

Scientific information	<p><b>Past weather trends, including seasonality</b> (Insert your <i>National level &amp; Local level</i> data, if possible, from nearest weather station, through your Met Service):</p> <ul style="list-style-type: none"> <li>Increased average temperature and no. of warm days</li> <li>Increase / decrease in total annual rainfall</li> <li>Increase in number of days with heavy rainfall</li> <li>etc.</li> </ul> <p><b>Future changes</b> (<i>future projections for coming decades for country/ region – cannot zoom in on target area</i>):</p> <ul style="list-style-type: none"> <li>Further increases in average temperature and frequency of 'hot days'</li> <li>An increase in extreme rainfall events will be 'very likely'</li> <li>Sea-level rise, if relevant, etc.</li> </ul>

Community information – assessment tools

**Seasonal calendars** document seasonal shifts in weather, hazards, health and livelihoods

### Example of Seasonal Calendar

Month	J	F	M	A	M	J	J	A	S	O	N	D
Hazard Flooding												
Sea surges												
Livelihood Cabbage												
Health Malaria												

**Key:** Red = present, Blue = past (thinking back 30 years)

Guiding questions for analysis:

- What were the observed changes in the seasonal events such as weather, hazards, livelihood, health problems, etc.?
- If there were changes in the seasonal cycle, what actions has the community taken or is considering?

**Comparative mappings** identify community growth, areas impacted by different hazards, changes in water sources etc. Also, external ("upstream") factors beyond community control should be discussed/noted.

Guiding questions for analysis:

- What are main changes in community's environment and land use?
- What are the "old" and "new" areas affected by different hazards?
- Are there any changes in the exposure?
- What are the hazards experienced by the community due to the external factors?

**Historical Profiles** identify changes in frequency and intensity of hazardous (and other) events.

Guiding question: Have any hazards become worse or more frequent over time?

**Livelihoods Analyses** identify changes in peoples' livelihoods, some of which may be (significantly) affected by variations in rainfall patterns etc. but also by social and economic factors.

**Hazards – Vulnerability – Capacity Matrices** capture e.g. existing early warning methods, which elements are currently most at risk, and how hazards and disasters are normally dealt with (current practices are basis for improvements and scaling up).



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## Climate-smart community planning – a quick guide

### Questions to guide the Planning

- Does the information people report match the scientific climate information? (If not, then the reported changes may have other reasons than climate change, and climate projections are less helpful in the planning – see example in table below)
- How is climate change likely affecting existing risk patterns?
- If the trends observed by communities and science continue, how may risks shift in the future?
- How do people normally deal with the challenges? Can existing practices be adjusted and scaled up to handle more frequent and more severe events?

### Example of assessing climate versus other causes of observed changes

Changes observed by the community	Possible reasons for changes	
	Evidence based on scientific information	Other factors that may explain observed changes
Example 1 Sea eroding the coastline	Sea level rise 4 mm per year in the region	Some sand mining along the coast
Example 2 Getting hotter in the summer	Temperature rising, more hot days recorded	none
Example 3 Flooding more often, higher	Meteorological office reports that no change in extreme rainfall events	Logging intensified upstream, probably affecting flow

### Advocacy

#### Use the evidence gathered to:

- Stimulate community 'demand creation' towards local authorities on the need for assistance to meet increasingly challenging conditions
- Help develop government priorities (climate adaptation planning) so climate change adaptation funding reaches people in at-risk communities

### ACTIONS TO ADDRESS CHANGING RISKS

#### Community disaster preparedness plans:

- Contingency plans and SOPs not only based on past disaster events and hazards knowledge, but prepare for more extreme events
- Early warnings (awareness and practice) enhanced – start with available public weather and climate forecasts

#### Shelter and small- scale infrastructure measures:

- Design with new extremes in mind; seek technical assistance, and understand the local building materials and their markets to gauge their effects on the environment and local (natural) resources
- Consider (supplementary?) sustainable 'bio-engineering' alternatives to maintenance-demanding concrete solutions

#### Water, sanitation and hygiene (WASH):

- Water quantity:** Diversify the water sources, increase water storage, manage better available water (water conservation, rainwater harvesting...)
- Water quality:** Improve resilience of wells to flooding, treating water at HH level
- Sanitation and hygiene:** Raised pit latrines, septic tanks, relocation of latrines.

#### Livelihoods and basic needs:

- If challenges are agriculture, help communities seek external advice for adapting to changing water/temperature conditions towards government extension services, or assistance from specialised NGOs
- Argue for *livelihood diversification* or *agricultural diversification* – not only shifts to new crops – to prepare for more a variable future

#### Health:

- Build on and adjust existing effective health outreach programmes and encourage scale-up of successful health practices to existing and/or new geographical areas to address new or emerging (vector/water/food/heat related) health risks.

#### Displacement:

- Design actions that alleviate pressures and minimise permanent displacement, e.g. environmental degradation that make living conditions increasingly precarious or livelihoods eroded.
- Where planned relocations or permanent displacement is foreseen, ensure both voices of those relocated and host-communities are heard in assessing changing risks and related decision-making processes. Design with new extremes in mind.

Community resilience plan elements (examples)