

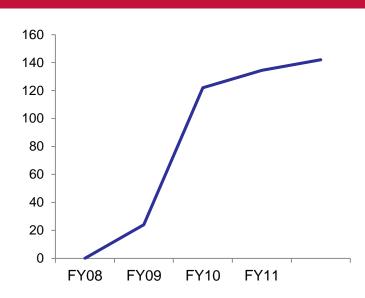
# USAID Climate Change Adaptation Programs

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## Overview of USAID Adaptation programming

- USAID funding for Adaptation
  - \$24M in FY2009 → \$142M in FY2012
- USAID Climate Change and Development Strategy
  - Adaptation pillar: helping countries and communities prepare for and adapt to changes in climate
    - Least developed countries
    - Countries in Africa
    - Small island developing states
    - Glacier-dependent countries
  - Also, integration of climate consideration into all areas of USAID programming

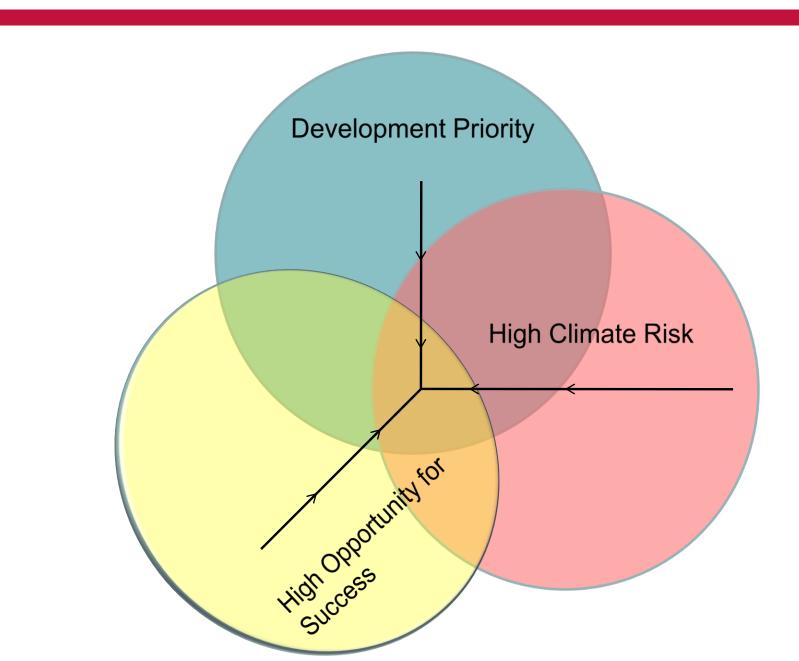




#### Three types of Adaptation programming

- 1. Improving access to science and analysis for decision making in climate-sensitive areas or sectors;
- 2. Establishing effective governance systems to address climate-related risks; and/or
- Identifying and disseminating actions that increase resilience to climate change by decreasing exposure or sensitivity or by increasing adaptive capacity.

## Making the most of Adaptation investments



#### Vulnerability = f (Exposure, Sensitivity, Adaptive capacity)

- Exposure: Is an asset (e.g., crops) out in the elements?
  - Potential exposure to flooding, drought, sedimentation, high winds, etc.
  - Agriculture is exposed, highly dependent on weather/climate
  - To reduce exposure: Economic diversification, relocation, etc.
- Sensitivity: Does exposure matter?
  - Are crops suitable to a range of temperatures and precipitation profiles?
  - To reduce sensitivity: Crop diversification, irrigation, drainage, etc.
- Adaptive capacity: Can farmers respond?
  - Do farmers have information about what is likely to happen?
  - Do they know what to do with that information?
  - Do farmers have access to savings, credit, insurance?



#### Importance of the decisionmaking timeframe

- Adaptation program should address mid- to longterm projected climate conditions, not just current climate variability, while being flexible in response to the uncertainty in those projections;
- Different sectors = different timeframes for decisionmaking (e.g., seasonal vs. multi-decadal)
   = different info needs & interventions
- But over time, farmers may need to make larger shifts in order to adapt.
  - Will insurance help signal when those changes are needed?

#### Examples of adaptation programs in agriculture

#### **Kazakhstan** – wheat production

- Stakeholder workshops: how are farm-level decisions made? Under what timescales (e.g., annual, multi-year)? with what information? what is needed?
- Understand info used for short vs. long term decisions such as:
  - Allocation of land to different crops
  - Selection of crop varieties (within a year/over time)
  - Timing of planting/harvesting
  - Soil management/cultivation practices
  - Chemical inputs
  - Investments in equipment
- Discuss types of info currently used, e.g.
  - Historical data, climate scenarios, crop modeling, ag advisories, early warnings, daily forecasts, seasonal forecasts, market information



- Where do farmers get info today & which sources do they trust?
- Starting to look at state-provided insurance, but also other risk management options (e.g., addressing differences in productivity)

### Examples of adaptation programs in agriculture

- Cambodia crop diversification, drip irrigation, rehabilitating irrigation canals, agroforestry to prevent flooding
- West Africa Training representatives of hydro and agro-met services to develop seasonal forecasts – help farmers make strategic choices about which crop varieties to plant, what inputs to invest in



 Central America – Training of trainers on climate resilient ag, farmer exchange visits, grad school curriculum; climate services work



#### Buckets for climate risk management

- Insurance is not the best way to deal with all risks
- It should complement other adaptation interventions
- Importance of accurate price signal on risk

