



INTEGRATING CLIMATE CHANGE INTO ENVIRONMENTALLY SOUND DESIGN & MANAGEMENT

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January 23, 2017

MANDATE FOR CLIMATE-RESILIENT INTERNATIONAL DEVELOPMENT: EXECUTIVE ORDER 13677

“Today, I’m directing our federal agencies to begin factoring climate resilience into our international development programs and investments.”

President Barack Obama, September 23, 2014



USAID EO 13677 IMPLEMENTATION PLAN

- **October 1, 2015:** Climate risk screening required for new strategies
- **October 1, 2016:** Climate risk management required for all new projects and activities



Photo credit: USAID

WHAT DOES EXECUTIVE ORDER 13677 ENTAIL?

Resilience = capacity of a system to “*anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner*”.*

Climate-resilient development: i) identify, evaluate, select, implement, and adjust actions to reduce climate vulnerabilities and improve development outcomes; ii) helps minimize the costs and consequences of climate impacts so they do not hinder progress toward development goals.

- looks forward and plans for the future;
- identifies climate and non-climate stressors and utilizes appropriate climate information;
- reduces vulnerability to climate stressors;
- promotes flexibility and robustness; and
- continues over time as the needs of countries and communities evolve and climate stressors change.

*IPCC. 2012. *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*. IPCC. Cambridge University Press, Cambridge, UK and New York. p. 582.

Key Definition: Vulnerability = degree to which something can be harmed by or cope with stressors such as those caused by climate change; generally described as a function of exposure, sensitivity, and adaptive capacity.

Exposure: extent to which something is subject to a stressor; e.g., flooding is a climate stressor that can affect infrastructure. Infrastructure built in a floodplain is exposed to this stressor, but infrastructure built at higher elevations is not exposed to flooding.

Sensitivity: extent to which something will change if it is exposed to a stressor; e.g., agricultural crops are sensitive to increased night-time temperatures. However, some plants will fail at lower temperatures and are thus more sensitive to this climate stressor than others. Crop choice can reduce an individual farmer's sensitivity to increased temperatures.

Adaptive capacity: the “*combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities.*”^{*} Adaptive capacity is fundamentally about the ability of an affected system to change in response to climate stressors; generally understood in terms of people, businesses, and their communities. Thus, highly networked and wealthier communities often have more adaptive capacity than isolated and poorer communities.

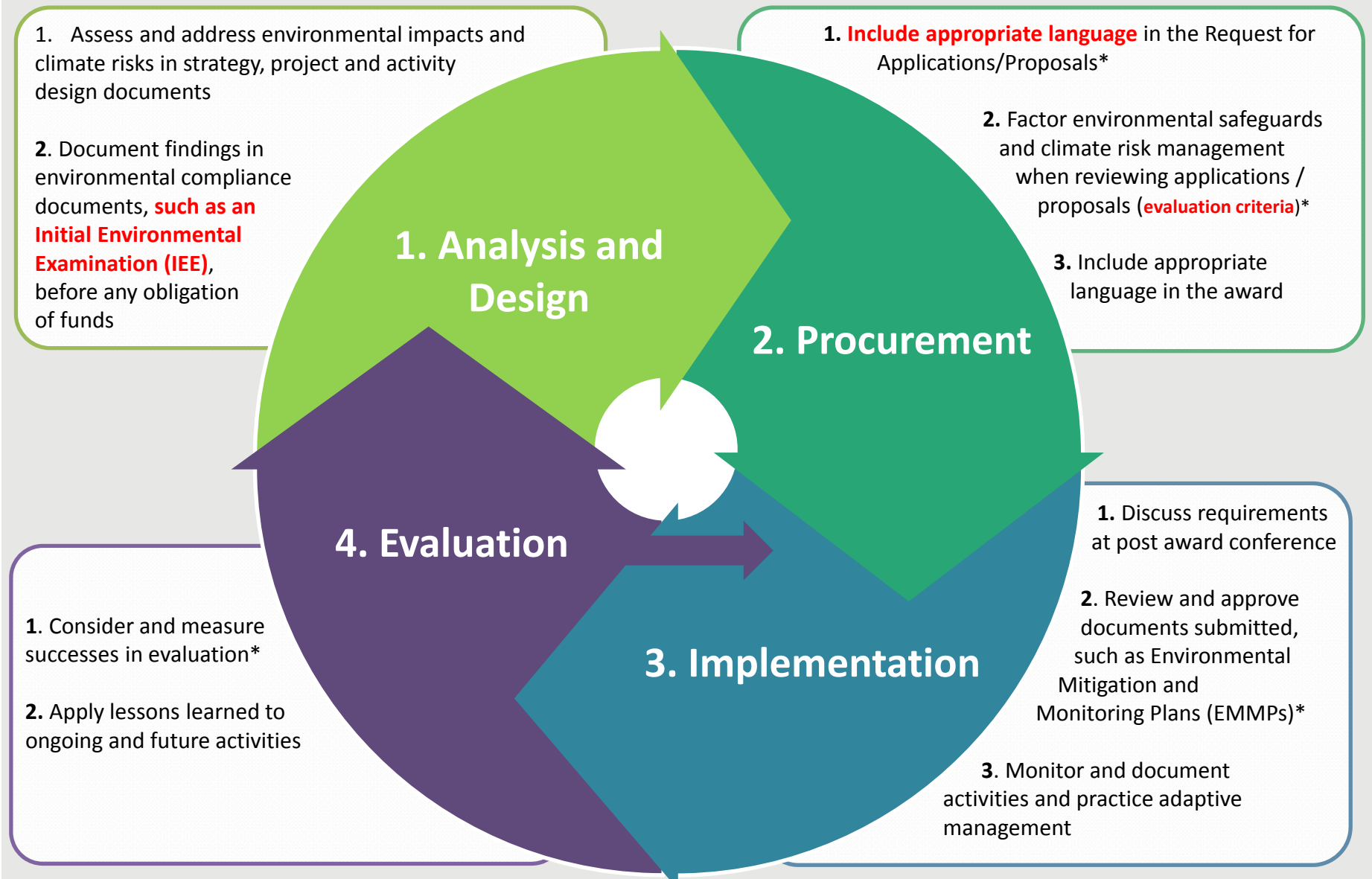
^{*}IPCC. 2012. *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York. p. 556

USAID's Climate-resilient Development Framework

Identify, evaluate, and take actions to reduce the impact of climate & non-climate “stressors”; design and take actions that reduce vulnerability and enhance resilience --

- minimize potential damage (e.g., increase flood protection);
- take advantage of opportunities (e.g., capture and store rainfall where average precipitation may increase); or
- cope with unavoidable impacts (e.g., by speeding recovery or spreading risk through insurance programs).

USAID LIFE OF ACTIVITY – ENVIRONMENTAL SAFEGUARDS AND CLIMATE RISK MANAGEMENT MILESTONES



* As appropriate (ex. activities that have “conditions” in the IEE, in the case of high or moderate climate risk, etc.)

CLIMATE RISK SCREENING & MANAGEMENT TOOLS

1. Set up tool and scope



3. Assess adaptive capacity



5. Identify opportunities



7. Identify next steps



Assess climate risks

Address climate risks



2. Identify climate risks



4. Assign risk rating

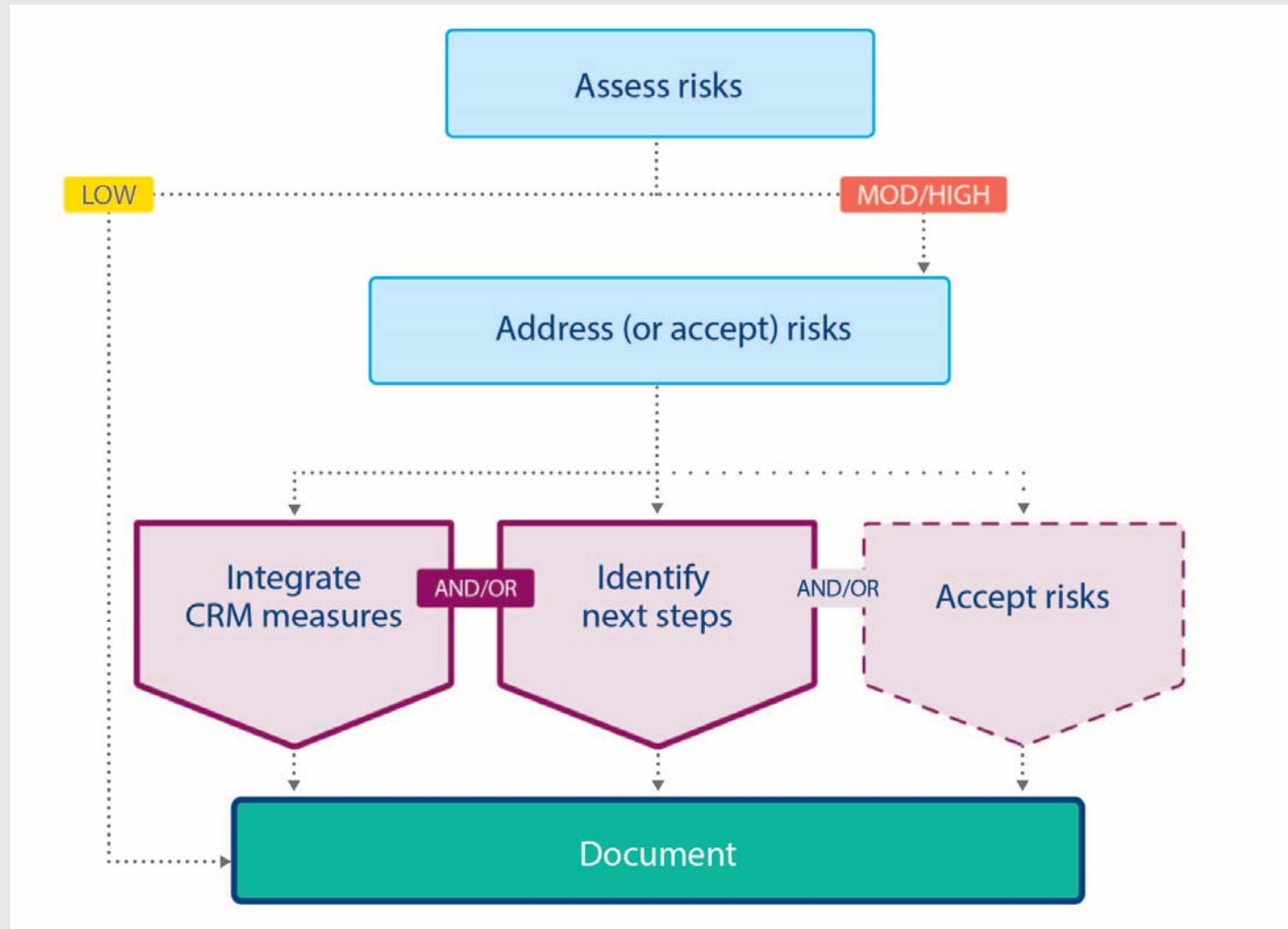


6. Identify and select risk management options



8. Accept risks (if necessary)

WHAT IS CLIMATE RISK MANAGEMENT (CRM)?



CRM PROJECT TABLE - TO BE INCLUDED IN USAID'S ENVIRONMENTAL DOCUMENTATION (E.G., IEE)

Defined or anticipated project elements	Climate Risks: List all risks related to the project elements identified through either the strategy- or project-level climate risk assessment.	Risk Rating: Low/ Moderate/ High	How risks are addressed at project level Describe how risks have been addressed . If a decision has been made to accept the risk, explain why.	Risks addressed or further analysis to be conducted in activity design/ Implementation Describe CRM measures to be integrated into activity design or implementation, including additional analysis, if applicable.	Opportunities to strengthen climate resilience: Describe any opportunities to achieve multiple development objectives by integrating climate resilience or mitigation measures
Improving livestock productivity	Heat stress due to increasing temperatures	High	Target support to more heat-tolerant livestock - - sheep/goats vs cattle		Drought early warning systems Conflict prevention with DRG programs as water becomes more scarce.
	Mortality from increasingly frequent/severe drought	High		Improve fodder storage/banking strategies Improve access to insurance	Leverage host government's increasing focus on climate change adaptation and agricultural extension.
	Loss of livestock due to sea level rise and storm surge	Low (upland focus areas)	NA	NA	

MORE CLIMATE CONSIDERATIONS FOR ENVIRONMENTAL COMPLIANCE ANALYSES

Section	Climate Considerations
Baseline	Focus on 'background' climate conditions / stressors (e.g., variability of temperature, precipitation)
Impacts	Discuss impacts to project from climate & non-climate stressors, and project's impacts on climate change (e.g., flooding, changes in water availability, heat stress on crops/livestock)
Mitigation	Describe measures or actions that reduce vulnerability, enhance resilience, improve chance for success (e.g., adaptation, maintain vegetation / forest cover as 'carbon sink' → reduce emission &/or capture GhG = 'mitigation' in USAID's CC strategy)

How could my project or activities w/in a project be impacted by climate variability? by climate change?

- WASH?
- Food security – impact ‘links’ in value chains?
- Infrastructure?
- Peace & Governance?
- NRM - e.g. forest mgmt, eco-tourism, marine fisheries?
- Health – PMI, nutrition, family planning?

Resources: <https://www.climatelinks.org>

Climate Change in USAID Strategies: A Mandatory Reference for ADS Chapter 201 (10/1/2015)

Climate Risk Management for USAID Projects & Activities: A Mandatory Reference for ADS Chapter 201 (10/12/2016)

Primer: *Climate-resilient development: a framework for understanding & addressing climate change (March 2014)* + 6 annexes (vulnerability assessments, governance, water resource mgmt, coastal zone mgmt, marginal populations, conflict)