



Republic of Ghana



GHANA PLAN OF ACTION FOR DISASTER RISK REDUCTION (DRR) AND CLIMATE CHANGE ADAPTION (CCA)

**NATIONAL DISASTER MANAGEMENT ORGANIZATION
(NADMO)**

GHANA

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GHANA PLAN OF ACTION FOR DRR AND CLIMATE CHANGE ADAPTATION 2011-2015

HFA 1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.					
OUTCOME 1: National authorities are better familiarized with DRR/CCA concepts and as a result have reinforced national legislation and policies for DRR and CCA, have established national and district levels strategies, actions plans and coordination mechanisms to address DRR and CCA, and ensure regular funding for DRR and CCA in the national budget.					
Outputs	Activities	Lead agency	Supporting partners	Required funds (\$)	Pledged funds
1. National legislation for DRR and CCA reviewed and reinforced.	Review Act 517 and propose amendments for strengthening it for effective DRR and CCA.	MOI/ NADMO	-MEST/EPA, GMet WRC,GNFS, MOFA ,AG's Office	45,000	GoG 20'000C, IGF 90'000C
	Ensure passage of the revised amendment bills	-Do-	Parliamentary Select Committee On Defense & Interior, UNDP	85,000	
2. National DRR and CCA policy reviewed and adopted.	Review policies on DRR and CCA for effective disaster response	NADMO	-NDPC,MOI,AG MOEP,MEST/EPA G-Met, WRC, GNFS, MOFA	90,000	GoG 30'000C, NREG 40'000C GFDRR 200'000USD
	Validate DRR and CCA policy, Publish DRR and CCA policy and ensure wide dissemination	NADMO	-MOI, Parliamentary Select Committee On defense & Interior, MOFEP, MEST,PLATFORM	36,000	
3. DRR and CCA strategies and subsequent action plans exist at national and district levels.	Prepare National DRR and CCA Strategies	NADMO	-National Platform, Key stakeholders and partners	145,000	GoG 40'000C, NREG 220'000C, IGF 100'000C GFDRR 200'000USD
	Prepare National framework for DRR and CCA under which the various existing DRR/CCA plan of action will be realigned	MEST, NADMO	MOI,NDPC,MLGRD,MWRWH	60,000	
	Provide technical support to district authorities to draft and disseminate their DRR and CCA action plans in line with national DRR and CCA policies and strategies	NADMO	MLGRD,MOFEP, NDPC,MOI,UNDP, MMDA'S	300,000	

<p>4. National coordination mechanisms for advancing DRR, CCA and Environmental sustainability in place at national, regional and local levels and are continuously reinforced.</p>	<p>Assess the existing multi-level inter-ministerial (national, regional and local) coordination mechanisms for CCA and sustainable development</p>	MEST	-NADMO,NDPC, G-Met, MLGRD, MLGRD, MMDA'S	150,000	<p>Gog 40'000C, NREG 80'000C GFDRR 50'000USD</p>
	<p>Develop proposals for different institutional coordination options for CCA following a consultative multi-stakeholder workshop to consider institutional options for CCA coordinating structures</p>	MEST /MOI	-MOFA,MOH Energy Commission, NADMO	40,000	
	<p>Establish an Inter-Ministerial coordination mechanism for DRR CCA and ES to advocate for mainstreaming DRR, CCA and ES into policies and sectoral development plans</p>	MEST/ NADMO	-Do	30,000	
	<p>Review/set up agreed multi-stakeholder coordination mechanisms for DRR and CCA at national, regional and district levels</p>	-MOI	-MWRWH,NADMO, MEST, GMet, Friends of the earth(NGO),UNDP,	50,000	
	<p>Reinforce the capacities of NADMO for coordination of the DRR national platform</p>	NADMO	MOI,MOFEP, UNDP	100,000	
	<p>Establish DRR district platforms in 170 districts (following the ongoing establishment of 10 regional platforms)</p>	NADMO	MOI,MOFEP,UNDP	1,700,000	
<p>5. National authorities familiarized with DRR and CCA concepts, show public commitment for DRR and CCA and contribute to regional partnership.</p>	<p>Define systematic and ongoing process of high-level awareness raising and training events on DRR and CCA new policy directions at national and district levels</p>	NADMO/MEST	-MOFEP,MLGRD, UN Agencies, MWRWH, NGOs	60,000	
	<p>Organise a national event on DRR/CCA with participation of the UNISDR SRSG and all concerned line Ministers, Parliamentarians, and civil society organizations</p>	MOI/ NADMO	-UNDP, UN Agency ,UNISDR,MoFARI	70,000	

	<p>Organise a yearly one-day event for Mayors and their technocrats to discuss Urban Risk and for joining the UNISDR “Safer Cities” campaign. This is expected to raise interest in DRR/CCA and to foster experience sharing and collaboration</p> <p>Undertake exchange programmes and visits to other countries with strong DRR and CCA programmes</p> <p>Strengthen networks with sub-regional organizations: participate in ECOWAS yearly consultation meetings.</p>	NADMOMLGRD	-MOI, MLGRD UNDP	200,000	
		MOI	-MOI, MoFARI MOFEP, ECOWAS Sect, UNDP, NADMO	150,000	
		MoFARI	- MOI, MOFEP ECOWAS Sect, UNDP, NADMO	50,000	
6. National Management Fund established to undertake DRR/CCA activities.	Ensure permanent funding for DRR and CCA.	MOI	MOFEP, MEST, Parliament, National Platform on DRR & CCA	35,000	

HFA 2: Identify, assess and monitor disaster risk and enhance early warning					
OUTCOME 1: Based on sound legislation, developed competencies and adequate tools for disaster, climate and environmental risks assessment, Ghana has completed its national disaster risk profile and has built proper early warning mechanisms to inform communities of possible disaster, climate and environmental hazards					
Outputs	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
1. A framework for risk assessment and early warning is in place.	Ensure regular risk assessments at national and district levels, and the establishment of a national risk observatory.	NADMO	-EPA, GMet, MOI WRC, FC, MLGRD, MMDAS, MEST/EPA, AG’S Office	45,000	
2. A tool developed for national disaster and climate risk	Develop a tool for disaster and climate risk assessment for Ghana (with the integration of climate information and climate change projections into the risk assessment)	GMet	Consultancy - UNDP, MEST/EPA, NADMO	300,000	GFDRR 400’000USD

assessment in Ghana.	Adopt methodology and implementation arrangements for disaster and climate hazard/risk/vulnerability profiling at district level (pilot flood risk assessment in the some selected areas of the country)	NADMO	-GMet, UNDP MEST/EPA, NDPC, WRC MWRWH/ HSD	250,000	
3. Competencies developed at national and district levels for conducting disaster and climate risk assessments.	Organise training for Disaster and climate risk assessment at the national level for NADMO and other relevant stakeholders at all level.	NADMO	Consultancy, UN Agencies, NGOs, GRCS, GMet, MMDAs, MLGRD, MEST/EPA	500,00	GFDRR 200'000USD
	Organise training in Disaster and climate risk assessment at district level.	NADMO	UN Agencies NGOs -GRS	850,000	
	Develop and implement a strategy for community based participatory approach to local hazard and vulnerability analyses in 5 districts in each region.	NADMO	NDPC,MEST EPA, DVGs, UN Agencies, NGOs, GRCS, GMET, MMDAs, MLGRD	45,000	
4. Disaster and climate risk assessment completed at national and district levels and are regularly updated.	Conduct a study on Indigenous and Traditional knowledge for Early Warning systems	NADMO	-GMET, MOFA MOH,UN Agencies, NGOs, Consultant, MLGRD,MMDAs	50,000	
	Produce/Review/Update existing hazard/risk/vulnerability assessments and maps for priority hazards.	NADMO	-GSD, HSD, SD, MOFA, MOH / G H S,GAEC, GNFS	180,000	
	Map out an overview of key infrastructure and assets threatened by hazards	NADMO	Consultant/ WRC	50,000	
	Conduct pilot exercise in urban hazard mapping and urban governance (based on City Primer)	NADMO	-Consultant	30,000	
	Conduct disaster risk and climate risk assessments at national, regional, and district levels.	NADMO/ MEST	-UN Agencies, NGOS,MMDAs, MDAs, COP	100,000	
	Conduct country Vulnerability and risk analysis and mapping capacity (VRAM) for	MOH	-WHO, NGOS NADMO, DHMT	400,000	

	<p>health, including health facility safety (WHO support)</p> <p>Revise bi-annually results of the various assessments in collaboration with various technical agencies.</p>	NADMO	<p>Directorate of Vet. Services</p> <p>-Technical Agencies</p>	30,000	
<p>5. An effective hazard monitoring and early warning service an systems with sound scientific and technological basis established, contingency plans using the results prepared and updated regularly of the national risk assessments</p>	<p>Support the development of the legal and policy framework for prioritizing early warning</p>	NADMO	-GMET, MEST, GSD, MOFA, AG, CERSGIS, NMIMR	160,000	<p>GoG 30,000. IGF, 80,000</p>
	<p>Undertake an inventory of Early Warning Systems (EWS)</p>	NADMO	GMET, MOFA, HSD, GHS, GSD, GNFS, MEST, GAEC, GPC, DVGs	55,000	
	<p>Design a multi-hazard EWS with identification of key areas of focus and collaborating institutions and initiatives</p>	NADMO	-Do-	20,000	
	<p>Develop a capacity building strategy for EWS and contingency planning for all stakeholders</p>	NADMO	GMET, MOFA, HSD, GHS, GSD, GNFS, MEST, GAEC, GPC, DVGs, UN Agencies, NGOs	80,000	
	<p>Procure EWS materials</p>	NADMO	-DO-	4,000,000	
	<p>Provide infrastructure and communication equipment to facilitate exchange of risk information</p>	NADMO	MOC, MOFEP, UN Agencies, NGOs, MC, ECOWAS Secretariat	2,000,000	
	<p>Train staff of GMet on the use and maintenance of EWS equipment</p>	GMet	ECOWAS Secretariat, UN Agencies, AAP	80,000	

	Review and update existing contingency plans at Regional, District, and community levels using risk assessment results	NADMO	MLGRD, UN Agencies, NGOs, MMDAs	150,000	
	Establish mechanisms for disseminating the information through radio, TV, cell phones, and other forms of EWS communication to ensure that communities take precautionary measures to avert the impact of disasters	MOI	MC, NADMO, MoI, ISD, MoC, MMDAs, Trad Authorities, Tech. Agencies, GMet	100,000	
	Establish EWS on environmental calamities at district levels	NADMO	MEST/EPA, CBOs	1,000,000	
	Establish protocols for integrating, where possible, Regional and cross boarder warning systems	MOI/MOFARI	ECOWAS, NADMO, WRC, MOFA, VRA, GHS	40,000	

OUTCOME 2: Ghana has reinforced its technical institutions (GMet, Seismological Institutions etc.) and has established a National Risk Observatory to facilitate access to information on disasters, EWS, and climate and environmental risks for decision makers.					
Outputs	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
1. Enhance the capacity of the GMet, and other Seismological institutions to provide adequate data on trends of disaster and climate risk.	Ghana Meteorological Services and other research stations to build their capacity for predicting climate-related disasters such as droughts and floods.	GMet	-MOFA, NADMO AAP, UN Agencies, NGOs SARI, ECOWAS, SADA	55,000	GoG 20'000C, IGF 80'000C
	Support GMet capacity building: training staff, renovate weather stations, and establish a numerical weather prediction service.	GMet	-MOFEP, NADMO AAP, UN Agencies	5,000,000	

	<p>Enhance the development of the institutional capacity of Geological Survey Department.</p> <p>Undertake research on key environmental issues such as climate change and health</p>	<p>GS Dept</p> <p>NADMO</p>	<p>-MOFEP, Dept of Earth Science (University of Ghana)</p> <p>-MEST/EPA, UN Agencies, NGOs, NMIMR, Teaching Hospitals</p>	<p>2,000,000</p> <p>55,000</p>	
2. A National Disaster Risk Observatory, including various information management systems established	<p>Establish systematic, standardized process to collect, assess and share data, maps and trends on hazards and vulnerabilities</p> <p>Establish GIS based information management system on climate change induced disaster and natural hazard risk information</p>	<p>NADMO</p> <p>NADMO</p>	<p>MOFEP. MoH, MOFA, GMet, AAP, UN Agencies, NGOs, SD, Lands Commission,</p> <p>GMet, NDPC, AAP, MOFA, Dept. of Earth Science (UG)</p>	<p>65,000</p> <p>4,000,000</p>	

HFA 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels.					
OUTCOME 1: A national strategy developed for raising public awareness in DRR, CCA and ES. As a result, various actors and influencers trained on DRR, CCA and ES concepts; regular campaigns are conducted at national, regional and district levels; schools and academic institutions gradually incorporated DRR, CCA and ES into their regular curricula or extra curricula activities.					
Outputs	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
1. A National strategy drafted and mechanisms established for public awareness on disaster, climate change and environmental risk	Develop a strategy for a national public awareness on DRR/CCA/ES, which will include effective use of media (radio, newspaper, internet and TV).	NADMO	-MoI/ISD, Technical Agencies, Media	170,000	
	Consult with key stakeholders and establish	NADMO	Key	200,000	

	national knowledge platform for climate change at national, regional and district levels.		Stakeholders		
<p>2. Competencies of various actors and potential influencers (politicians, judiciary, police, financial institutions, architects, etc) in DRR, CCA and ES developed at national, regional and district level.</p>	<p>Design and conduct various DRR, CCA and ES training using learning in action programmes at national, regional and local levels, with a focus on women's participation.</p>	NADMO	-MOWAC, UN Agencies, NGOs, MEST/EPA	250,000	<p>GoG 70'000C, IGF 180'000C GFDRR 300'000USD</p>
	<p>AAP Regional Specialists to conduct Leadership for Results Programme</p>	UNDP	-NADMO, NGOs, Private, Sector	130,000	
	<p>Training for policy makers and professional bodies on DRR/CRM</p>	NADMO	MOFEP, NGOs, UN Agencies, Association of Eng, Arch, Doc, MMDAs, AI, Private Sector, MC	55,000	
	<p>Organise training for journalists and media on DRR, CCA and ES</p>	NADMO	-Do	100,000	
	<p>Organise joint trainings for NGOs and other IO engaged in DRR, CCA, ES</p>	NADMO	-UN Agencies, -NGOs, GRCS, ECOWAS	100,000	
<p>3. Regular public awareness campaigns on DRR, CCA and ES (TV, radio, brochures, posters, leaflets, etc.) conducted at national, regional and district levels.</p>	<p>Design/Prepare advocacy and knowledge sharing materials in disaster, climate change, environmental hazards and risks</p>	MOI/ NADMO	-GMet, ISD, EPA, Media Houses, MDAs	350,000	<p>GoG 70'000C, IGF 700'000C</p>
	<p>Identify a few DRR champions in Ghana among celebrities, political figures, artists, etc., who could advocate and demonstrate/promote practical DRR/CCA/ES cases.</p>	MOI, NADMO	-UN Agencies, Select Committee on Defense and Interior, MUSIGA	20,000	
	<p>Organise annual campaigns/events/ public relations on DRR, CCA and ES using "international days" of celebration (floods, drought).</p>	MOI, NADMO	-UN Agencies, MDAs, NGOs, DVGs, MMDAs	110,000	
	<p>Equip regions and selected districts with communication and outreach equipment</p>	MLGRD, NADMO	-GMet, MEST UN Agencies MDAs, MOC, Private Sector	200,000	

	<p>Organise durbars and outreach programmes for vulnerable groups and civil society organisations</p> <p>Carry out community-based outreach programmes</p> <p>Carry out public education on DRR, CCA and environment issue in national and local media</p>	<p>MLGRD, MMDAs</p> <p>NADMO</p> <p>MMDAs</p>	<p>-UN Agencies, MMDS, CSOs, Private Sector & Traditional Authority, CBOs, NADMO</p> <p>-Do-</p> <p>-Media, EPA, ISD, NADMO, UN Agencies</p>	<p>80,000</p> <p>120,000</p> <p>90,000</p>	
<p>4. DRR/CCA/ES integrated into regular programmes or extra curricula activities of schools and various academic institutions.</p>	<p>Develop and distribute handbooks/text books on DRR/CRM/ES to educational institutions</p> <p>Adopt for Ghana tools and best practices already developed in other countries for the education system.</p> <p>Collaborate with tertiary institutions to develop or provide courses in DRR/CRM</p> <p>Integrate DRM in tertiary training institutions curricula, including health training institutions</p> <p>Stimulate environmental education in formal and non- formal education systems.</p>	<p>MOE/GES</p> <p>MOE,</p> <p>MOE, NADMO</p> <p>MOE, NADMO</p> <p>MOE NADMO</p>	<p>- MEST/EPA, UNICEF, NADMO</p> <p>- GES, NADMO, UNICEF, UNDP, NDPC</p> <p>-Do-</p> <p>- GES, GNAT, MOH, UNICEF, UNDP, NDPC GHS,</p> <p>-Do-</p>	<p>250,000</p> <p>40,000</p> <p>145,000</p> <p>70,000</p> <p>160,000</p>	<p>GoG 20'000C, IGF 60'000C</p>

HFA 4: Reduce the underlying risk factors					
Outcome 1: Following the further development of national competencies in mainstreaming DRR and CCA into environmental and natural resource management , social and economic development practices, land-use planning and other technical sectors, effective programmes implemented at national, district and community levels to enhance resilience to natural hazards, with particular focus on the North of Ghana.					
Outputs	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
Output 1: The technical personnel of ministries and local government trained on environmental and natural resources management as a result environmental projects that contribute to building community resilience initiated.	Adapt the training tool on “DRR and Ecosystems” to the Ghana context	MLNR	-NADMO, GNFS MOFA, MEST/ EPA, GMet, UNDP, NGOs	60,000	NREG 70’000C, IGF 70’000C
	Organise training in DRR and Management of Ecosystems for various concerned Ministries, agencies and other technical personnel.	NADMO	- MLNR, MEST/EPA	40,000	
	Engage with key sector programs including NREG on how to integrate elements of DRR and CCA into environment, forestry and mining. Initiate projects on climate change, desertification, biodiversity, wetlands, e-waste, etc...	MEST, NADMO	-EPA, MOFA -MLNR, NGOs, UN Agencies, Mining Companies , Private Sector	30,000	
	Stimulate community environmental initiatives and programmes starting by supporting school clubs to implement practical environmental action programmes.	NADMO	-GES, UNICEF MEST/EPA, NGOs, GNFS, MLNR	60,000	

<p>Output 2: The technical personnel of concerned ministries and district/local governments trained on how to integrate DRR/CCA/ES into Social and economic development practices and as a result effectively adapted their strategies, action plans and budgets.</p>	<p>Develop specific tools for integrating DRR/CCA/ES into various development sectors (water management, agriculture, health, tourism, energy, etc).</p>	<p>MEST, NADMO</p>	<p>-NDPC, EPA -Consultant</p>	<p>60,000</p>	
	<p>Organise gender sensitive training on how to integrate DRR/CCA/ES into various development sector planning processes</p>	<p>MOWAC NADMO</p>	<p>- UNDP, NGOs</p>	<p>75,000</p>	
	<p>Establish focal points in all sector agencies (MDAs) and encourage/accompany key sector ministries and districts/local governments to prepare sectoral DRR/CRM/ES strategies, plans and integrate them in programmes.</p>	<p>NADMO</p>	<p>-NDPC, UNDP MLGRD, MEST, MMDAs, MDAs</p>	<p>50,000</p>	
	<p>Revitalize the Technical Advisory Committees (TACs)</p>	<p>NADMO</p>	<p>-MOI, MOFEP UNDP, RCC, MMDAs</p>	<p>35,000</p>	
	<p>Identify and sensitize women on DRR/CRM/CCA/ES</p>	<p>MEST NADMO</p>	<p>-MMDAs, MOWAC, UNDP, NGOs</p>	<p>100,000</p>	
	<p>Train and resource women in vulnerable communities in viable economic activities to build assets and coping mechanism and capacity</p>	<p>MOWAC NADMO</p>	<p>-MMDAS, MEST, NBSSI NVTI, MASLOC, Financial Institution, NGOs, MESW</p>	<p>140,000</p>	
	<p>Train and resource youth groups and other community based organizations (CBOs)</p>	<p>MoYs NADMO</p>	<p>-Do-</p>	<p>120,000</p>	
	<p>Conduct in depth review of all sectoral development plans and identify the funding that already supports DRR/CCA. Identify the existing financial mechanism in national sectoral budgeting that could support further DRR/CCA</p>	<p>MEST NADMO</p>	<p>-MOFEP -NDPC -Consultant, EPA, ISSER, IEA -UNDP</p>	<p>45,000</p>	

	<p>Build on existing interventions for enhanced economic analysis of climate change adaptation needs, and budgeting</p> <p>Assist key stakeholders to develop climate resilient investment plans</p> <p>Sensitize Private Sector to fund DRR and CCA</p> <p>Facilitate the introduction of disaster and climate insurance schemes</p>	<p>MEST NADMO</p> <p>MEST NADMO</p> <p>NADMO</p> <p>NADMO</p>	<p>-Do-</p> <p>-EPA, NDPC Gmet, National Platform for DRR & CCRM, UNDP</p> <p>MEST/EPA, NDPC, MDAs, UNDP</p> <p>UNDP, MEST, National Platform for DRR, GIZ, NIC, NGOs, MOFEP NDPC, Media</p>	<p>10,000</p> <p>30,000</p> <p>20,000</p> <p>50,000</p>	
<p>Output 3: The technical personnel of concerned ministries and district/local governments competencies reinforced in Land-use planning and other technical measures and as a result building codes reviewed, concrete measures taken to effectively reinforce key infrastructures and building resilience to natural hazards</p>	<p>Train key technical partner organisations (Architects, Surveyors and Engineers on building designs, etc.) in construction to better integrate CCA and DRR into their areas of expertise.</p> <p>Establish and strengthen DRM within the Ministry of Health.</p> <p>Review national building codes in relation to risks posed by various natural hazards</p> <p>Establish and enforce mechanism for inspection of compliance of building codes</p> <p>Review the national land use planning and ensure the integration of retention basins.</p>	<p>MWRWH</p> <p>MOH, NADMO</p> <p>MWRWH</p> <p>MWRWH</p> <p>MLNR</p>	<p>-GIE, GIS, GIA NADMO, UNDP MLGRD,</p> <p>-MWRWH, GHS, Teaching Hospital, WHO MDAs</p> <p>-NADMO, GSB MLGRD,</p> <p>-NADMO, ECG MOFA, MEST, MLGRD, SADA, GWCL, MMDAs</p> <p>-NADMO, FC, MMDAs, RCC UNDP, LC.</p>	<p>140,000</p> <p>45,000</p> <p>500,000</p> <p>40,000</p> <p>80,000</p>	

	<p>Build infrastructure for capturing water (multipurpose storage reservoirs, aimed also at generating electricity and provide water for irrigation during the dry season) and other infrastructure for mitigation (river bank reinforcement, forestation, "Regular cleaning and reinforcement of water evacuation channels in cities located in flood prone regions" ...).</p> <p>Conduct campaign on Safer Schools: establish ID cards for Schools compliance to minimum safety to various natural hazards and prepare a plan of action for physical reinforcement of schools most at risk in high natural disaster risk prone areas.</p> <p>Conduct campaign on Safer Hospitals: establish ID cards for Hospitals compliance to minimum safety to various natural hazards and prepare a plan of action for physical reinforcement of hospitals most at risk in high natural disaster risk prone areas.</p> <p>Establish ID card for all public buildings and critical infrastructure following criteria for resilience to natural disasters.</p> <p>Support the ongoing resettlement programmes in the North as part of disaster risk reduction measures. (WB project for the North following floods risk assessment of September 2011).</p>	<p>MWRWH</p> <p>MOE, NADMO</p> <p>MOH, NADMO</p> <p>MWRWH</p> <p>NADMO</p>	<p>-MOFA, MEST ECG,NADMO SADA, GWCL,VRA</p> <p>GES, UNICEF, GET FUND, UNDP, NGOs</p> <p>- GHS Teaching Hospitals, MOFEP, WHO, UN Agencies</p> <p>NADMO,MMDAs, MOFEP, NGOs, MOFEP, UN Agencies</p> <p>-SADA, RCC MMDAs, MDH UN Agencies, NGOs</p>	<p>30,000,000</p> <p>100,000</p> <p>120,000</p> <p>50,000</p> <p>1,200,000</p>	
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Outcome 2: The resilience and the capacity to recover from disasters (drought and floods) of populations in the North of Ghana enhanced due to the implementation of the SADA programme.					Pledged funds
Outputs	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
<i>Environmental and natural resources management</i>					
1.Reduce the impact of future floods through Community Resource Protection	Plant trees and protect the vegetative cover along the banks of main drainage systems (rivers, dams, streams) in the north for developing and protecting watersheds and other communal water resources.	MLNR	-NADMO, MOFA, FC, GNFS, GHD, Traditional Authorities, UN Agencies, CBOs, MMDAs	500,000	
<i>Social and economic development practices</i>					
2. Wetlands developed for agriculture and ecotourism	Develop and use of wetlands for agricultural and ecotourism purposes as the opportunities arise (Such initiatives will be community-managed to ensure shared ownership and stakes in the preservation of the wetlands)	Forestry Commission	-MOFA, MMDAs, MoT/GTB, Traditional Authority, NGOs, DVG	700,000	
3. Regular development planning and management initiatives of state and non-state institutions to mainstream disaster risk reduction and CCA	Map out disaster risk zones in the north.	NADMO, SADA	-RCCs -MDAs -MMDAs	250,000	
	Establish common protocols for mainstreaming disaster risk reduction initiatives in all development planning and management processes.	NADMO/ SADA	RCCs, MLGRD -MDAs -MMDAs -NDPC -UNDP -NGOs	60,000	
4. Risk reduction measures in the agricultural sector regularly promoted and farmers' resilience enhanced for drought and other hazards due to guidance and technical support for better food production.	Develop and propagate drought resistant varieties of local food and cash crops to mitigate the impact of droughts.	SADA	- MOFA, SARI NADMO Agricultural research	40,000	
	Support farmers cultivating in flood plains with water management interventions, to enable them control and manage flood waters to enhance production and productivity.	MOFA	-MWRWH, SADA, -MMDAs, Department of Cooperative, CBOs	200,000	

5. The resilience of the Most Vulnerable Population in the North enhanced through Direct Food & Nutrition Assistance.	Support initiatives that improve the entitlements of poor and most vulnerable households to food and good nutrition (widows, orphans, sick, especially people living with HIV, etc) either directly or through a voucher system.	NADMO	-MMDAs, WFP MEST, Traditional Authority, RCCs, UNICEF, MOH MOFA, MOE MOWAC, NGOs, CBOs	340,000	
6. Community Resilience and Livelihoods Rebuilding Initiatives launched in order to accelerate the recovery of populations affected by the 2007 floods	Provide seeds, inputs, financial assets, and facilitate access to productive resources resulting from the floods of 2007 and the aftermath of other disasters such as droughts, floods, or conflicts. (The initiative will aim at stimulating the rebuilding of livelihoods and economic growth as the most viable ways of increasing community resilience, poverty reduction and wealth creation in the north.)	MOFA/ SADA	-MOFA, FAO RCC, MMDAs SARI, Traditional Authority, Financial Institution, WFP	100,000	
7. Strategic Food Reserve Initiatives promoted	Support the development and effective management of strategic food reserves in selected production zones across the north to further enhance financial capacity of poor households to access food throughout the year.	SADA	-MOFA/BSC, FAO, NADMO UNDP, NGOs RCC, MMDAs SARI	1,000,000	
<i>Land-use planning and other technical measures</i>					
8. Development and management of flood control systems promoted	Construct flood water diversion ducts and catchment reservoirs along flood plains to control surface run-offs and over spillage.	RCCs/ SADA	- MWRWH, MOFA/GIDA, VRA, MMDAs, NADMO, MLGRD/ DACF	3,000,000	
9. Local Capacities in terms of proper construction techniques developed	Build local capacity for Improved Housing (enabling households that lost all or part of their housing infrastructure during the 2007 floods to rebuild more flood)	SADA / DRH	- MWRWH, GIE,GIA, GSB, UN Habitat, NADMO , UN Agencies	290,000	
10. Appropriate Housing and Infrastructure Development promoted	Launch an Improved Rural Housing Development Initiative to promote the development of structured and robust housing scheme that harnesses local human and material resources to provide structurally improved, culturally appropriate, and financially affordable housing in the north.	MMDAs/ DRH	- MWRWH, GIE,GIA, GSB, UN Habitat, NADMO SADA, UN Agencies	300,000	

HFA 5: Strengthen disaster preparedness for effective response at all levels.					
OUTCOME 1: Sound legal base and institutional arrangements established in order to ensure efficient leadership and coordination for natural and environmental emergency preparedness and response.					
Output	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
1. Roles and responsibilities of different national actors for emergency response clarified.	Map Ministries, Departments, Agencies to ensure predictability and accountability in national response to emergencies.	NADMO	-MOI, NGOs, UN Agencies, NCCE, MDAs	50,000	
	Define stakeholders' role and responsibilities especially complementarities between coordination and operation role in emergency response.	NADMO	MOI, UN Agencies, NGOs, NDPC, MOD, MMDAs	60,000	
	Promote greater coordination among disaster preparedness and response organisations operating in the north in order to develop more rapid and coordinated response mechanisms.	NADMO	-SADA, RCCs, MMDAs, Traditional Authority, UNDP, NGOs	80,000	
	Review (if necessary) existing legal documents to clarify roles and responsibilities of various government sectors in DM.	MOI/ NADMO	RCCs, NDPC, AG Office, MMDAs, Parliament, NADMOS	70,000	
2. NADMO's capacity and competencies reinforced in order to provide operational leadership and coordination.	Clarify roles and responsibilities within NADMO on 1) coordination and 2) emergency response by organizing separate units, for example (exists in a way through the technical committees!).	NADMO	-MOI, NDPC, UNDP, MLGRD, MMDAs, PLATFORMS	30,000	
	Assess NADMO's capacity to perform the functions of coordinating and implementation. Once determined, it should be able to delegate as appropriate to other institutions. If otherwise, it should work at ensuring that those specific capacities lacking are revamped.	NADMO	-MOI, UNDP	45,000	
	Prepare a plan of action of NADMO's	NADMO	-MOI, MOFEP	55,000	

	capacity development and provide seed funding for addressing immediate internal institutional operational capacities (buy own boats/trucks, employ more staff in the field etc.).		NDPC, UNDP, DACF		
3. National Disaster Management Strategy and Emergency Preparedness/Response policy and Framework adopted and disseminated.	Enhance the current integrated national disaster management strategy with an effective framework of legal provisions, response plans, standard operating procedures and templates owned by national, regional and district level actors of all sectors.	NADMO	-MOI, AG's Office RCCs, NDPC, MMDAs, MLGRD UNDP, National Platform for DRR & CCA	65,000	
	Disseminate the strategy and other documents to NADMO staff (possibly in regional, district, community-level workshops)	NADMO	MOI, RCC, NDPC, MMDAS, MLGRD, UNDP	100,000	
	Select 3 districts per year from each most at risk region for training. Ensure linkage of environmental programmes, disaster risk management and climate change to Emergency Preparedness programmes.	NADMO	-National Platform for DRR & CCA, MEST, GMet, MOI, RCC, NDPC, MMDAS, MLGRD, UNDP	48,000	
OUTCOME 2: Competencies of NADMO personnel and various agencies working in DM enhanced through a ToT programme and various trainings are conducted as part of the implementation of the training strategy.					
Output	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
1. Training strategy prepared, existing DM training tools revised and adapted to the strategy, and new training tools developed.	Develop training strategy to address gaps relevant to Regions/Districts specific hazards (natural, man-made, health, food security, HazMat, etc...)	NADMO	MOFEP, MOI UN Agencies, Consultant, RCCs, MMDAs	200,000	
	Revise training modules and adapt existing training tools to different contexts and needs of vulnerable populations	NADMO	MOFEP, MOI, UN Agencies, Consultant, KAIPC	50,000	
	Develop new training manuals to ensure consistency with the training strategy.	NADMO	Consultants KAIPC, GIMPA, MOFEP,	35,000	

	Get additional modules from the former UN DMTP (including Health DRM training) Print and disseminate training modules	NADMO	UN Agencies	100,000	
2. Well selected resource persons trained as trainers to implement the training strategy (including simulations) in collaboration with various national agencies, NGO, IO, etc., at national, regional, district and community levels.	Establish proper criteria for selection of trainers	NADMO	-MOI, NDPC UN Agencies	20,000	
	ToT yearly workshop in DM including food security in each of the 10 regions	NADMO	-RCC, MOFA WFP, UNDP SADA	95,000	
	Organise training on Data Processing & GIS to enhance NADMO's capacity in the utilization of geo-information with emphasis on preparedness and rapid response.	NADMO	-GSS, GIMPA, UN Agencies, KNUST, GMet, EPA	2,000,000	
	Maintain a proper database of all trained resource persons	NADMO	MOI, UNDP,	20,000	
	Identify and maintain internationally trained personnel database as trainers and first responders to emergencies i.e. UNDAC trained	NADMO	MOI, UNDP	40,000	
	Encourage inter-agency joint training considering the limited capacity of organisations especially at regional and district levels (selection of participants should follow specific criteria in order to maximize the impact of trainings).	NADMO	MOFEP, UNDP, Private Sector	170,000	
	Provide specific trainings at district level for authorities in Recovery including Post disaster needs assessments that will include Damage and Loss Assessment (DALA) tool and the Human Recovery Needs Assessment (HRNA) tool	NADMO	MLGRD, UNDP,UN Agencies Consultant, MMDAs, MDAs	200,000	
	Organise trainings in Humanitarian Logistics Management in Emergency Situation	NADMO	UNISDR, IOM, GRB	45,000	
	Simulation exercises/drills conducted annually to test the contingency plan and the Disaster Coordination Structures	NADMO	-MMDAs, UN Agencies, ECOWAS,	250,000	

			NGOs, Bilateral organizations		
	Conduct 3 simulation exercises per year in 3 different regions with NADMO regional offices	NADMO	MMDAs, UN Agencies, ECOWAS, NGOs, Bilateral organizations, RCCs, CBOs	300,000	
	Identify and assess various community level trainings of CBOs/NGOs	NADMO	-NDPC, MDAs UN Agencies, MOI, NDPC	250,000	
	Establish formal partnerships with NGOs and civil society organisations that are already implementing Community Based Disaster Risk Management programmes for trainings at community level: offer its expertise, training modules, cost sharing, community participation, etc. Establish Community Information Exchange programmes through which communities can meet and exchange information/experiences on implementation of disaster risk management initiatives – based on regional/district disparities.		-MDAs, UN Agencies	40,000	
	School curriculums and extra-curricular activities in primary and secondary schools to include preparedness elements such as fire drills, evacuation exercises and first aid to prepare and provide all necessary information/dissemination materials to NADMO regional offices in order to organise awareness campaigns at district level).	NADMO	-MOE, GNFS, GES, GRCs GCA	100,000	
	Conduct in each region exercises/drills for 3 schools per year with the participation of various stakeholders.	NADMO	-Do-	140,000	

OUTCOME 3: Disaster preparedness and response planning/working/monitoring tools developed, response equipment and emergency response funding available at national regional and district levels to ensure rapid and efficient emergency response and recovery.					
Outputs	Activities	Leading agency	Supporting partners	Required funds	Pledged funds
1. Emergency Preparedness and Response Packages created to include Minimum Preparedness Measures, Emergency Readiness Measures, Standard Operating Procedures (SOPs) for First 24-48-72-hour response that are regularly tested.	Review National Contingency Plan yearly	NADMO	-MDAs, MMDAs, Private Sector, UN Agencies, Bilateral Organizations, NGOs, IOs	320,000	GoG 90'000C, NREG 360'000C, IGF 110'000C
	Establish and test emergency response plans for oil spills , floods, climate change related disasters	NADMO	-MEST, GMet, WRC,HSD, VRA, Oil Companies, GNPC, TOR MDAs, GMA GPHA, GAF, National Security, ECOWAS, EPA	90,000	
	Circulate the existing SOP to all relevant partners (normally included in the CP)	NADMO	-Do-	30,000	
	Agree on Needs Assessments Template Review regularly, Hazard vulnerability assessment and mapping (see also HFA2)	NADMO	-Do-	20,000	
2. Easily accessible database for centralizing information created and regularly updated to contain various key reference documents, templates, reports, plans and information.	Update and consolidate relevant baseline and vulnerability data (including mapping)	NADMO	-EPA, MDAs UN Agencies, NGOs	125,000	
	Create information management (IM) repository on EPR	NADMO	-Do-	60,000	
	Establish directory of useful emergency contacts (Govt., UN, NGO and donors)	NADMO	MDAs	50,000	
	Establish standby partner liaison arrangements between Govt. and other humanitarian partners	NADMO	-MOI, MOFA UN Agencies, IOs, NGOs, MDAs	40,000	

	<p>Agree on Minimum Standards of ensuring staff safety and security during emergencies</p> <p>Prepare draft EMOPs/project proposals – to be worked on quickly as per need.</p> <p>Agree on a standard reporting template (to be used by all NADMO offices to harmonize information).</p> <p>Establish a strategy for dealing with the Media and other public information tools.</p>	NADMO	-MOI, -National Platform for DRR and CCA, AG's Office, LC,NGO, UN Agencies	30,000	
		NADMO	MOI, NDPC, MDAs	35,000	
		NADMO	-MDAs, UN Agencies, NGOs	40,000	
		NADMO	- UN Agencies, MOI, ISD	30,000	
<p>3. Capacity assessment in terms of logistics and telecommunications completed. As a result, adequate response equipment procured, tailored trainings organised, and partnerships with private sector established with the resulting stand-by agreements included into disaster response plans.</p>	<p>Undertake joint assessment mission covering all zonal offices to review emergency telecom capacities, emergency backup power supply systems, ICT training.</p>	NADMO	-WFP, UN Agencies, MDAs, MMDAs, NGOs, GRCs MoE/ECG, GIFEC, MOC, Telecom Companies	40,000	
	<p>Develop joint comprehensive and strategic implementation plan in consultation with other key stakeholders.</p>	NADMO	-Do-	40,000	
	<p>Standardise and harmonize communication equipment between NADMO and potential stakeholders</p>	NADMO	-Do- & Consultant	40,000	
	<p>Procure logistics and equipment. (to be budgeted by NADMO).</p>	NADMO	-MOFEP, PPA,UN Agencies, Parliamentary Select Committee	3,000,000	

	<p>Organise annual trainings in logistics: for NADMO regional staff in Accra</p> <p>Establish stand-by agreements with the private sector to ensure logistics capacity for NADMO for emergency response, evaluation and monitoring (emergency SOPs for boats, ambulances, communication equipment with oil drilling/phone/healthcare companies, etc.).</p>	NADMO	on Defense & Interior -Consultant, WFP, Private Sector	60,000	
		NADMO	-Private Sector, UN Agencies, MOI, MOT	500,000	
4. Operational Coordination centres reinforced at regional and districts levels.	<p>Set up procedure to train Operation Center personnel to facilitate situation analysis, decision-making, and coordination in support to local authorities.</p> <p>Organise joint training (regional and district level EOCs) with SimEx</p> <p>SOP for first 24-48-72 hour response (SimEx at each stage)</p> <p>Organise information management workshop.</p> <p>Develop Standard Operating Procedures and business continuity plans.</p>	NADMO	-MMDAs, MDAs, RCCs, UN System, IOs, MLGRD, NDPC	55,000	
		NADMO	-Do-	200,000	
		NADMO	Do & GAF	85,000	
		NADMO	-ECOWAS, UN Agencies, NGOs	30,000	
		NADMO	-MMDAs, MDAS, RCCs, UN System, IOs, MLGRD, NDPC	90,000	
5. Emergency early warning systems developed and communities trained on disseminating early warning.	Develop communication and dissemination systems for emergency EW in collaboration with stakeholders	NADMO	-GMet, Mol, MOC/ISD, HSD, ISD, GSD, MOFA, MMDAs	40,000	

	<p>Develop, train and equip community level institutions for dissemination and communication of emergency early warning in 3 pilot areas.</p>	NADMO	-Do-	220,000	
	<p>Assess community response capacity in 3 pilot areas, and develop and implement community and volunteer education and training programmes in the 3 pilot areas.</p>	NADMO	-Do-	75,000	
<p>6. Adequate financial resources allocated for both first-line emergency services and disaster management programmes in the form of a common fund within budgets of various Ministries and other institutions at national, regional and district levels. The budgets will also include provisions for assistance to victims of disasters.</p>	<p>Enforce the 5% quota of district common fund to be allocated to emergency preparedness and response at national and district levels.</p>	NADMO	-MLGRD, MMDAs, RCC, DACF	20,000	
	<p>Encourage key ministries such as health and water to include contingency fund for emergencies within their annual work plans.</p>	NADMO	-MOFEP, UNDP, National Platform for DRR & CCA, MDAs	30,000	
	<p>Establish disaster response fund to ensure that people afflicted by disasters in the regions get the minimum help they need as soon as possible.</p>	NADMO	-SADA, MOFEP MOI, UN Agencies	60,000	
	<p>Encourage the use of voucher systems for providing assistance to people in need (eg. in the North) as a means of putting the decision making power in the hands of disaster victims.</p>	NADMO	-UN Agencies, GRCs, NGOs Donor, Community	135,000	

Total Budget: USD 77,954,000

Color Code:

Red : UNDP & NADMO

Green : African Adaptation Program

Blue : World Bank

Purple : National Environmental Protection Strategy (Ministry of Env.)

Black : SADA Project