



'Increasing resilience to health related impacts of climate change in Siem Reap Province'

**Vulnerability Assessment and Adaptation
January 2015 to May 2015**



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Introduction

Policy Context

- National Vulnerability and Adaptation Assessment 2010 by MoH and WHO
- Climate Change Strategic Plan for Public Health 2012
- Cambodian Climate Change Strategic Plan 2014 - 2023
- Health Climate Change Action Plan 2014

Vulnerability and Adaptation Assessment

Purpose

- To identify the climate change and health vulnerabilities for the target health centres and their catchment areas.
- To provide information to develop suitable adaptive measures.

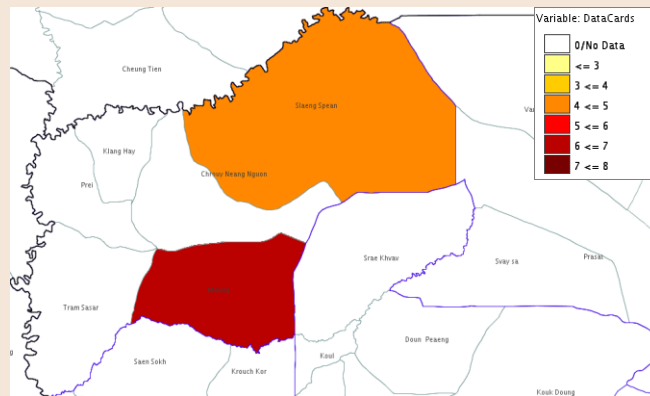
Assessment Area

Map of Cambodia – study area marked in red



<https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>

Siem Reap Province, Srei Snam District, Moug Commune and Slaeng Spean Commune - 13 of the 19 villages in the two target communes assessed



Srei Snam District, Siem Reap Province Disaster Frequency Mapping (Flood, Drought, Storm) 2000 to 2014 – CAMDI

Assessment Participants

All Levels

Village Level	Total	Women	Children
	547	327	140

- Village Level
- District Level
- Provincial Level
- Key Informants

Methodology

Topics for investigation:

-
- Presence of climate-sensitive diseases and distribution
 - Possible additional adverse health outcomes due to climate change
 - Health system capacity to respond to climate sensitive diseases and changes in demand
 - Rainfall intensity/variations
 - Additional factors: demographic changes, migration, trade, drug resistant malaria, de-forestation, urbanization & development

Methodology

Four analysis strategies with Guiding Questions for information gathering

Adapted from CARE International 2009 "Climate Vulnerability and Capacity Analysis Handbook"

- Resilient Healthy Community
- Disaster Risk Reduction
- Capacity Development
- Addressing underlying causes of vulnerability

Methodology

Three levels of analysis with Guiding Questions for each level

Adapted from CARE International 2009 "Climate Vulnerability and Capacity Analysis Handbook"

1. Health System Level (National)
2. Provincial/District/Commune
3. Village/Household/Individual

Data Collection Tools

Used to stimulate discussion to answer guiding questions at village level

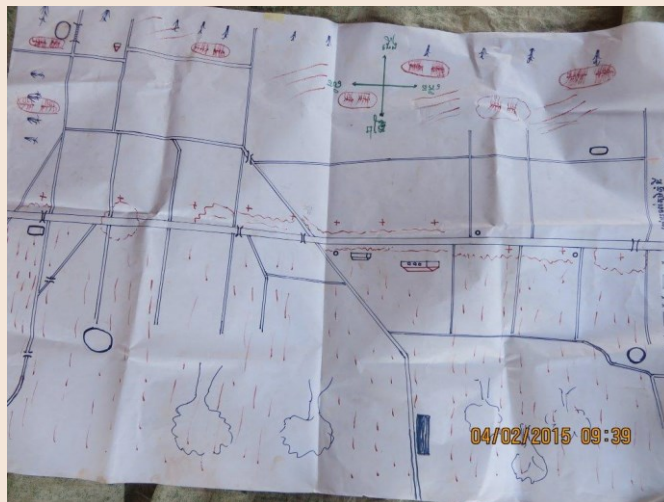
Adapted from CARE International 2009 "Climate Vulnerability and Capacity Analysis Handbook"

Participatory toolbox for focus group discussions:

1. Hazard Mapping
2. Seasonal Calendar
3. Historical Timeline
4. Vulnerability Matrix
5. Ven Diagram

Examples of Tools

Hazard Map



Examples of Tools

Seasonal Calendar

A handwritten seasonal calendar on a grid. The columns are numbered 01 to 18. The rows list various activities in Burmese. Checkmarks (✓) indicate when an activity occurs. A date stamp '04/02/2015 09:38' is visible on the right side.

Activity	01	02	03	04	05	06	07	08	09	10	11	12
စိုက်ပျိုးရေး	✓					✓	✓	✓			✓	✓
ပဲစိုက်ပျိုးရေး		✓	✓							✓	✓	✓
လှေပစ်ခြင်း		✓	✓									✓
ပျော့ပျောင်းစွာ လှေပစ်ခြင်း					✓							
ပျော့ပျောင်းစွာ										✓	✓	
ပျော့ပျောင်းစွာ										✓	✓	
ပျော့ပျောင်းစွာ												✓
ပျော့ပျောင်းစွာ		✓	✓	✓							✓	✓
ပျော့ပျောင်းစွာ		✓										
ပျော့ပျောင်းစွာ					✓	✓						

Examples of Tools

Historical Timeline

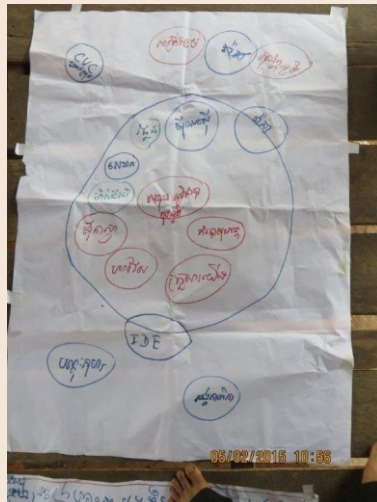
A handwritten historical timeline on a grid. The left column lists years, and the right column lists historical events in Burmese.

Year	Event
2009-2010	...
2011-1970	...
1970-	...
1979	...
2010	...
2006	...
2008	...
ရက်စွဲ	...
19	...
1985-1993	...
1993	...

Examples of Tools Vulnerability Matrix



Examples of Tools Venn Diagram



Validating results

Analysis and Confirmation

- Impact Chains
- Adaptation Tables
- Results Dissemination Workshop

Results

Outcomes

- Disaster emergency response and community based planning inc. health centres
- Raise awareness of vector borne and water related diseases
- Protect or improve rainwater storage, sanitation and water sources
- Climate change awareness raising inc. health impacts

Results Insights

- 3000 litre capacity rainwater tanks = improved
- CC and Health IECs developed
- CC, Health and DRM curricula
- CC and disaster HC needs assessment
- Health Seeking Guide developed
- Latrine designs – water less or less water
- DRM First Aid training and simulations

Implemented Adaptive Measures Household Rainwater Harvesting & Disaster Risk Management Planning and Awareness Raising



Implemented Adaptive Measures
Climate Sensitive Disease Promotion & Disaster Risk Management First Aid Training



Implemented Adaptive Measures
Primary School Climate Change Awareness Raising & Climate Proofing Health Centre Assessment



Conclusions

- Relative narrow focus of National Climate Change Health Action Plan
- Greater local level coordination between relevant departments
- Funding for implementation of strategies/action plans
- Greater effort to align Health Climate Change Action Plan and Disaster Risk Reduction Strategy for Public Health

Questions and Answers

Q&A

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