#### Proposal for PACC Economic Analysis

### Steps

- 1) Each country will identify 1-2 people from their nation to conduct economic analysis
  - Individual should have some economics background
  - Individual should be able to work full time starting in November
- 2) Person(s) will attend regional training sessions (first in November) (4 total)
- 3) Person will complete economic analysis of demonstration projects
- 4) Person will conduct economic sectoral analysis to prepare for PACC+ applications of funds and policy analysis

# Outputs

- Economic analysis of demonstration projects
- Economic analysis of three key sectors: coastal, agriculture, water
- Provide economic input to national policy recommendations
- Provide economic basis for additional grant applications
- Develop national economic capacity

# Budget

- UNDP country budgets will pay for their own people and their expenses
- UNDP or other funds will cover costs of experts
- Economic analysis will take 2 years

# Water Study

- Calculate capital cost and annual cost of alternative source of water
- Compare cost per liter and quantity of solar panels, infiltration wells, osmosis, roof collections, desalinization, additional water storage, dams
- Measure marginal value of water- current price or people's willingness to pay

## Water analysis

- What is the cheapest source of small additional amount of water?
- What is cheapest combination of sources if more and more water is needed?
- How does the additional cost of water compare to what people will pay for it?
- Are there institutional changes to water distribution that are worth making?

#### Infrastructure Improvements

- What is the capital and annual cost of different improvements?
- What is the additional cost of making the improvement more climate proof?
- What is the value of climate proofing?

## Example with roads

- Improve roads with drainage culvert or paving or bridge over streams or relocation
- What is cost of improvement?
- How does improvement reduce future maintenance costs (repairs)?
- How does improvement increase road performance (increase speed and therefore reduce travel time)?

## Agriculture

- Examine alternative crops or animals or farm management
- Calculate net revenue per hectare of each alternative (gross revenue minus costs)
- Determine which alternative yields highest net revenue