

Climate Sensor

A TOOL FOR CLIMATE SENSITIVE PLANNING

This Climate Sensor has been created to help you and your organisation to take into account the effects of climate change in your project work in the South. At first it may be difficult to see the connections between the direct and indirect impacts of climate change and your own project, especially if you don't have an expert in climate change issues working with you.



A tool for climate sensitive planning

A good starting point to include climate sensitivity into project planning is finding out how local people feel their living environment has already changed. For example, local people often have a clear understanding of changes in rainfall. From the project planning perspective it is often sufficient to consider the changes that have taken place, which also gives an insight to possible future changes and risks.

The questions in this Climate Sensor help you to map out the direct and indirect links through which the impacts of climate change can hinder the achievement of the project's objectives. For example, climate change can make it more difficult to reduce poverty, eradicate hunger, fight against diseases or to promote education and equality. Therefore the effects of climate change need to be taken into consideration in all projects.

Linking climate change to project planning will be approached from four different perspectives which have been formed by comparing and simplifying already existing climate tools. These are:

1. Changes in the living environment
2. The impacts of climate change on livelihoods
3. The vulnerability of people and the environment
4. Risk mapping

You as a development worker need to apply appropriate methods to discuss the questions of the Climate Sensor. For example, changes in the living environment can be mapped by drawing different kinds of village maps or a historical time-line as a way to support the discussion.



Taking impacts of climate change into consideration is part of risk management in development co-operation projects. Not all environmental changes are caused by climate change, but it is still necessary to take them into account so that the success of the project is not endangered.

It is important to remember that in poor countries the dependence on natural resources and livelihoods that are sensitive to climate change, such as agriculture, is greater than in the industrialised countries. Limited resources also reduce opportunities to prepare and adapt to the effects of climate change.



The Sensor viewpoints

The questions in this Climate Sensor help you to map out the climate risks involved in a project and their effects on project implementation and objectives. This is a way to consider climate change in a cross-cutting manner.

By checking what issues you have already assessed, what you have taken into account in your planning and what areas still need further consideration, you can see what needs to be improved in your project planning. The 'Next step' questions bring a new angle to the discussions and will hopefully also create some new ideas for further consideration.

CHANGES IN THE LIVING ENVIRONMENT

Climate change causes significant changes in people's living environments. Adapting to the changes is difficult because it requires social, political, economic, technological and also life-style-related changes. Therefore it is important to support the possibilities of the poorest people to prepare for the changes.

Taking climate change into account in project work is often easiest by mapping out the changes that have already taken place in the area. Local people and project workers are in a key position because they can tell about their observations in their living environment based

on their own experiences.

Since climate change is a difficult term, it should be explained through examples. Comparing the occurrence and duration of rainy seasons nowadays and before is one example. Observing the changes in your own living environment also increases awareness: "this also concerns us".

Although local people's observations about changes in the weather and the environment are not necessarily connected to climate change, they should still be taken into account when mapping the risks.

	TO BE ASSESSED	ALREADY ASSESSED	CONSIDERED IN THE PROJECT PLAN
What kind of changes in the climate and the living environment have occurred in recent years? How about in the longer term (e.g. in a generation)?			
How have local people reacted to the changes that have already taken place?			
How have changes in the environment changed the life of the local people?			
How do potential changes affect the implementation of the project and the sustainability of the results?			

NEXT STEP:

What can you learn from the way the local people have adapted to the changes?

THE EFFECTS ON LIVELIHOODS

Mapping out how the increase in extreme weather conditions and dry areas, worsening water shortages and depleted harvests caused by climate change affect people's lives should be a part of the planning stages of projects.

These effects often increase poverty and inequality as well as impeding the ability of the

local population to improve their living conditions in a sustainable way. It is easier to recognise the direct impacts of climate change in the rural areas and in flood risk areas, but climate change also affects cities, for example in terms of housing, water and refuse services, health and food availability.

	TO BE ASSESSED	ALREADY ASSESSED	CONSIDERED IN THE PROJECT PLAN
What resources are important for the livelihoods of the local people?			
How does climate change affect these resources?			
How does climate change affect the livelihoods of the local people?			
How do the effects of climate change on people's lives and livelihoods affect the implementation of the project and the sustainability of the results?			

NEXT STEP:

What new opportunities could changes in the climate and the environment bring to the project area?

THE VULNERABILITY OF PEOPLE AND THE ENVIRONMENT

Both people and the environment suffer from the effects of climate change, such as the rise in the sea level and extreme weather conditions. The vulnerability of the environment means a lowering in the availability of natural resources. Forests, soil, fish stocks and clean water are all under threat, as are the biodiversity and people's health and food security. People with the weakest physical, social and economic resources are the least able to adapt to the changes. They become easily vulnerable due to their bad health condition, because their social networks cannot support them in the changed situation or their livelihood is dependent on one source of income only. Taking climate change into account in development cooperation can reduce vulnerability in two ways: by mitigating climate change and by supporting adaptation to it.

	TO BE ASSESSED	ALREADY ASSESSED	CONSIDERED IN THE PROJECT PLAN
Which local groups of people are the most vulnerable to the effects of climate change? Why?			
What kind of support networks do local people have?			
What capabilities do they have to react to changes?			
How can these capabilities be strengthened?			

NEXT STEP:

Who defines vulnerable groups? The project workers or the local people themselves?

How can the project help to conserve natural resources or prevent their overexploitation?

RISK MAPPING

Taking climate issues into account and collecting the necessary background information is important already at the planning stage of a project. In addition to the experiences and adaptation methods collected with the local people, it is worthwhile to look for useful information from national action plans, other actors in the region and meteorological stations. There is no single model that works best for climate change adaptation and mitigation. Finding the right methods always requires knowledge of the local conditions and the participation of all the stakeholders.

	TO BE ASSESSED	ALREADY ASSESSED	CONSIDERED IN THE PROJECT PLAN
What are the most serious climate risks in the project area?			
Which local institutions provide information on climate change and its regional effects?			
How do climate change risks relate to other identified risks in the project?			

NEXT STEP:

How do the project activities worsen or mitigate climate change?

How can your organisation promote climate-friendly lifestyle?

Ideas for climate sensitive development cooperation work

SECURING LIVELIHOODS

- ▶ strengthening the support networks and capacity of vulnerable groups
- ▶ diversifying sources of income and livelihoods to avoid dependence on a single livelihood vulnerable to climate change
- ▶ securing land ownership rights
- ▶ protecting and strengthening material possessions like houses against extreme weather
- ▶ strengthening sustainable agricultural methods
- ▶ diversifying crops, agrobiodiversity
- ▶ agroforestry

EDUCATION AND HEALTH

- ▶ awareness raising about the effects of climate change, the consequent risks, and ways to mitigate and adapt to climate change
- ▶ training health care personnel on the effects of climate change
- ▶ taking care of sanitation and hygiene under changing circumstances
- ▶ running health and sanitation campaigns needed to help people adapt to changing environment (using mosquito nets, proper cooking of food, hand-washing)
- ▶ preparing evacuation plans in case of natural disasters

WATER RESOURCES AND LAND USE

- ▶ protecting water sources and the community water supplies against contamination, collecting rainwater
- ▶ planting crop varieties suitable for changing conditions
- ▶ communal forest management
- ▶ establishing seed banks in case of crop failure
- ▶ forest conservation, tree planting
- ▶ preventing desertification
- ▶ protecting biodiversity and promotion of sustainable use of natural resources
- ▶ protecting soils against erosion
- ▶ sustainable land use planning

ENERGY USE

- ▶ saving energy, for example stoves that use less firewood, energy saving electrical appliances and lighting
- ▶ support renewable energy use: wind and hydro power, solar energy, biogas, ground source energy
- ▶ advocating for improvements in public transport
- ▶ good examples and campaigning for sustainable lifestyles
- ▶ own example