biomass and the resulting useful forms of bioenergy produced from it are anticipated by many advocates to provide significant contribution to the global energy supply of many countries.</p>	<p>Rapid increases in volume and types of waste agricultural biomass, as a result of intensive agriculture in the wake of population growth and improved living standards has become a big problem as rotten waste agricultural biomass emits methane and leachate and open burning by farmers to clear the lands generate CO₂ and other local pollutants.</p> <p>EBAFOSA - Ghana would act by raising awareness and building the capacity of local stakeholders to cover all the waste streams and all the stages of waste management chain such as source segregation, collection and transportation, treatment, material and energy recovery and final disposal.</p> <p>EBAFOSA will gather comprehensive data on present and anticipated waste situations, supportive policy frameworks, knowledge and capacity to develop plans and systems, proper use of environmentally sound technologies and appropriate financial instruments to support its implementation</p> <p>EBAFOSA will assess and link stakeholder markets for the bioenergy carriers produced as heat, electricity, gaseous fuels, liquid biofuels or solid biofuels</p>	<p>November 2016 - June 2017</p>	

Ghana's NDCs priorities aligned to EBAFOSA	EBAFOSA-Ghana's roles and strategy	EBAFOSA Initiatives	Time frame	Expected results – Articles of Paris agreement satisfied
<p>Agriculture</p> <p>-Improved crop systems (upscale use of drought resistant crops; adopt better soil management practices)</p>		<p>ADAPTATION</p> <p>1. EBAFOSA will create awareness, advocate and build capacities for agriculture resilience initiatives</p>		
<p>-Improved resource management (efficient agriculture water use; re-greening; better soil management)</p>	<p>ADAPTATION</p> <p>A comprehensive database of actors from govt. policy level to operational level actors in academia, private sector, extension services etc., to foment mutual partnerships to integrate Ecosystems Based Adaption approaches (EBA) including up-scaled use of drought resistant indigenous crop varieties and other conservation approaches like efficient irrigation into</p> <p>mainstream agriculture policy and practice. Target will be proven techniques that increase yields while simultaneously restoring degraded areas, improving ground water recharge.</p> <p>A comprehensive database of private sector, academia, extension services to enhance dissemination & usage of efficient irrigation technologies in</p> <p>EBA's hence inform EBA integration into relevant policies in Ghana</p>	<p>2. EBAFOSA will create awareness, advocate and build capacities in value addition-based utilization of land and forest resources</p> <p>3. Advocate and support efforts for</p> <p>a. city-wide resilient infrastructure planning</p> <p>b. recognition of early warning signs and disaster prevention readiness/preparedness</p> <p>c. Create awareness about climate-induced health risk and build capacities of sections of the Ghanaian population about the management of climate-induced health risk</p> <p>d. Build capacities in integrated water resources management</p> <p>a. Building capacities and promoting resilience initiatives through awareness creation for gender and the vulnerable in Ghanaian societies</p> <p>b. Promote outreach by informing, communicating and educating the citizenry and committing to accountable monitoring and reporting</p> <p>c. Create awareness, build capacities and promote innovations in post-harvest storage of food and processing of food – including grains, fruits, vegetables and roots and tubers</p>	<p>ADAPTATION</p> <p>October 2016 – December 2017</p> <p>October 2016 – December 2018</p>	<p>ADAPTATION</p> <p>We expect the yield of positive synergies with the mitigation support initiatives</p> <p>Awareness creation to reach some 10-15 Million Ghanaians</p> <p>Some 1000 people from Ghana to benefit from capacity building initiatives.</p> <p>Obtain adequate financing from both domestic sources and international sources</p> <p>Working with other agencies, help community based conservation agriculture to be adopted in 43 administrative districts</p> <p>Scale up penetration of climate smart technologies to increase livestock and fisheries productivity to the intended 10% by Gh-NDC</p> <p>Innovations implemented in post-harvest storage and processing in food and forest products</p>

Ghana's NDCs priorities aligned to EBAFOSA	EBAFOSA-Ghana's roles and strategy	EBAFOSA Initiatives	Time frame	Expected results – Articles of Paris agreement satisfied
<p>Forestry</p> <ul style="list-style-type: none"> -Support review & implementation of National Forest Policy -Forest restoration -Strengthen implementation of National Community-Based Forest Resources Management Programme 	<p>1. A comprehensive database of policy level and ground actors from both agriculture and forestry to foment mutual partnerships to Integrate Ecosystems Based Adaption approaches (EBA) that link agriculture to forestry into mainstream agriculture & forestry plans & policies and upscale ongoing ground initiatives. Simultaneous objectives are enhancing forest cover while improving food security.</p>	<p>EBAFOSA – Ghana would support enhancement of forest carbon stocks through the proposed 5,000 ha per annum enrichment planting and enforcement of timber felling standards through public and mass education, awareness creation and physically held tree planting exercises</p> <p>EBAFOSA – Ghana working to support National forest and wildlife policy, the Timber resource utilization regulation and the National REDD+ strategy</p>	<p>October 2016 – December 2018</p>	<p>Reduce deforestation and degradation</p> <p>Reduce emissions of short-lived climate pollutants</p>
	<p>2. EBAFOSA- Ghana EBA farm linked to additional stakeholders in government, academia, private sector etc., to upscale EBA practices and demonstrate restoration & conservation viability of EBAs hence inform EBA integration into relevant forestry, agriculture & other land use policies</p>			
<p>Sustainable Mass Transportation</p>	<p>EBAFOSA convenes cross-cutting stakeholders for mutual partnerships to actualize policies & plans to enhance investment in rural transport infrastructure – rural roads, to enhance efficient linkage of high potential agro-areas & agro-industrial zones to affluent urban markets & export centers. Target is to:</p> <ul style="list-style-type: none"> a. Ensure shortest distance linking production zones to markets to minimize travel distances & related emissions b. Good roads ensure vehicles consume fuel efficiently hence lowers emissions. 	<p>Mass education and roll out of awareness creation on the use of mass transportation for efficient energy use and emission reduction</p>	<p>October 2016- December 2018</p>	<p>Work with other stakeholders to achieve increase in number of trips by public transportation by 10%</p>

Ghana's NDCs priorities aligned to EBAFOSA	EBAFOSA-Ghana's roles and strategy	EBAFOSA Initiatives	Time frame	Expected results – Articles of Paris agreement satisfied
<p>Climate Proof Infrastructure Linkages</p> <ul style="list-style-type: none"> - Link actors from diverse fronts and support the active implementation of the national biodiversity preservation and strategic actions that address climate change impacts - Link actors and support recommended climate change adaptation policies and programmes in sectors that affect biodiversity conservation, including agriculture, forestry, energy and livelihoods. - Link various actors along the agricultural value chain. Build capacities, create awareness and support implementation of programmes for alternative livelihoods in order to reduce unsustainable resource use that contributes to loss of biodiversity 	<p>A comprehensive database of multiple stakeholders at both policy and operational level from bio-diversity dependent sectors / ministries i.e. environment, agriculture, forestry, energy, lands to ensure formulation, refinement and implementation of relevant sectorial bio-diversity conservation policy, plans and practices.</p>	<p>EBAFOSA- Ghana will facilitate EBA linkages to stakeholders in government, academia, private sector etc., to upscale biodiversity conserving EBA practices and demonstrate their viability hence inform EBA integration into relevant policies in forestry, agriculture, lands, energy & other biodiversity dependent sectors</p>	<p>October 2016 – December 2018</p>	<p>Community led adaptation and livelihood diversification for vulnerable groups</p> <p>Effective management of nearly 500,000 Ha fragile, ecologically sensitive and culturally significant sites in the assigned 22 administrative districts in the forest and savannah areas</p> <p>Governance reformed for utilization of forest resources for sustainable energy use and biodiversity business</p>
<p>Equitable social development</p> <p>EBAFOSA – GHANA will review and advocate for land use plans in industrial areas in light of equitable social development and climate change adaptation</p>	<p>EBAFOSA will educate the masses about favorable land-use practices to establish suitable locations for setting up rural agro-industrial zones powered by clean energy and build relevant stakeholder partnerships</p> <p>EBAFOSA will partner the responsible agencies to set up EBA-Based agro-industrial zones powered by clean energy and ICT</p>	<ol style="list-style-type: none"> 1. ICT through mobile apps that enhance market linkages (instead of paper processes & physical travelling) create income opportunities for mobile innovators while contributing to climate resilience through minimizing sources 2. Clean energy powered agro-industry creates income opportunities for processing industries while contributing to climate resilience through minimizing sources 	<p>October 2016 – December 2018</p>	<p>Achieve emission reduction</p> <p>Enhancement of forest carbon reduction</p> <p>Reduce national poverty levels</p> <p>Reduction in electricity demands and expenditure</p>

Ghana's NDCs priorities aligned to EBAFOSA	EBAFOSA-Ghana's roles and strategy	EBAFOSA Initiatives	Time frame	Expected results - Articles of Paris agreement satisfied
<p>Livelihoods</p> <ul style="list-style-type: none"> - Build a network of intermediate NGOs capable of working on climate change and livelihoods issues, where these NGOs support a number of communities in high risk States. -Animate communities with appropriate engagement methods, in order to elicit and document valid climate change and livelihood related needs/vulnerabilities -Use or reinforce available (endogenous) community resources to reduce vulnerability and build livelihood-linked capacity to adapt to climate change. 	<p>A comprehensive database of climate change and livelihood improvement NGOs and CBOs within Ghana and across partnerships and networks between them to facilitate peer learning cross-hybridization and exchange of innovative climate resilient approaches especially on enhancing food security</p>	<p>EBAFOSA-Ghana EBA farm linked to additional stakeholders in government, academia, private sector etc., to upscale biodiversity conserving EBA practices and demonstrate their viability hence inform EBA integration into relevant policies in forestry, agriculture, lands, energy & other biodiversity dependent sectors</p> <p>- Initiative on waste to wealth for electrification (Clean Energy) & Bio fertilizer</p>	<p>October 2016 – December 2018</p>	<p>Job creation for the unemployed and youth especially</p> <p>Improved urban sanitation and waste management</p> <p>Improved agricultural yield through the availability of organic fertilizer</p>
<p>Industry</p>	<ol style="list-style-type: none"> 1. EBAFOSA will create awareness and promote adoption of green technology in industry 2. EBAFOSA will build relevant stakeholder partnerships targeting policy and ground actions to establish EBA-Based agro-industrial zones powered by clean energy and ICT enabled market linkages / digital market systems enhancing adoption of clean technologies in industry as follows: 	<ol style="list-style-type: none"> 1.EBAFOSA will upscale programmes on EBA approaches to food security 2. Private sector companies will be partnered given them opportunities to enhance their corporate brand locally and nationally through engaging their Corporate Social Responsibility to support Ghana to implement Paris agreement & support national socio-economic development priorities 3. Financial institutions will be engaged to establish EBA based agriculture climate risk sharing facilities to lower the cost of agriculture finance risk and simultaneously finance climate adaptation given EBA is a climate adaptation technique 4. Initiative an waste to wealth for electrification (Clean Energy) & Bio fertilizer 	<p>October 2016 – December 2018</p>	<ol style="list-style-type: none"> 1. Clean energy powered agro-processing & value addition to reduce operating costs and improve profits 2. Digital marketing systems will reduce paper processes related emissions 3. EBA technologies to ensure agro-industrialization will enhance forest sinks. 4. Sustainable yield increases will improve farmer level incomes while contributing to climate adaptation given that EBA is an adaptation technique



EBAFOSA AFRICA

www.ebafosa.org

info@ebafosa.org