

ADAPTATION REASONING CRITERIA IN AF PROJECTS

- Presented by AF Programming Team
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AR6 WGII RISK PROPELLER

(a) Main interactions and trends



The risk propeller shows that risk emerges from the overlap of:



Vulnerability





... of human systems, ecosystems and their biodiversity

AR6 WGII OPTIONS TO REDUCE RISK

(b) Options to reduce climate risks and establish resilience





Adaptation in this report is defined,

in **human systems**, as the process of adjustment to actual or expected climate and its effects in order to moderate harm or exploit beneficial opportunities.

In **natural systems**, adaptation is the process of adjustment to actual climate and its effects.

Source: IPCC AR6 WGII, - Impacts, Adaptation and Vulnerability, Technical Summary pg. 43



PRINCIPLES OF ADAPTATION

- i. Adaptation is place and context specific
- ii. Adaptation planning and implementation enhanced through complementary actions across levels
- iii. Reduce vulnerability and exposure to present climate variability
- iv. Recognition of diverse interests, circumstances, social-cultural contexts, and expectations can benefit decision making processes
- v. Indigenous, local, and traditional knowledge systems and practices, are a major resource for adapting to climate change
- vi. Sensitivity to context and the diversity of decision types, decision processes, and constituencies ensures effective decision making
- vii. Integration of adaptation into planning and decision making can promote synergies with development
- viii. Poor planning, overemphasizing short-term outcomes, or failing to sufficiently anticipate consequences can result in maladaptation

Adapted from IPCC 2015a





ADAPTATION REASONING AT THE ADAPTATION FUND



- Assist Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change; Serving the Paris Agreement since 1 January 2019.
- Finance concrete adaptation projects and programmes



- Activities shall aim at producing visible and tangible results on the ground
- Strategic Results Framework has been developed, drawing upon definitions of adaptation and vulnerability used by Working Group II of the Fourth Assessment Report of the IPCC



- Whilst the Fund's mandate is to finance concrete adaptation projects, scope is also provided for projects to strengthen the enabling environment (SRF Outcomes 1, 2 and 7 and associated output indicators)
- The Fund's adaptation reasoning remains in alignment with current thinking (purposefulness, social and economic drivers)

ADAPTATION OUTPUTS - EXAMPLES

Technology	 Develop or expand climate-resilient technologies 	
Capacity building	 Developing human resources, institutions, and communities; equipping them with the capability to adapt to climate 	
Management and Planning	 Incorporating understanding of climate science, impacts, vulnerability, and risk in government and institutional planning and management 	
Practice and Behavior	 Revisions or expansion of practices and on- the ground behavior that are directly related to building resilience 	
Policy	 The creation of new policies or revisions of policies or regulations to allow flexibility to adapt to changing climates 	



ADAPTATION OUTPUTS – EXAMPLES (CONTINUED)

Information	 Systems for communicating climate information to help build resilience toward climate impacts (other than communication for early warning systems) 	
Physical Infrastructure	 Brick and Mortar. Any new or improved hard physical infrastructure aimed at providing direct or indirect protection from climate hazards 	
Warning and observation systems	 Development of community-based early warning systems, and low-tech information dissemination mechanisms that are linked to national climate monitoring networks 	
Green Infrastructure	 Any new or improved nature-based infrastructure aimed at providing direct or indirect protection from climate hazards 	
Financing	 New financing or insurance strategies to prepare for future climate disturbances 	



AF THEMATIC AREAS OF SUPPORT



 Disaster Risk Reduction



 Forests and Land Use

Advancement of

gender equality



 Nature-based solutions



Rural development



 Enhancement of cultural heritage



 Coastal management



Food Security



 Focus on communities



Agriculture



Social innovation



Inclusion of youth



 Water resources Management



 Urban adaptation





EXAMPLE FROM APPROVED AF PROJECT : ADAPTATION OF SMALL-SCALE AGRICULTURE FOR IMPROVED FOOD SECURITY OF RESILIENT COMMUNITIES IN PAPUA NEW GUINEA (ASSA)





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The potential impacts on climate risk on staple food crop are summarized in the table 1.

Crops	Climate issues	Manifestations	
Banana	- Increase in annual rainfall 98	 Increase in annual rainfall up to 25% may decrease the yield of bunches 	
Cassava	- Increase in annual rainfall ⁹⁹	- Increase in annual rainfall up to 25% could reduce production	
Sweet potato	- High soil moisture ¹⁰⁰	 Increase in soil moisture affects the formation of tubers after planting, and excessive high soil moisture can lead to the reduction of tuber yield 	
	- increase in mean annual rainfair	 Increase in average annual rainfail leads to a decline in tuber production 	
Swamp taro	- Sea level rise ^{102,103}	 Sea-level rise is potentially having a serious effect on swamp taro production by contaminating the freshwater lens on atolls 	
Yams	 Increase in annual rainfall and decrease in number of drier months 104 	 8% increase in annual rainfall or a reduction in the number of dry months can reduce tuber yields 	
Rice	 Rainfall variation within a given year and across year¹⁰⁵ Rainfall variation in terms of start of the wet season¹⁰⁶ 	 Rainfall variation can lead to a reduction in irrigated rice yield due to poor water-holding capacity of soil, pests and diseases 	

Table 1: Climate issues affecting some crops and their potential impacts

LINKING IMPACTS ON HUMAN SYSTEM: ADAPTATION OF SMALL-SCALE AGRICULTURE FOR IMPROVED FOOD SECURITY OF RESILIENT COMMUNITIES IN PAPUA NEW GUINEA (ASSA)

Reduce the welfare of PNG's population, as agriculture plays a significant role in the country's economy:

- Adverse impact on GDP 40% (2017)
- Food insecurity as subsistence farming accounted for 80% of PNGs population (2017)

Climate risks aggravate the institutional and governance challenges that persist in promoting and strengthening women's participation in food value chains





EXAMPLE FROM APPROVED AF PROJECT: ADAPTATION OF SMALL-SCALE AGRICULTURE FOR IMPROVED FOOD SECURITY OF RESILIENT COMMUNITIES IN PAPUA NEW GUINEA (ASSA)



insufficient financial resources for necessary infrastructure, technology upgrades

limited capacity to propagate and widely distribute crop varieties, implement climate sensitive practices and post-harvest techniques, or operate and maintain climate-resilient value chain technologies.

inadequate infrastructure network related to lack of transport/storage/ energy infrastructure within the country,

lack of agricultural advisory services, lack of agricultural data and statistics; increasing environmental threats including ecosystem and biodiversity degradation, climate change, and inadequate access to markets and finance



ADAPTATION SOLUTIONS: ADAPTATION OF SMALL-SCALE AGRICULTURE FOR IMPROVED FOOD SECURITY OF RESILIENT COMMUNITIES IN PAPUA NEW GUINEA (ASSA)

The project aims to **enhance the sustainability of main agricultural value chains** through the adoption of **climate-smart practices**, contributing to **improving the produces' quality**, increasing access to markets, and creating green jobs for women and youth in vulnerable communities. Specific objectives set are:

- to integrate climate-resilient agriculture practices into standard farming techniques in PNG for increasing productivity, resilience, and food security of the most vulnerable smallholder farmers, particularly women and youth farmers
- to boost the ability of vulnerable smallholder farming communities, particularly women farmers, to access postharvest processing, storage technologies, and profitable markets
- to foster the development of climate-resilient practices of farmers, through capacity building, and knowledge management.



oject/Programme mponents	Expected Concrete Outputs	Expected Outcomes
Component 1: Climate-proofed small-scale agricultural production	 1.1. Selection, validation and dissemination of climate-resilient crops 1.2. Extension services for climate- resilient agriculture 1.3. Nature-based solutions to protect agro-ecological systems from landslides and coastal erosion induced by flooding and heavy rain events 	 Enhanced climate- resilience of agricultural production for vulnerable small-scale farmers
Component 2: Climate-resilient access to markets	 2.1. Digital platform to strengthen relationships among agricultural value chains actors 2.2. Eco-friendly technologies for climate-smart seed saving, postharvest processing, and modern storage. 	 Improved access to appropriate processing, storage technologies, and profitable markets
Component 3: Capacity building and knowledge management for scaling-up CRA practices	 3.1. Training-of-trainers to monitor, report and verify impacts of climate- resilient practices across agricultural value chains 3.2. Capacity building programme on climate-resilient agricultural production 3.3. Knowledge management and dissemination to policy-makers, development partners, private sector including smallholder SMEs, and civil society organizations on scaling up climate-resilient agricultural practices 	3. Scale-up of climate- resilient agriculture practices, processing, and storage technologies, facilitated through capacity building, and knowledge management.

EXAMPLE FROM APPROVED AF PROJECT: ADAPTATION OF SMALL-SCALE AGRICULTURE FOR IMPROVED FOOD SECURITY OF RESILIENT COMMUNITIES IN PAPUA NEW GUINEA (ASSA) Robust adaptation rationale should include an assessment of climate risks and impacts accompanied with reliable scientific resources & data

The suite of **interventions should comprehensively address identified underlying climate risks** by clearly articulating the proposed activities and how they address expected climate risks, impacts and vulnerabilities

Incremental and **transformational adaptation** is integral to maintain the essence and integrity of existing functions, and have been the dominant focus on adaptation efforts to date

Knowledge management, **replication** and **sustainability** create an important link between demonstrating adaptation responses, strengthening the enabling environment in which the responses occur, capturing and disseminating the lessons learned to facilitate replication, and ensuring outcomes are sustained to allow replication to occur

Proposals should explain how activities are **aligned with climate and development policies at national and subnational levels**. It is important to not underscore the importance of devolved decisions making (e.g. success of EDA projects).

Replication of results relies on **integration into national planning instruments** and **decisionmaking** for long-term low-emission climate resilient development









