

Annual Work Plan (AWP) for 2016



Atlas Award ID: 74442

Atlas Project ID: 86856

Project/Programme Title: Climate Information and Early Warning Systems

UNDAF Outcome: PRSP Pillar 2 - Managing Natural Resources

Outcome A: By 2018, targeted Government institutions, the private sector, and local communities manage natural resources in a more equitable and sustainable way.

Outcome B: By 2018, communities within targeted districts demonstrate increased resilience to natural and man-made disasters.

Related CPD Outcome: 5: Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change

Expected Outputs  And baseline, associated indicators and annual targets	Planned Activities  List activity results and associated actions	Time Frame				Responsible Party	Planned Budget UNDP TRAC		
		2016					Funding Source	Budget Description	Amount (USD)
		Q1	Q2	Q3	Q4				
	Output 1 Result The capacities of national hydro-meteorological (NHMS) and environmental institutions are enhanced to monitor extreme								
<b>Output 1: Transfer of technologies for climate and environmental monitoring infrastructure.</b>  Baseline: • 20% national coverage of climate/weather and hydrological monitoring infrastructure and reporting • Limited skilled-based staff at the SLMD  Indicators; • Frequency and timeliness of climate-related data availability • # equipment for hydrological monitoring and weather/climate equipment procured installed • # of technicians and observers trained  Targets: • 12 River Gauges, 2 Water Level (Limnometric Scale), 6 Groundwater data Logger, 2 Signal counter Rotations installed for Hydrological Monitoring • 10 workstations, AMESD-PUMA e-station and SYNERGY system upgraded and Aviation Data International Service strengthened to support for tailored forecasting • 16 staff trained as WMO Class IV certified technicians and observers • 60% national coverage of climate/weather and hydrological monitoring infrastructure and reporting	<b>Output 1.1</b>								
	a. Re-assess needs for hydrological monitoring to support warning of flash floods		X	X		SLMD	GEF	71300 (Local Consultant)	15,000.00
	b. Procure and install (operationalization training) meteorological and hydrological monitoring equipment		X	X				72100 (Contract Service)	529,000.00
	c. Procure and Operationalise a mobile Hydromet Automatic Station (HAS) for sensor's field calibration		X	X				71200 (International Consultant)	40,000.00
	d. Develop a Plan and a National Framework for integrating Hydrological Monitoring of Watershed Projects		X	X	X			71200 (International Consultant)	70,000.00
	e. Support a programme in operational watershed monitoring and hydrological modelling for hydromet officers		X	X	X			72100 (Contract Service)	16,000.00
	f. Renew and purchase hydrological modelling licenses		X						
	<b>Sub-Total</b>								<b>670,000.00</b>
		<b>Output 1.2</b>							
	a. Assess installation sites for AWS and make necessary arrangements for hosting of AWS		X			SLMD	GEF	72100 (Contract Service)	19,000.00
	b. Procure, install and operationalise meteorological monitoring equipment		X	X				72200 (Equipment and Furniture)	440,000.00
	c. Procure and operationalise a mobile AWS for sensor's field calibration		X	X					
	d. Procure, install and test Synoptic AWS with display systems at SLMD Freetown & Lungi Airport		X	X					
	e. Integrate recently installed and existing AWS with central data collection & storage systems			X	X			72100 (Contract Service)	100,000.00
f. Establish mobile communications between AWS and central servers through NATCOM			X	X					
g. Procure technical services for the refurbishment of the of SLMD premises at SLMD Tower Hill		X	X						
h. Conduct viability studies and recommendations on proposed AWS installation sites		X							



<b>Sub-Total</b>							<b>559,000.00</b>			
<b>Output 1.3.</b>										
a. Procure and install 10 workstations for tailored forecasting	X	X			SLMD	GEF	72200 (Equipment and Furniture)	92,000.00		
b. Re-install AMESD-PUMA e-station and upgrade SYNERGY system to support tailored forecasting	X	X	X							
c. Procure and install Aviation Data International Service to strengthen forecasting capacity	X	X	X							
d. Re-assess the need for acquisition and installation of LIGHTNING DETECTOR system based	X								72100 (Contract Service)	10,000.00
e. Procure and install all standard equipment for SLMD Forecasting Centre and provincial outer stations	X	X	X						72200 (Equipment and Furniture)	85,300.00
f. Develop partnership between SLMD and MAFFS for collaboration in AMESD-PUMA e-station at SLMD.	X	X	X						75700 (Meeting)	1,000.00
g. Conduct needs assessment on the rehabilitation of the SLMD Forecasting Centre and provincial outer stations	X	X	X						71300 (Local Consultant)	10,000.00
<b>Sub-Total 1.3</b>							<b>198,300.00</b>			
<b>Output 1.4</b>										
a. Develop in-service and on-the-job capacity development programme for 16 gender sensitive Met. Technicians (WMO Class IV)	X	X	X		SLMD	GEF	75700 (Training )	5,000.00		
b. Establish partnership with University of Sierra Leone and Fourah Bay College to develop a national advanced education programme	X	X							75700 (Workshop )	25,000.00
c. Establish partnership with WMO Regional Meteorological Centres for regional or in-country gender sensitive capacity development	X	X								
d. Deliver regional or in-country education weather forecasting capacity development programme for graduate pupils		X							75700 (Training )	15,000.00
e. Develop a capacity development programme for the training of other technical personnel for SLMD									71300 (Local Consultant)	15,000.00
e. Rolling out (training) of developed capacity programme for technical personnel for SLMD	X	X	X						75700 (Training )	35,000.00
<b>Sub-Total</b>							<b>95,000.00</b>			
<b>Output 1.5</b>										
a. Re-assess the need for strengthening of outer Meteorological Stations Communications facilities for data collection and transmission	X	X	X		ONS-DMD	GEF	71300 (Local Consultant)	10,000.00		
b. Provide the MWR, SLMD & ONS a reliable, direct and fast data and information communication system		X	X	X					72200 (Equipment)	25,000.00
c. Establish formal partnership with NATCOM towards the sustainable utilization of mobile communication and internet signal for EWS dissemination/response network	X	X	X						75700 (Meeting )	4,000.00
d. Develop an efficient communication network between SLMD and ONS and all DM Committee Members		X	X	X					75700 (Meeting )	5,000.00

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	e. Procure and install a Television and Radio Weather Broadcast equipment for forecast dissemination		X	X	X				72200 (Equipment)	61,000.00
	f. Review partnership agreement with the Sierra Leone Broadcasting Cooperation (SLBC), for broadcasting of climate	X	X						75700 (Meeting)	20,000.00
	<b>Sub-Total</b>									<b>125,000.00</b>
<b>Total of Output 1</b>										<b>1,647,300.00</b>
	Output 2 result: Efficient and effective use of hydro-meteorological and environmental information for making early warnings and long-term									
Output 2: Climate information integrated into development plans and early warning systems	<b>Output 2.1</b>									
	a. Establish a reliable communication system for SLMD		X	X	X				72100 (Contract Services)	10,000.00
	b. Develop, install and operationalise a Nowcast, Medium, Short term and seasonal forecasting system		X	X	X				72200 (Equipment)	35,000.00
	c. Develop a capacity programme in sector tailored weather forecasting techniques and information packaging		X	X					72100 (Contract Services)	70,000.00
	d. Develop capacity programme in hydrological modeling and sector tailored hydrological forecasting techniques and information packaging		X	X	X		SLMD	GEF		
	e. Develop sector oriented seasonal forecast to support community based EWS for selected communities		X	X	X					
	f. Carry out systematic assessment of future climate change scenarios and impacts		X	X						
	<b>Sub-Total</b>									<b>115,000.00</b>
	<b>Output 2.2</b>									
Baseline: • 35% men, 25% women of Sierra Leone with access to improved climate information (CIEWS project document). • 0 GoSL Development Plans and land-use plans at National/District that integrate climate information in their formulation of poverty reduction strategies and links between poverty and the environment at local levels • No Climate Change Data Management System • 0 Sector-specific EW products and strategies that integrate climate risks mining, tourism, and land management sectors • No Public-private cost-recovery partnership and service level agreement • No community based early warning system (CBEWS) nationwide	a. Establish a multi-disciplinary and Inter-institutional Technical Committee (EWS-MITEC) to develop SOPs & EWS Products	X	X						75700 (Workshop)	5,000.00
	b. Conduct scoping study to assess existing situation against international best practice leading to establishment of a National EWS		X						71300 (Local Consultant)	25,000.00
	c. EWS-MITEC to review current legal framework supporting EWS for issuing a warning & identifying gaps and shortfalls		X	X	X		SLMD	GEF	71300 (Local Consultant)	18,000.00
	d. Conduct training on climate change risk assessment for key stakeholders		X	X					75700 (Training)	35,000.00
	e. Develop capacity of SL Disaster Management Committee to understand tailored warning generation/response		X	X	X				75700 (Training)	5,000.00
	f. Convene an interagency capacity development sessions for exchange of skills and experiences on SOPs		X						75700 (Workshop)	5,000.00
	<b>Sub-Total</b>									<b>93,000.00</b>
	<b>Output 2.3</b>									
Indicators: • # of sector-specific EW products and strategies that integrate climate risks	a. Establish & operationalise a Climate Change Data Management System		X	X	X				72100 (Service Contract)	175,000.00
	b. Establish partnership between CC-DAMAS and CIESIN at SLEPA for systematic streamlining of digital information	X	X	X	X					
	c. Build on ACMAD data recovery programme by providing CLIMSOFT facilities for data treatment and quality control	X	X	X	X		EPA-SL	GEF		



mining, tourism, and land management sectors • % of population with access to improved climate information and flood, drought, strong wind and coastal warnings • # of GoSL Development Plans and land-use plans at National/District that integrate climate information in their formulation of poverty reduction strategies and links between poverty and the environment at local levels • # of CBEWS established • # of PPP agreements established  Targets: • 50% women and 50% men with access to improved climate information and early warning • Establish and operationalize a Climate Change Data Management System • Establish a Public-private cost-recovery partnership and service level agreement between the SLMD, DWR and national internet service • Establish a CBEWS in 3 communities	d. Integrate climate change risk into national policies and plans		x	x	x					
	e. Developed within CC-DAMAS a project Website		x	x	x					
	f. Establish partnership with University of Sierra Leone and Fourah Bay College to develop capacity for systematic data	x	x							
	<b>Sub-Total</b>									<b>175,000.00</b>
	<b>Output 2.4</b>									
	a. Carry out needs assessment of ONS-DMD communication network		x	x					71300 (Local Consultant)	10,000.00
	b. Develop communication channels between SLMD and ONS-DMD for dissemination of forecasting products		x	x	x				72100 (Contract Service)	4,000.00
	c. Develop and deliver training for gender sensitive ONS-Sectoral Task Forces to harmonise agreements and inter-agency protocols		x	x					75700 (Training)	15,000.00
	d. Establish institutional mechanisms for collection of feedback from the community <u>end-users on the usefulness of warning</u>		x	x	x				72100 (Contract Service)	10,000.00
	e. Develop a communication and awareness raising strategy, pilot application and implementation of local level responses		x	x			ONS-DMD	GEF	75700 (Meeting)	30,000.00
f. ONS-DMD in partnership with local NGO's and CBO's to communicate and disseminate response plans	x	x	x					75700 (Workshop)	13,000.00	
g. Procure 6 "sms-FrontLine" communication system to support emergency dissemination response mechanisms of ONS-DMD		x	x					72200 (Equipment)	18,000.00	
h. Field visits and stakeholder consultations undertaken to understand how users of early warning advisories and warnings		x	x					71600 (Travels)	5,000.00	
<b>Sub-Total</b>									<b>105,000.00</b>	
<b>Output 2.5</b>										
a. EWS-MITEC to support SLMD to carry out a comprehensive needs assessment for climate services		x	x					71300 (Local Consultant)	5,000.00	
b. Establish a plan and a financial framework for SLMD sustainability in the context of forthcoming transformation		x	x	x				71200 (International Consultant)	48,000.00	
c. Engage in consultations with private sector to build partnerships based on cost-recovery service provision			x	x				75700 (Workshop)	4,000.00	
d. Establish a public-private cost-recovery partnership and service level agreement between the SLMD, DWR and national internet service provider with regards start-up costs for servers and modems				x	x	SLMD	GEF	75700 (Workshop)	25,000.00	
e. Organize bi-annual workshops, seminars and dialogue sessions for senior policy makers to raise awareness of the climate change issues		x						75700 (Workshop)	8,000.00	
<b>Sub-Total</b>									<b>90,000.00</b>	
<b>Output 2.6</b>										
a. Establish CBEWS at Bumbuna Watershed, Guma Valley and IVS Farms in Easter Districts under a "Cash-for-Work" scheme	x	x						75700 (Workshop)	15,000.00	
b. Strengthen infrastructure and technical capacity of local community radios for warning dissemination in areas of pilot demonstration sites		x	x	x				72100 (Contract Service)	25,000.00	



	c. Establish a community-based communication and information sharing tool using local languages		x	x		ONS-DMD	GEF	72100 (Contract Service)	10,000.00
	d. Partner with local NGO's & CBO's in the development of a training-awareness programme for local communities		x	x				75700 (Workshop)	5,000.00
	e. Conduct regular national drills involving all actors of future EWS and in particular women and youth associations		x					75700 (Meetings & Trainings)	15,000.00
	f. Partner with NGO's, CBO's, local mobile phone provider and other institutions to develop community based warning dissemination systems		x	x				75700 (Workshop)	5,000.00
	<b>Sub-Total</b>								<b>75,000.00</b>
<b>Total of Output 2</b>									<b>653,000.00</b>
<b>Direct Programme Cost</b>									<b>2,300,300.00</b>
<b>Output 3: Programme Management Costs</b>	National Project Coordinator					SLMD/PIU	GEF	71400	20,000.00
	Technical Advisor					SLMD/PIU	GEF	71400	131,000.00
	M&E Officer					SLMD/PIU	GEF	71400	9,000.00
	Office Supplies (Procurement of equipment & office Stationaries)					SLMD/PIU	GEF	72500	3,000.00
	Management Costs (fuel, vehicle maintenance, etc)					SLMD/PIU	GEF	72200	7,000.00
	CIDRA M&E consultant					SLMD/PIU	GEF	71200	5,000.00
	M & E Missions (Travel)					SLMD/PIU	GEF	71600	10,000.00
	M&E (UNDP cost) 2%					SLMD/PIU	GEF	74300	46,006.00
	Travel (Conferences)					SLMD/PIU	GEF	71600	10,000.00
	Steering Committee Meeting					SLMD/PIU	GEF	75700	500.00
	Mid-term Evaluation					SLMD/PIU	GEF	74100	15,000.00
	Communication					SLMD/PIU	GEF	72400	6,200.00
	Communication - 1%					SLMD/PIU	GEF	74300	23,003.00
	Common service					SLMD/PIU	GEF	73100	12,100.00
	Security					SLMD/PIU	GEF	74300	520.00
	Direct Project Cost (DPC) - 4.6%					SLMD/PIU	GEF	74300	105,813.80
<b>Total of output 3</b>									<b>404,143</b>
<b>Total 2016 Project Budget</b>									<b>2,704,443</b>

This Annual Work Plan (AWP) is based on Results Management Guidelines (RMG) of UNDP. Once signed by UNDP and the Implementing Partners, National Counterpart

Abubakar Carew  
Permanent Secretary  
Ministry of Energy  
Date: 30/03/16

*Transport + Aviation*

Sudipto Mukerjee  
Country Director  
UNDP Sierra Leone  
Date:

*29/03/16*

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## UN Development Programme

### Sierra Leone - Freetown

**Project:** 00074442  
**Project Title:** Climate Information and Early Warning Systems  
**Start Year:** 2013  
**End Year:** 2017

**Implementing Partner:** National Execution

**Responsible Parties:** COL-CORPORACION AUTONOMA REGIO  
 SIL-National Execution

**Revision Type:** General Revision 5

**Project Description:**

Establishment of 2016 budget for the implementation of the activity plan

Budget (US\$) as of Last Revision on 29-March-2016		
Donor	Fund	Amount
GEFTrustee	62160 GEF LDC/NAPA Programme Actv	3,116,482.00
<b>Total Budget ( 2016 and Beyond )</b>		<b>3,116,482.00</b>
<b>Total Utilization ( 2015 and Prior )</b>		<b>418,376.79</b>
<b>Project Total</b>		<b>3,534,858.79</b>
<b>Unprogrammed/Unfunded</b>		<b>0.00</b>

**Agreed by:** UNDP Country Director *[Signature]* 29/03/16  
**Agreed by:** PMSU *[Signature]*  
**Agreed by:** TL (EENRM) *[Signature]*  
**Agreed by:** *[Signature]* 30/03/16 PS MTA





## Annual Work Plan

Sierra Leone - Freetown

Project: 00074442

Project Title: Climate Information and Early Warning Systems

Year: 2016

Report Date: 29/3/2016

Output	Key Activities	Timeframe		Responsible Party	Planned Budget				
		Start	End		Fund	Donor	Budget Descr	Amount US\$	
00086856 Climate Information and Early	Integration of Climate inform	23/10/2013	31/12/2017	SIL-National Execution	62160	GEFTrustee	71600	Travel	5,000.00
					62160	GEFTrustee	72100	Contractual Services-Companies	304,000.00
					62160	GEFTrustee	72300	Materials & Goods	0.00
					62160	GEFTrustee	71400	Contractual Services - Individ	80,000.00
					62160	GEFTrustee	71200	International Consultants	48,000.00
					62160	GEFTrustee	72200	Equipment and Furniture	60,000.00
					62160	GEFTrustee	74500	Miscellaneous Expenses	0.00
					62160	GEFTrustee	75700	Training, Workshops and Confer	1,939.00
					62160	GEFTrustee	71300	Local Consultants	58,000.00
					62160	GEFTrustee	74200	Audio Visual&Print Prod Costs	0.00
					62160	GEFTrustee	74300	Contributions	87,672.00
					62160	GEFTrustee	72100	Contractual Services-Companies	-47,500.00
					62160	GEFTrustee	72500	Supplies	3,000.00
					62160	GEFTrustee	75700	Training, Workshops and Confer	500.00
					62160	GEFTrustee	73100	Rental & Maintenance-Premises	12,100.00
62160	GEFTrustee	74500	Miscellaneous Expenses	0.00					
62160	GEFTrustee	71300	Local Consultants	0.00					
62160	GEFTrustee	71600	Travel	20,000.00					
62160	GEFTrustee	72100	Contractual Services-Companies	47,500.00					
62160	GEFTrustee	74100	Professional Services	15,000.00					
62160	GEFTrustee	71200	International Consultants	5,000.00					
62160	GEFTrustee	71400	Contractual Services - Individ	80,000.00					
62160	GEFTrustee	71300	Local Consultants	5,281.00					
62160	GEFTrustee	72200	Equipment and Furniture	703,300.00					
62160	GEFTrustee	75700	Training, Workshops and Confer	174,993.00					
62160	GEFTrustee	71200	International Consultants	110,000.00					
62160	GEFTrustee	72300	Materials & Goods	0.00					
62160	GEFTrustee	72100	Contractual Services-Companies	758,726.00					
	Project Management	23/10/2013	31/10/2017	COL-CORPORACION AUTONOMA					
	Transfer of technologies	23/10/2013	31/12/2017	SIL-National Execution					



**Annual Work Plan**

Sierra Leone - Freetown

Report Date: 29/3/2016

Project: 00074442

Project Title: Climate Information and Early Warning Systems

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Output	Key Activities	Timeframe		Responsible Party	Planned Budget				Amount US\$
		Start	End		Fund	Donor	Budget Descr	Amount US\$	
	Transfer of technologies	23/10/2013	31/12/2017	SIL-National Execution	62160	GEFTrustee	72400	Communic & Audio Visual Equip	6,200.00
				SIL-National Execution	62160	GEFTrustee	74300	Contributions	87,671.00
<b>TOTAL</b>									<b>2,626,382.00</b>
<b>GRAND TOTAL</b>									<b>2,626,382.00</b>





**Annual Work Plan**

Sierra Leone - Freetown

Report Date: 29/3/2016

Project: 00074442

Project Title: Climate Information and Early Warning Systems

Year: 2017

Output	Key Activities	Timeframe		Responsible Party	Planned Budget				
		Start	End		Fund	Donor	Budget Descr	Amount US\$	
00086856 Climate Information and Early	Integration of Climate inform	23/10/2013	31/12/2017	SIL-National Execution	62160	GEFTrustee	74500	Miscellaneous Expenses	0.00
					62160	GEFTrustee	72200	Equipment and Furniture	0.00
					62160	GEFTrustee	74200	Audio Visual&Print Prod Costs	0.00
					62160	GEFTrustee	71300	Local Consultants	224,150.00
					62160	GEFTrustee	72300	Materials & Goods	0.00
					62160	GEFTrustee	71400	Contractual Services - Individ	0.00
					62160	GEFTrustee	75700	Training, Workshops and Confer	0.00
					62160	GEFTrustee	71300	Local Consultants	28,000.00
					62160	GEFTrustee	74500	Miscellaneous Expenses	0.00
					62160	GEFTrustee	71600	Travel	37,500.00
					62160	GEFTrustee	72300	Materials & Goods	0.00
					62160	GEFTrustee	75700	Training, Workshops and Confer	0.00
					62160	GEFTrustee	72100	Contractual Services-Companie	228,450.00
Project Management	Transfer of technologies	23/10/2013	31/12/2017	SIL-National Execution	62160	GEFTrustee	71300	Local Consultants	-28,000.00
					62160	GEFTrustee	74200	Audio Visual&Print Prod Costs	0.00
					62160	GEFTrustee	71400	Contractual Services - Individ	0.00
					62160	GEFTrustee	72200	Equipment and Furniture	0.00
<b>TOTAL</b>									<b>490,100.00</b>
<b>GRAND TOTAL</b>									<b>490,100.00</b>