

RELEVANCE AND EFFORTS OF CLIMATE PROOFING FOR DIFFERENT SECTORS

C.1 Different relevance for different sectors

In addition to regional differences, the relevance of climate change also varies depending on the prioritised issues of Welthungerhilfe's projects. Climate forecasts are usually of key importance for planning projects for food security, resource management, basic health and water supplies. On the other hand they tend to play a less important role for projects aimed at promoting democracy, preventing HIV&AIDS or providing emergency aid. However, this does not rule out the need for integrating adaptation to climate change as a prominent component into planning for projects in the area of promoting democracy/conflict management, for instance in a region where climate change threatens to trigger conflicts over water or other scarce resources. It may also be necessary and possible to in particular integrate adaptation measures into emergency projects with short durations. Hence, ultimately each project must be individually evaluated to determine whether climate change has to be taken into consideration in planning, and if so, then in what way. The following explanations on the individual sectors of the Welthungerhilfe portfolio are envisaged as orientation help.¹⁹

Sector	Mitigation potential	Adaptation necessity
Emergency aid	Low	Medium
Basic infrastructure	Low	Medium - High
Rural and regional development	Medium	High
Social integration and education	Low - Medium	Medium
Civil society structures	Low	Medium
Health and HIV&AIDS	Low	High (basic health)

Rural and regional development

This sector contains the areas Integrated Rural Development; Agriculture, animal husbandry and forestry; Food Security; Natural Resource Management; Disaster Risk Reduction and Promotion of Local Economic Development. Because of its great dependence on the weather it is the sector with the most urgent need for adaptation to climate change. The following highlights some aspects:

- Harvests can, for instance, be damaged or destroyed because of water shortages or increasing incidences of pest infestation with consequences for food security and development. In contrast in other regions the temperature increase can enable new or more productive agriculture.
- The availability of drinking water and industrial water can be limited through reduced precipitation, salinisation and pollution and this can lead to water shortages. The temperature increase, lower precipitation and the pressure to expand areas of agricultural cultivation due to losses in productivity can also place a burden on other natural resources.

¹⁹See also the presentation at the IPCC (2007), page 13. According to the Welthungerhilfe approach, the assessment of the mitigation potential refers to the potential in primarily rural regions in developing countries. For larger cities or more developed countries the assessment can be different.

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- The means of subsistence in rural regions (agriculture, animal husbandry, natural resources, etc.) can be interrupted or even destroyed by heat, storms, erosion, forest fires, floods or interrupted access to the market. This jeopardises food security and development.
- Climate change can influence local economic development in many ways (disasters, weather-dependent sectors or those that rely on natural resources, such as tourism). However, climate change can also possibly create new economic opportunities.

Even though the contribution to mitigation is usually low in developing countries, in particular in the sectors Agriculture, Animal Husbandry and Forestry as well as Promotion of Local Economic Development potentials are available which as far as possible should be taken into consideration in project planning:

- Deforestation reduces the storage capacities for carbon dioxide (CO₂) and hence considerably contributes to climate change. Avoiding deforestation or even achieving reforestation contributes towards mitigation.
- Converting natural land into agricultural land also releases CO₂ and should be avoided – from the point of view of mitigation.
- Cattle farming and wet rice farming are important causes of climate change (methane emissions). For both these types of farming there are now approaches for reducing methane emissions. These should be checked to determine their feasibility.
- In promoting the local economy emphasis should be placed on energy efficiency and the use of renewable energies should be investigated.

Basic infrastructure

The sector Basic Infrastructure includes interventions in the areas of Basic Housing; Road Construction; Water and Sanitation as well as Social Infrastructure. The necessity of adaptation to climate change is assessed as medium - high, depending on how great the danger is that the infrastructure can be damaged or destroyed by extreme weather events (above all cyclones and floods). The contribution towards mitigation provided by Welthungerhilfe's infrastructure investments is estimated as low.

Health and HIV&AIDS

In this sector scarcely any potential for contributions to mitigation is recognised. With regard to the adaptation to climate change a differentiation is made between the two areas Basic Health and Prevention and Minimizing the Consequences of HIV&AIDS: whereas in the area of HIV&AIDS there is hardly any connection recognised with regard to climate change and consequently also scarcely any requirement is seen for adaptation, the requirement for adaptation is regarded as high for projects involving Basic Health. The reason for this is that in many regions climate change presents a whole series of dangers to health: increased danger to life and health due to extreme weather events (floods, storms, landslides, etc.), increased danger to life through epidemics, risk of malnourishment, increased danger to

life due to infectious diseases as well as an increased risk of trauma after disasters. The basic health services must be prepared for these new dangers and risks, in order to be able to react promptly and effectively. The health services can also help to limit the spread of epidemics (cholera, dengue fever and malaria) through preventive measures (for instance hygiene, midge and mosquito control and protection).

Social integration and education

This sector includes the areas Pre-School Support and School Education; Vocational Training as well as Social Integration. A direct influence of climate change on projects in this sector which would render adaptation necessary is only to be expected in individual cases – if, for instance, climate change has an impact on the content of professional training or if a project of social integration has to take into account increased migration due to climate change. Also, the potential for directly contributing to mitigation tends to be low. However, in this sector important contributions can be made to adaptation to climate change and also to mitigation if climate change is integrated into the syllabus of school education and vocational training (raising awareness and options for solutions).



Civil society structures

This sector involves self-help groups and partner organisations; promotion of democracy and strengthening of human rights as well as conflict management and peace education. Here there is only a direct necessity for adaptation if the scarcity of natural resources triggers conflicts or intensifies them. Nevertheless, there are sufficient possibilities within the framework of projects in this sector in particular to contribute towards adapting to climate change which go way beyond this, because the strengthening of civil society structures and

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rights of codetermination can enable the population affected by climate change to more effectively articulate their requirements and assert them within decision-making processes. If this strengthening of civil society structures consciously focuses on the risks and opportunities of climate change, a decisive contribution can be made towards increasing the target group's capacity to adapt.

Emergency aid

The integration of climate change adaptation and mitigation measures within emergency aid programmes (food/drinking water; shelter; basic needs) presents a particular challenge, because here with short project terms the overwhelming tasks in any case absorb the capacities. Nevertheless, in particular after weather-related disasters it should be investigated whether the risk will presumably increase through similar events in future. This can influence the decision on, for instance, the extent to which a danger of flooding or hurricanes/cyclones should be taken into consideration in building emergency accommodation. The project personnel of Welthungerhilfe and the project partner should also be prepared for the increasing danger of epidemics and the need for dealing with trauma after disasters.

C.2 Preliminary estimate of the relevance and efforts

In future for every new individual Welthungerhilfe project it should be checked whether and how climate change can be appropriately taken into consideration. The climate proofing should be integrated into every project planning process as a matter of principle, irrespective of whether adaptation to climate change has a key significance or only limited importance for the country or the project. However, in this respect the different relevance of the issue means that the proofing can have a very different depth and breadth, and the cost for it can also be accordingly low or high.

The described method of climate proofing is therefore kept very flexible and – with a simple risk estimate which is, however, kept as precise as possible – it enables the achievement of the intended consideration of climate change in very different individual projects. The depth and breadth of the climate proofing, and hence the cost involved, depends in particular on the intended target (sector) and the project area. The following checklist helps in the beginning to identify the most important approach points in terms of content for the respective climate proofing. These can be used for deriving conclusions on the approach, the cost and the participants. Under certain circumstances the preliminary examination also shows that climate change no longer needs to be taken into consideration in the project planning, and the climate proofing then finishes at this point. In this case this should be briefly justified in the project proposal.

Table C2-1: Checklist for preliminary examination²⁰

A) Questions on previous history of the project	Answer
A.1 If the project comes into being on the basis of a regional or country programme with climate proofing: <ul style="list-style-type: none"> ■ Does the programme contain references to the fact that the project region, the sector or the target group could be affected by the effects of climate change (Chapter 1.2 of the programme description)? ■ With relation to climate change does it make any recommendations which are relevant for the new project (Chapter 4 of the programme description)? 	
A.2 Is the new project a reaction to a weather-related disaster? If yes, what influence will climate change probably have on the future occurrence of similar events?	
A.3 Has a previous phase provided references to the relevance of climate change? If yes, what?	
A.4 Have partners and target groups expressed interest or need for adaptation measures for climate change? If yes, what?	
A.5 If applicable: does a call for proposals include the requirement for taking into consideration climate change?	
B) Questions on project idea	
B.1 Does the planned project belong to one of the following sectors? <ul style="list-style-type: none"> ■ Basic infrastructure (basic housing, road construction, social infrastructure) ■ Water and sanitation (water supply, waste water disposal) ■ Agriculture, animal husbandry and forestry ■ Food security ■ Natural resource management ■ Disaster risk reduction ■ Integrated rural development ■ Promotion of local economic development and energy ■ Education and social integration ■ Self-help groups, strengthening democracy, peace education and conflict management ■ Basic health services 	
B.2 Is the project to be implemented in an area with the following characteristics? <ul style="list-style-type: none"> ■ Coastal zone ■ Flood plain ■ Mountainous region ■ Regions affected by hurricanes/cyclones ■ Arid or semi-arid zones ■ Rain forests 	
B.3 Are the intended impacts of development cooperation and their sustainability dependent on important climate parameters, such as temperature, precipitation and wind? If yes, from what perspective?	
B.4 Is it possible to significantly increase the adaptability of target groups or ecosystems within the framework of the measure? If yes, from what perspective?	
B.5 Is it possible to reduce emissions of greenhouse gases within the framework of the measure? If yes, in what area? This particularly applies if the project is involved with Agriculture, Animal Husbandry and Forestry or Promotion of Local Economic Development.	

²⁰ The checklist is based on the screening checklists of the BMZ (s. BMZ guidelines for climate proofing in development work from 2009, Appendices 1 and 2; only available in German "Leitlinie für Umwelt und Klimaprüfung"). It was adapted for Welthungerhilfe's work.

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For most project ideas one or several of the questions will be able to be answered with „Yes“. As far as possible the answers should be made more precise by the use of key words and supplements such as „limited“ or „considerable“. This can be used as the basis for deciding at which points the climate proofing should be applied in order to identify climate risks and appropriately take them into consideration in the project. This can be used for determining the approach and the temporal, financial and personnel effort of the climate proofing:

Example 1:

An emergency aid project in a region just hit by flooding only produces a „Yes“ with regard to the questions A.2 and B.2 (flood area). Consequently the climate proofing can be restricted to securing the climate forecasts relevant for the floods and – within the framework of the normal analysis of the situation – discussing whether these forecasts should have consequences for the project design, for instance the integration measures to raise people’s awareness of the consequences of climate change. In this case the effort/cost is limited.

Example 2:

A basic infrastructure project in a rural coastal region which points out to the partner the increasing flooding and salinisation due to rising sea levels (Answer „Yes“ for questions A.4, B.1 and B.2). In this case initially the forecasts on the effects of climate change should above all be made with regard to rising sea levels. Within the framework of the planning process a debate (workshop) lasting approximately half a day should be dedicated to the climate proofing. This should address the issues of the location (is it worth investing in infrastructure in areas which will be more frequently flooded in future?) and also quality criteria (how does the infrastructure have to be built to be protected against floods and if necessary to serve as an area for protecting the population?). This approach requires a medium amount of time, financing and personnel. Within the framework of the detailed planning with the target population the specific infrastructure decisions can then be made on the basis of local requirements and risks.

Example 3:

A food security project in a mountainous region dominated by subsistence farming. It is probable that the success and the sustainability of such a project are strongly influenced by climate change. Here a comprehensive climate proofing is necessary: this should be based on the most precise analysis of the documents possible during the course of a separate 1-2 day workshop. The issues of climate risks and adaptation options are also integrated into the detailed analysis and planning with the target group. In such a case the cost and effort involved with the climate proofing is accordingly great.

C.3 Agenda proposal for climate proofing workshops

In addition to the document analysis and participative analysis and planning methods at village level the workshop represents a core format for the climate proofing. Here the length

and design of the workshop depends on the expected importance of climate change for the project and the depth of the situation analysis and planning which the climate proofing is integrated into.

Objective of the workshop:

The most important climate risks for the project and target group are identified together with the partner on the basis of the existing scientific information, and options for action are debated and preliminary choices made regarding these.

Sub-objectives:

- The previously compiled scientific information is checked.
- Risks and options for action are jointly identified and evaluated.
- The awareness of the partners and other participants is raised and they recognise the necessity of the prioritised adaptation measures.



Preparation:

Analysis of the expected impacts of climate change on the project region and target group (research and evaluation of information); this can be carried out by Welthungerhilfe, a partner or a scientific expert. Checklist for the preliminary examination (C2-1). If necessary, preliminary selection of the evaluation criteria to be used.

The following presents two agenda proposals for a short and a detailed workshop.

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1. Three-hour unit within the framework of a more comprehensive workshop on situation analysis and preliminary planning

This format is sufficient for a „short“ version of the climate proofing and can be opted for if either the latest planning process is only implemented on a very rudimentary basis or if only a limited importance of climate change for the project is expected. The more time available for the debate, the better this will be.

Participants:

The partners and representatives of the target group who are in any case involved in the situation analysis and planning, and if necessary additional experts on the impacts of climate change from the scientific community and/or government, local authority administration: here it should be ensured that there is a gender balance in terms of participants.

Core elements:

Time	Content	Methods
Approx. 45 minutes	Presentation of the expected impacts of climate change on the project region in the national and regional context. In doing so, uncertainties in forecasts should be presented. Citing risks and opportunities, above all for the target group.	15-20 minutes presentation Approx. 25 minutes time for questions
Approx. 15 minutes	Presentation of national policies and initiatives for adapting to climate change and mitigation; international and regional donor initiatives; and also possible supplementary sources of financing (donor, sector).	Approx. 10-minute presentation by the government (or scientific community), including questions. If necessary allow the participants to cite their own activities during the presentation.
Approx. 60 minutes	Assessment of risk: debate and identification of the most important risks on the basis of the proposed table (impacts, affected, vulnerabilities, risks).	This can be carried out in the form of a brainstorming session in the plenum or in working groups discussing the most important effects.
Approx. 60 minutes	Options for action for adaptation and, if necessary, mitigation: debate and rough prioritisation of options.	30-40 minutes debate in working groups, with subsequent presentation in the plenum; or alternatively a debate in the plenum.

2. A one-to-two day workshop on climate proofing

A one-to-two day workshop on climate proofing is worthwhile if the planning process is highly detailed and climate change is expected to be very important for the project. This naturally particularly applies if a project for adaptation to climate change is explicitly planned.

Participants:

Experts on the impacts of climate change (government, scientific community), partners, representatives of the target group and if necessary representatives of the relevant sectors (for instance agriculture, disaster reduction, health, weather services), representatives of the local administration who are important for implementation, etc. and moderator. Balanced gender participation should be ensured.

Core elements:

Time in a one-day workshop	Content	Methods
Approx. 30 minutes	Opening of the workshop with explanations of target and programme.	
Approx. 30 minutes	Presentation of participants.	Naming names and one representative per organisation/group briefly names activities/interest in the issue of climate change.
Approx. 45 minutes	Presentation of expected effects of climate change on the project region in a national and regional context. In doing so, explanation of forecast uncertainties. Citing risks and opportunities, above all for the target group.	15-20 minute presentation Approx. 25 minutes time for questions.
30 minutes	Coffee break	
Approx. 15 minutes	Presentation of national policies and initiatives for adaptation to climate change and on mitigation; international and regional donor initiatives; as well as possible supplementary sources of finance (donor, sector).	Approx. 10-minute presentation by the government (or scientific community), subsequently questions.
Approx. 30 minutes	Step 1 Risk assessment: identifying the most important effects of climate change for the project (threats and opportunities).	Brainstorming on threats/affected and opportunities, setting up working groups in accordance with effects or affected.
Approx. 60 minutes	Step 1 Risk assessment: discussion and identification of the most important risks.	Working groups fill in tables with columns on effects, affected, vulnerabilities and risks (see Table 3).
60 minutes	Lunch	

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Time in a one-day workshop	Content	Methods
Approx. 45 minutes	Step 1 Risk assessment: discussion and compilation of results from the working groups. If necessary, prioritising risks which the project should deal with.	Presentation of the results from the working groups with debate in plenum.
Approx. 45 minutes	Step 2 Options for action: discussion and identifying the most important options for adaptation and mitigation.	30-minute discussion in the working groups (if required new groups set up) on the basis of the table (Table 4), subsequently short presentation in the plenum.
30 minutes	Coffee break	
Approx. 45 minutes	Step 3 Prioritisation: discussion of results from the working groups and prioritisation on the basis of the selected evaluation criteria.	Debate in the plenum on the basis of the evaluation table (Table 6), if necessary short working groups. Transfer of results to main table (Table 5).
Approx. 30 minutes	Identification of conclusions for the project outlines and the detailed planning.	Debate in the plenum (completion of Table 5).
Approx. 15 minutes	Explanation of the next steps and completion of workshop.	

This workshop proposal is based on a one-day workshop lasting 8 hours, 30 minutes. If it is possible to plan the workshop for 1.5 or two days more time can be earmarked in particular for the discussions on risk assessment and identifying and prioritising the options for action. In many cases it will also be worthwhile allowing more room for the definition of conclusions. In particular if the participants are still relatively unknown for Welthungerhilfe's personnel, a subsequent evaluation of the workshop is recommended to recognise the extent to which the sub-objectives of raising people's awareness and ownership were achieved. Apart from this, the integration of supplementary units may be worthwhile – for example

- a more detailed presentation of existing initiatives on the part of the participants in the plenum, in the working groups or as small „trade fair“; or
- the drawing up of one or several risk maps, if necessary parallel to different risks or for different sub-regions.