

	Indicators	Specification	Unit	Situation before SLAMDAM (Baseline)	Project Target	Comments	Flood damage tool applicable	Baseline Metric	Monitoring Metric	(Literature) source
OBJECTIVE 1:										
Reduce vulnerability and increase resilience to climate-induced flooding and drought at Rubira Hills, Musenyi area of Mpanda Commune in Bubanza, Burundi through innovation and technology transfer for climate change adaptation										
Outcome 1.1:										
Weather information service solutions in combination with a mobile flood barrier piloted or deployed to reduce climate-related flood and drought risks and/or enhance resilience										
Output 1.1.1:										
Physical and natural assets made more resilient to climate induced flooding	Total area directly benefiting from more resilient physical and Agricultural landscape protected from flood damage		(Potential) damage reduced (dollars)			KEY Indicator: Please use the same metric for all protected landscape indicators	yes	Obtain an indication of the potentially flooding area, either through hydraulic	During a floodevent, where the SLAMDAM has been put to action,	Huizinga, J., De Moel, H. and Szewczyk, W., Global flood depth
	Urban landscape protected from flood damage		(Potential) damage reduced (dollars)			KEY Indicator: Please use the same metric for all protected landscape indicators	yes	Obtain an indication of the potentially flooding area, either through hydraulic	During a floodevent, where the SLAMDAM has been put to action,	Huizinga, J., De Moel, H. and Szewczyk, W., Global flood depth
	Rural landscape protected from flood damage		(Potential) damage reduced (dollars)			KEY Indicator: Please use the same metric for all protected landscape indicators	yes	Obtain an indication of the potentially flooding area, either through hydraulic	During a floodevent, where the SLAMDAM has been put to action,	Huizinga, J., De Moel, H. and Szewczyk, W., Global flood depth
	Residential houses protected from flood damage		(Potentially) vulnerable buildings protected				yes	Obtain an indication of the potentially flooding area, either through hydraulic	During a floodevent, where the SLAMDAM has been put to action,	Huizinga, J., De Moel, H. and Szewczyk, W., Global flood depth
	Public buildings protected from flood damage		(Potential) damage avoided (dollars)				yes	Obtain an indication of the potentially flooding area, either through hydraulic	During a floodevent, where the SLAMDAM has been put to action,	Huizinga, J., De Moel, H. and Szewczyk, W., Global flood depth
	Industrial or commercial units protected from flood damage		(Potential) damage avoided (dollars)				no	Obtain an indication of the potentially flooding area, either through hydraulic	During a floodevent, where the SLAMDAM has been put to action,	Huizinga, J., De Moel, H. and Szewczyk, W., Global flood depth
	Small businesses / shops protected from flood damage		(Potential) damage avoided (dollars)				no	Obtain an indication of the potentially flooding area, either through hydraulic	During a floodevent, where the SLAMDAM has been put to action,	Huizinga, J., De Moel, H. and Szewczyk, W., Global flood depth
	Irrigation or water structures protected from flood damage		Number of irrigation structures protected				no	Conduct a field visit and interview the local leader to obtain	During a floodevent, where the SLAMDAM has been put to	

	Ports or landing sites protected from flood damage	Repair costs of the facilities	Damage (dollars) prevented				yes	Obtain an indication of the potentially flooding area	During a floodevent, where the SLAMDAM has	Habermann, N., & Hedel, R. (2018).
		Number of people who cannot fulfill their travel, transport hampered	Indirect financial damage (dollars) avoided				no	Conduct interviews with the port	During a floodevent, where the	
	Airports protected from flood damage	Direct damage to airports	Damage (dollars) prevented				yes	Obtain an indication of the potentially flooding area	During a floodevent, where the SLAMDAM has	Habermann, N., & Hedel, R. (2018).
		Number of people who cannot fulfill their travel, transport hampered	Indirect financial damage (dollars) avoided				no	Conduct interviews with the airport	During a floodevent, where the	
	Roads protected from flood damage	Direct damage to the roads	Repair costs (dollar) avoided				yes	Obtain an indication of the potentially	During a floodevent, where the	Habermann, N., & Hedel, R. (2018).
		Number of people who cannot access work and corresponding financial	Affected individuals prevented				no	Conduct interviews with government	During a floodevent, where the	
km rail networks protected from flood damage	Direct damage to the railroad	Repair costs (dollar) avoided				yes	Obtain an indication of the potentially	During a floodevent, where the	Habermann, N., & Hedel, R. (2018).	
	Number of people who cannot access work and corresponding financial losses	Affected individuals prevented				no	Conduct interviews with government officials aware of daily	During a floodevent, where the SLAMDAM has been put to		
Other										
Output 1.1.2: Livelihoods and sources of income of vulnerable populations diversified and strengthened	Total no. of direct beneficiaries with diversified and strengthened livelihoods and sources of income	Total nr. Of people which are no longer prone to	number				yes, but only as a quickscan	Determine the potentially flooding area	During a floodevent, where the	
		Males which are no longer prone to flooding	number				yes, but only as a quickscan	Determine the potentially flooding area through hydraulic	During a floodevent, where the SLAMDAM	
		Females which are no longer prone to flooding	number				yes, but only as a quickscan	Determine the potentially flooding area through hydraulic	During a floodevent, where the SLAMDAM	
		Elderly which are no longer prone to flooding	number				yes, but only as a quickscan	Determine the potentially flooding area through hydraulic	During a floodevent, where the SLAMDAM	
		Children which are no longer prone to flooding	number				yes, but only as a quickscan	Determine the potentially flooding area through hydraulic	During a floodevent, where the SLAMDAM	
		Reduction in No. people displaced / migrated	number				yes, but only as a quickscan	Determine the potentially flooding area through	During a floodevent, where the SLAMDAM	Kam, P. M., Aznar-Siguan, G., Schewe, J., Milano, L., Cinnetti, I.
	Reduction in No. injuries and deaths	number				yes, but only as a quickscan	The number of injured people and potential deaths is determined by	During a floodevent, where the SLAMDAM	Boyd, E., Levitan, M., & van Heerden, I. (2005, December).	

	Reduction in No. jobs lost		number				yes, but only as a quickscan	The number of jobs lost is a function of the	During a flood event, where the	Sarmiento, C. (2007). The impact of flood
	Other									
Output 1.1.3: The number of people who are warned in advance of climatic induced floods and drought grows and the warning consistency and reliability is increased	Total no. of direct beneficiaries from the new/improved climate information systems	Total	number							
		Male	number				KEY Indicator			
		Female	number				KEY Indicator			
	No. of Climate hazards addressed compared to before		number					Determine which climate (meteo)	This should not be monitored on event base	
	No. of people who are warned for climate risks in advance		number					Determine the expected	After each flood event, do	
	Increase in percentage of uptime of weather information		percentage uptime					Make an estimate of the	Install an automated	
	No. of correct warnings issued		percentage						After each	
	No. of people who have become more aware of their		number					Assume an area where	During the first 5 years after	
Hours between warning issue and climate disaster (leadtime)		hours					Depending on the setup, weather			
No. of platforms to disseminate climate warnings has increased		number		53500				Determine through which platforms climate	During the first couple of years carefully monitor the	
Output 1.1.4: Vulnerable natural ecosystems strengthened in response to climate change impacts	Vulnerable ecosystem protected		Protected area (ha)				KEY Indicator: Please take into account that ecosystems might benefit from flooding	Obtain an indication of the potentially flooding area, either through hydraulic		
OBJECTIVE 2: Strengthen community resilience and local capacity building to increase prosperity at Rubira Hills, Musenyi area of Mpanda Commune in Bubanza, Burundi										
Outcome 2.1: Institutional and human capacities strengthened to identify and implement adaptation measures										
Output 2.1.1: Active, skilled and materialised local flood and drought response team	Total no. of direct beneficiaries from more resilient physical and natural assets	Total nr. Of people with new job	number of people							
		Males with new job	number of people				KEY Indicator	Estimate the number of		
		Females with new job	number of people				KEY Indicator	Estimate the number of		
	Km mobile flood barrier							Based on		
	Ltr water that can be stored in the mobile barrier							Based on		
	People trained on how to operate and maintain the flood		number of people						To operate the barrier multiple	
Strategically located storage facilities		number						To use the SLAMDAM it should be stored in		
Output 2.1.2: Number of people trained and informed regarding	People are trained and informed regarding climate change impacts	Total nr. Of people trained	number of people							
	and informed regarding	Males trained	number of people				KEY Indicator			

climate change impacts and appropriate adaptation responses	Females trained	number of people			KEY Indicator	no.			
	People at line ministries are trained and informed regarding climate change impacts	Total nr. Of people trained	number of people				no.		
Male		number of people				no.			
Female		number of people				no.			
Community / association members trained and informed regarding climate change	Total nr. Of people trained	number of people				no.			
	Male	number of people				no.			
	Female	number of people				no.			
Extension service officers trained and informed regarding climate change impacts	Total nr. Of people trained	number of people				no.			
	Male	number of people				no.			
	Female	number of people				no.			
Hydromet and disaster risk management agency staff trained and informed regarding climate change impacts	Total nr. Of people trained	number of people				no.			
	Male	number of people				no.			
	Female	number of people				no.			
Small private business owners trained and informed regarding climate change impacts	Total nr. Of people trained	number of people				no.			
	Male	number of people				no.			
	Female	number of people				no.			
Schoolchildren, university students or teachers trained and informed regarding climate	Total nr. Of people trained	number of people				no.			
	Male	number of people				no.			
	Female	number of people				no.			
Other (specify)		number of people				no.			