

EBAFOSA

Ecosystem Based Adaptation for
Food Security Assembly



NIGERIA ACTION PLAN 2016 -2017



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EBAFOSA Nigeria – Action plan on supporting Nigeria INDC implementation

Nigeria's INDC are within the context of taking climate action while simultaneously ensuring critical socio-economic priorities of delivering direct development benefits to solve food insecurity, inadequate access to energy, high unemployment, amongst others. These challenges remain principal constraints on economic development and are of primary concern to the government.

EBAFOSA entry into INDCs implementation support is through its strategy of convening, building on & complementing established ongoing & planned initiatives for harmonized progress in its focus area of policy and ground actions to actualize EBA-based agro-industrial zones powered by clean energy, with ICT enabled enhanced market linkages. This contributes to socio-economic priorities of food security, expanding clean energy and job & income generation while simultaneously contributing to specific articles of the Paris agreement. EBAFOSA entry is also through leveraging EBA for innovative domestic climate finance. Hence, EBAFOSA will support implementation of specific Nigeria INDC priority areas that are aligned within its focus areas as follows:

Nigeria INDC priorities aligned to EBAFOSA	EBAFOSA contribution & strategy	EBAFOSA Actions	Time frame	Expected results – Articles of Paris agreement satisfied
ADAPTATION (as per NASPA-CCN)¹ captured in Annex 1 of INDC				
Agriculture -Improved crop systems (upscale use of drought resistant crops; adopt better soil management practices) -Improved resource management (efficient agriculture water use; re-greening; better soil management)	1) 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 mainstream agriculture policy and practice in Nigeria. Target will be proven techniques that increase yields while simultaneously restoring degraded areas, improving ground water recharge. Below specific techniques that have proven effective in the Sahel will be prioritized:	Phase 1 1) 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 2) Reach out, mobilize and register into EBAFOSA database these mapped out stakeholders / initiatives	As captured in Gantt Chart	Article 3 on INDCs and Article 7 on adaptation

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	<p>-The Zai - Niger rehabilitated up to 300 000 hectares of its crusted and barren.</p> <p>- Integrated soil fertility management (ISFM) - In Burkina Faso, ISFM across over 200,000 ha has resulted in yield increases of 33-58% over four years, and accompanying revenue increases of 179% for maize and 50% for cassava and cowpea.</p> <p>-Farmer Managed Natural Regeneration (FMNR) for re-greening: Senegal has regenerated indigenous trees on 40 000 hectares of cropland. This ecological technique has increased tree density on cropland from an average of 4 to 33 trees per hectares and improved soil fertility, crop yields, and wildlife, and reduced soil erosion</p> <p>2) A comprehensive database of private sector, academia, extension services to enhance dissemination & usage of efficient irrigation technologies in Nigeria</p> <p>Earmarked initiative to build on</p> <p>- the EBAFOSA Nigeria 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 policies</p>	<p>Phase 2</p> <p>1) Send motivational emails and follow-up reminders inviting registered stakeholders to volunteer to be sectorial and regional focal persons to lead in both mobilization & registration of additional relevant stakeholders and in mutual partnerships building for concrete actions implementing INDC priorities</p> <p>2) Develop questionnaire to be shared with registered stakeholders to capture details of what the respective stakeholders are planning / implementing in INDC agriculture priority areas, i.e.</p> <p>a) use of drought resistant crops; better soil management practices</p> <p>efficient irrigation; re-greening activities; better soil management</p> <p>b) gaps they need to be bridged at both policy and ground level to enhance their activities</p> <p>c) stakeholders they believe will be key to bridging the gaps</p> <p>3) Mail out questionnaires and set response period</p> <p>4) Analyze responses and make follow-up to clarify unclear responses</p> <p>5) Compile report of responses and note ongoing/planned activities and gaps identified</p>		

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		<p>6) Link stakeholders' ongoing activities that are implementing Nigeria INDC to the Ministry of Environment INDCs focal to be captured officially for reporting as official INDC implementation progress by Nigeria under the UNFCCC</p> <p>7) Develop map of potential mutual combinations between registered stakeholders based on their ongoing and planned initiatives at both policy and ground level that can bridge identified gaps to enhance implementation of INDCs</p>		
		<p>8) Link up these stakeholders by sharing the map of activities and arranging networking meetings to catalyse development of business / partnerships that bridge these gaps</p> <p>9) Follow up with matched stakeholders to come up with proposals for joint mutually complementary initiatives building on and complementing their ongoing and planned initiatives towards bridging identified gaps to enhance INDC implementation</p> <p>10) Review and refine proposals and in collaboration with continental secretariat provide necessary backstopping e.g. financial for stakeholders to implement these joint activities</p> <p>11) Note reminder gaps that cannot be bridged through mutual partnerships with current registered members</p>		
		<p>12) Note other non-registered stakeholders / initiatives suggested in questionnaire and research additional ones that will be key to bridge the remaining gaps</p> <p>13) Target phase 1 stakeholder mobilization efforts to register these stakeholders</p> <p>14) Monitor and report on progress</p>		

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<p>Forestry</p> <p>-Support review & implementation of National Forest Policy</p> <p>-Forest restoration</p> <p>-Strengthen implementation of National Community-Based Forest Resources Management Programme</p>	<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. Below specific techniques will be prioritized:</p> <p>-Agroforestry / forest regeneration: In Malawi, Agroforestry is reported to improve maize yields by about 50% by planting nitrogen fixing <i>Faidherbia albida</i> trees. Quantitative increases from 4.6 T/ha to 5.7 tons/ha have been reported in test/monitored fields in the country.</p> <p>-Farmer Managed Natural Regeneration (FMNR) Examples: Mali has restored over 500,000 hectares through using simple FMNR. The same technique in Senegal has regenerated indigenous trees on 40 000 hectares of cropland. This ecological technique has increased tree density on cropland from an average of 4 to 33 trees per hectares and improved soil fertility, crop yields, and wildlife, and reduced soil erosion, while in Ethiopia, it has restored 2 700 hectares of barren mountain terrain.</p> <p>2) A comprehensive database of Community Based Organizations (CBOs) to work with policy stakeholders & technical actors in agriculture & forestry towards strengthened implementation of the National Community-Based Forest Resources Management Programme</p> <p>Earmarked initiative to build on</p> <p>– the EBAFOSA Nigeria 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>Steps as elaborated in priority area 1 (agriculture) but customized to the forestry INDC priorities targeted by EBAFOSA</p>	<p>As captured in Gantt Chart</p>	<p>Article 3 on INDCs, Article 5 on REDD+ and Article 7 on adaptation</p>

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<p>Biodiversity</p> <ul style="list-style-type: none"> - Support the active implementation of the National Biodiversity Strategy and Action Plan (NBSAP), particularly those strategic actions that address climate change impacts - Support recommended climate change adaptation policies and programmes in sectors that affect biodiversity conservation, including agriculture, forestry, energy and livelihoods. - Support and implement 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>Earmarked initiative to build on</p> <ul style="list-style-type: none"> - the EBAFOSA Nigeria 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>Steps as elaborated in priority area 1 (agriculture) but customized to the biodiversity INDC priorities targeted by EBAFOSA</p>	<p>As captured in Gantt Chart</p>	<p>Article 3 on INDCs, Article 5 on REDD+ and Article 7 on adaptation</p>

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<p>Industry & Commerce</p> <p>-Review and enforce land use plans in industrial areas in light of climate change (long term)</p> <p>-Promote and market emerging opportunities from climate change</p>	<p>1) EBAFOSA targets favorable land-use policies to establish suitable locations for setting up rural agro-industrial zones powered by clean energy, hence convenes relevant stakeholder partnerships</p> <p>2) EBAFOSA target for policy and ground actions to establish EBA-Based agro-industrial zones powered by clean energy and ICT enabled market linkages promotes entrepreneurial opportunities in climate action as follows:</p> <p>a) 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</p> <p>b) Clean energy powered agro-industry creates income opportunities for processing industries while contributing to climate resilience through minimizing sources</p> <p>c) Upscaling EBA approaches to food security ensures sustainable yield increases under the changing climate (up to 128% compared to non-EBA) hence increases farmer level incomes while contributing to climate adaptation given that EBA is an adaptation technique</p> <p>d) Private sector companies opportunities to enhance their corporate brand internationally & nationally through engaging their CSR to support countries implement Paris agreement & support national socio-economic development priorities</p> <p>e) Financial institutions engagement 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 climate adaptation technique</p> <p>Earmarked initiative(s) to build on</p> <ul style="list-style-type: none"> - the EBAFOSA Nigeria EBA farm being linked to clean energy agro-processing & other commercial value chains; - Initiative on waste to wealth for electrification (Clean 	<p>Steps as elaborated in priority area 1 (agriculture) but customized to the Industry & Commerce INDC priorities targeted by EBAFOSA</p>	<p>As captured in Gantt Chart</p>	<p>Article 3 on INDCs, Article 7 on adaptation and Article 9(2) on voluntary climate finance</p>

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<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>Energy) & Bio fertilizer</p> <ul style="list-style-type: none"> - Upcoming initiative with the Etisalat mobile company corporate affairs department - Upcoming collaboration with NIRSAL & the AU Africa Risk Capacity (ARC) <p>A comprehensive database of climate change and livelihood improvement NGOs and CBOs within Nigeria and across Africa and partnerships between them to facilitate peer learning cross-hybridization and exchange of innovative climate resilient approaches especially on enhancing food security</p> <p>Earmarked initiative to build on</p> <ul style="list-style-type: none"> - the EBAFOSA Nigeria 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 - Initiative on waste to wealth for electrification (Clean Energy) & Bio fertilizer 	<p>Steps as elaborated in priority area 1 (agriculture) but customized to the Livelihood INDC priorities targeted by EBAFOSA</p>	<p>As captured in Gantt Chart</p>	<p>Article 3 on INDCs, and Article 7 on adaptation</p>

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MITIGATION				
<p>Energy</p> <p>-Decentralized renewable energy</p>	<p>1) 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</p> <p>2) Comprehensive database of policy level and operational actors from private sector, academia and development partners engaged in decentralized clean energy systems</p> <p>Earmarked initiative(s) to build on</p> <ul style="list-style-type: none"> - the EBAFOSA Nigeria EBA farm being linked to clean energy agro-processing, ICT enabled market linkages & other commercial value chains; - Initiative on waste to wealth for electrification (Clean Energy) & Bio fertilizer 	<p>Steps as elaborated in priority area 1 (agriculture) but customized to the Energy INDC priorities targeted by EBAFOSA</p>	<p>As captured in Gantt Chart</p>	<p>Article 2 on climate resilient growth, Article 3 on INDCs, and Article 4 on mitigation through minimizing sources</p>

Nigeria INDC priorities aligned to EBAFOSA	EBAFOSA contribution & strategy	EBAFOSA Actions	Time frame	Expected results – Articles of Paris agreement satisfied
<p>Agriculture and Land Use</p> <p>-Climate Smart Agriculture</p> <p>-Stop use of charcoal</p>	<p>1) EBAFOSA convenes relevant stakeholder partnerships targeting to actualize policy and ground actions to establish EBA-Based agro-industrial zones powered by clean energy and ICT enabled market linkages / digital market systems. This promotes climate smart agriculture through</p> <p>a) Upscaling clean energy based value addition hence ensure carbon is sequestered in such activities (solar irrigation can sequester over 1,000,000tCO2 equivalent by 2030)</p> <p>b) Upscaling EBA approaches like agro-forestry, FMNR, reforestation etc., which enhance carbon sinks and sequestration (one large-scale forest regeneration project of 25,000Ha can ensure a country sequesters up to 15.6 million tons of CO2) and enhance capacity of ecosystems which underpin production (FMNR in Senegal has regenerated indigenous trees on 40 000 hectares of cropland, increased tree density on cropland from an average of 4 to 33 trees per hectares and improved soil fertility, crop yields, and wildlife, and reduced soil erosion).</p> <p>c) Digital market systems / ICT based market linkages reduce paper processes, hence paper based emissions & physical travel for markets (transport emissions)</p> <p>2) Enhance use of clean, energy efficient cook stoves to reduce indoor pollution from charcoal use and preserve forest sinks</p> <p>Earmarked initiative(s) to build on</p> <ul style="list-style-type: none"> - the EBAFOSA Nigeria EBA farm being linked to clean energy agro-processing, ICT enabled market linkages & other commercial value chains; - Initiative on waste to wealth for electrification (Clean Energy) & Bio fertilizer - National Day of Resilience and Food Security 	<p>Steps as elaborated in priority area 1 (agriculture) but customized to the Agriculture & Land use INDC priorities targeted by EBAFOSA</p>	<p>As captured in Gantt Chart</p>	<p>Article 2 on climate resilient growth, Article 3 on INDCs, and Article 4 on mitigation through enhancing sinks & reservoirs</p>

Nigeria INDC priorities aligned to EBAFOSA	EBAFOSA contribution & strategy	EBAFOSA Actions	Time frame	Expected results – Articles of Paris agreement satisfied
	<ul style="list-style-type: none"> - UNEP-Climate & Clean air Coalition project in Nigeria utilizing EBAFOSA in mobilizing multiple stakeholders to upscale dissemination of clean, energy efficient cook-stove technologies to reduce indoor pollution from charcoal use and preserve forest sinks 			
<p>Industry</p> <p>-Adoption of green technology in industry</p>	<p>EBAFOSA convenes 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:</p> <ul style="list-style-type: none"> a) Clean energy powered agro-processing & value addition, b) Digital marketing systems to reduce paper processes related emissions and c) EBA technologies to ensure agro-industrialization enhance forest sinks. <p>Earmarked initiative(s) to build on</p> <ul style="list-style-type: none"> - the EBAFOSA Nigeria EBA farm being linked to clean energy agro-processing, ICT enabled market linkages & other commercial value chains; - Initiative on waste to wealth for electrification (Clean Energy) & Bio fertilizer - UNEP-Climate & Clean air Coalition project in Nigeria utilizing EBAFOSA in mobilizing multiple stakeholders to upscale dissemination of clean, energy efficient cook-stove technologies to reduce indoor pollution from charcoal use and preserve forest sinks 	<p>Steps as elaborated in priority area 1 (agriculture) but customized to the Industry INDC priorities targeted by EBAFOSA</p>	<p>As captured in Gantt Chart</p>	<p>Article 2 on climate resilient growth, Article 3 on INDCs, and Article 4 on mitigation through minimizing sources & enhancing sinks & reservoirs</p>

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Transport -Upgrading roads	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: 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.	Steps as elaborated in priority area 1 (agriculture) but customized to the Transport INDC priorities targeted by EBAFOSA	Long term future focus	Article 3 on INDCs, and Article 4 on mitigation through minimizing sources

(Footnotes)

1 National Adaptation Strategy and Plan of Action for Climate Change Nigeria

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