Climate Change Adaptation (CCA) Mainstreaming Checklist

German Red Cross

1) Carry out a climate risk assessment together with the HNS

Organize a workshop *with the staff at the NHQ / Branches about potential climate risks together with national climate experts (e.g. meteorological institutions, universities, environmental institutions).*

Step 1: ***Preliminary test*** if there is a need for a climate risk assessment

Step 2: ***Assessment* of climate risk** in close cooperation with HNS and climate experts

- Identification of potential climate related hazards, e.g. storms, floods and droughts
- Identification of population most at risk, e.g. population in storm prone areas
- Identification of vulnerability factors, e.g. lack of awareness, livelihood situation
- Description and estimation of specific risks for the population in project area, because of climate change related hazards and their related vulnerability

Step 3: ***Identification of options for action***

- Options for action based on the assessment of climate risks to reduce the identified climate related vulnerabilities (e.g. DRR, Basic Health Care, WatSan, Livelihood diversification)

Step 4: ***Prioritization*** of action. Prioritization should consider communities to be targeted for assistance by the way climate change is affecting particular parts of the country.

Ask the right questions:

- *Are we in contact with the right experts to understand the current and future climate related hazards and risks in our country?*
- *Are we aware about potential impacts (e.g. disasters, health and livelihood impacts) related to climate change for the different regions in the country?*

2) Establish new partnerships as part of your project planning and implementation

Step 1: ***Dialogue with knowledge centres during the climate risk assessment and later in the VCA process (see under 3)***

- Cooperate with national meteorological offices and/or universities
- Organize meetings with them, discuss possible cooperation with them and create symbiosis (e.g. they do research in your communities and you get their information)
- Include their information into your climate risk assessments, project planning and into the different VCA trainings

Step 2: ***Dialogue between HNS and their government***

- Almost all countries have National Reports about their countries vulnerability to climate change, some countries already have National Adaptation Programmes of Action (NAPAs)
- Get this reports, facilitate contact between HNS and governmental climate change focal points and discuss their goals regarding CCA inside their national planning
- There might be possibilities for cooperation between HNS and the government regarding the implementation of adaptation programmes

Step 3: ***Dialogue with NGOs, donors and private sector***

- Identify organizations which are already active in CCA
- Check whether actors from private sector want to support CCA mainstreaming (e.g. insurance companies)
- Strengthen the HNS to become an active member of stakeholder meetings regarding climate change in their country

3) Address the climate risks in your project planning and implementation

ACT! *CCA should not be an issue in isolation. It is a mainstreaming topic and therefore CCA should be mainstreamed into your project planning and implementation.*

Step 1: ***General background information***

- Understand and take into consideration the changing risks and vulnerabilities identified in the climate risk assessment (see under 1)

Step 2: ***Conducting VCAs – Plan for the future by bringing in outside climate information***

Integration of climate change into VCAs can be done in a very simple way; the main purpose is to discuss upcoming risks with the communities!

Check if the following components might fit for your DRR project:

- Training for VCA facilitators
  - Climate change background information for facilitators
  - Ask for help from climate experts but keep it simple
- Carry out the VCA in the communities including climate change
  - Awareness: Give an overview to the communities about climate change
  - Seasonal calendar: ask whether seasons have been changing
  - Historical calendar: ask about strange weather events
  - Risk map: not only the current situation but also how risks changed
  - Focus group discussions: How did the weather changes affect the families?

Step 3: ***Focus on programmatic approaches, including DRR, Basic Health Care, Livelihood and WatSan activities***

There must not be big differences to regular DRR, Health, Livelihood and/or WatSan activities, except that activities are planned with changing risks in mind!

Look at your project and answer the following questions:

- Are you prepared for all disasters that can be expected?
- Are you prepared to deal with climate related health impacts like malnutrition, infectious disease outbreaks caused by changes in range of vectors?
- Are you focussing on the most vulnerable groups?
- Are you including changing risks into your training activities?
- Are you informing the communities about the climate risks within your project?

If the answers are NO, you should think about options to adjust your project!

Integrate the identified options for action of the climate risk assessment in your project, e.g.:

- Further structural assistance to reduce climate risks
  - Construction of shelter, safe places, evacuation sites, reinforcement of houses
  - Elevated food and seed storage in flood prone areas
  - Special communication equipment to HNS, volunteers and communities
  - Seedlings for reforestation to prevent flooding
  - Mangrove plantings to prevent storm damages
  - Hillside protection to prevent landslides
  - Establishment of water-catchment systems
  - Livelihood diversification and hazard resistant seeds
  - [….]
- Further non-structural assistance to reduce the climate risks
  - Establishment of community committees and action team
  - Updated community disaster management plans
  - Focus on community based early warning activities
  - Hygiene promotion campaigns
  - Local clean up campaigns to eliminate vector-breeding sites
  - [….]

PLEASE NOTE: **Have a look on the IPCC Overview of health risks related to climate change including possible CCA measures (see annex) !!!**

4) Focus on raising awareness in your project planning and implementation

Step 1: ***Define your target audience***

- Clarify if you want to reach HNS staff, volunteers, communities or government officials

Step 2: ***Tailor the content of your message***

- Keep the message simple
- Use the voice of peers and other people trusted by the audience
- Consider different options: flyers, posters, videos, dramas etc.

Step 3: ***Develop communication products and check if the following components might fit for your project***

- Disseminate the message in your project communities
- Carry out CCA awareness projects at schools
- Carry out public awareness forums in your communities
- Create radio spots in your project about climate risks and CCA
- Find new cooperation partners in running these awareness sessions

Step 4: ***Regular CCA related trainings for staff and volunteers***

- Organize and train communities and volunteers and include climate risks into your different training activities about DRR, health, WatSan and livelihood
- Use of presentation material and training tools of the RC/RC Climate Centre

5) Make use of seasonal forecasts and projections (Early Warning / Early Action)

Step 1: ***Use seasonal weather forecasting tools***

- Forecasts are available for months, weeks, days and hours in advance
- Check regular the IFRC Forecast Map Room and the Seasonal Forecast information of the RC/RC Climate Centre
- Make use of climate projections and weather information before a disaster strikes

Step 2: ***Prepare for the certain and the uncertain and focus on communication***

- Take the kind of actions that are appropriate at specific timescales:
    - Long-term timescales (years): e.g. work with communities, update risk maps, recruit volunteers, reinforcement of houses, reforestation campaigns etc.
    - Mid-term timescales (months and weeks): e.g. Revisit contingency plans, information about seasonal risks to communities, replenish of stocks, drills, alert to volunteers, monitoring rainfall forecasts, stakeholder meetings etc.
    - Short-term timescales (days and hours): e.g. Prepare evacuation, mobilize communities, warning to communities, evacuation etc.

6) Documentation / Lessons learned out of your project

Step 1: ***Carry out evaluations*** once a year regarding the climate risks

Step 2: Document success stories and carry our ***Lessons Learned Workshop*** about the integration of CCA into your project

Step 3: ***Share the experience*** inside the RC/RC Movement

Annex: IPCC Overview of health risks related to climate change including possible CCA measures (source: RC/RC Climate Centre 2007)

Table 2: An overview of health risks related to climate change

Possible climate change impacts on health	Disease and premature death	Mechanisms	Possible adaptation measures
Change in range of infectious-disease vectors	Malaria, dengue, West Nile virus, leishmaniasis, Lyme disease, schistosomiasis	Diseases are transmitted by vectors or intermediate hosts (mosquitoes, sand flies, ticks, snails, rodents). Climate change can shift distribution of vectors/hosts, and/or lead to changes in transmission season. Effects on malaria are mixed depending on region. Cattle is vulnerable as well: e.g. Rift Valley Fever, blue tongue, which can have impacts on food supplies.	Additional surveillance to identify and prevent epidemics if vectors change their range. Medical training, increased medical supplies in new areas. Early warning systems, community education, awareness, mobilization, use of bed nets (long-lasting insecticidal), vector management measures, e.g. local clean-up campaigns to eliminate mosquito breeding sites.
Diseases increasing with higher temperatures, humidity or drought	Diarrhoeal disease, cholera, meningitis, skin disease, food poisoning	Temperature directly affects incidence of diarrhoeal diseases. Malnutrition is a possible consequence of diarrhoeal disease. Meningitis is associated with drought. Food poisoning: e.g. contaminated shell fish, salmonellosis are linked to temperature.	Monitoring water and food quality, access to safe water, sanitation, drainage, health education, hygiene promotion, oral rehydration. Medical training, increased medical supplies.
Deaths and injuries and disease from extreme-weather events: storms, hurricanes, intense rainfall, floods and/or droughts and bushfires	Disasters: risk of immediate death and injury, mental-health effects Increased risk of waterborne diseases, malaria, dengue, diarrhoeal disease, cholera Malnutrition	Death and injury are due to flooding, storm damage (loss of infrastructure, housing), land slides, riverbank erosion etc. A number of vectors can breed in water after extreme weather events such as storms or floods. Leptospirosis (Weil's diseases) can be transmitted through contact with by rodents/pathogens after floods. Extreme rainfall or drought can cause microbial or chemical contamination of water or insufficient water, increasing risk of disease. Drought/flooding can lead to crop failure and consequent malnutrition. Displacement of population, loss of income can lead to malnutrition and disease.	Disaster management, Community risk reduction, Vulnerability and Capacity Assessment. Early-warning systems for vulnerable areas, evacuation training, trained volunteers, planting mangrove trees for coastal zone protection, shelters, higher storage spaces for food and seeds, higher houses, retention walls, dams, change in crop varieties and planting times/livestock, harvesting, conserving water, water reservoirs, fire breaks, teaching new income-generating skills in towns.
Deaths and injuries and disease from extreme-weather events: heatwaves; increase in temperatures	Heat-related mortality, heat stress, heat stroke, dehydration, heart failure. Diseases linked to temperature increase (*see above*).	During heatwaves vulnerable groups are at risk: urban poor, elderly, babies, chronically ill and certain occupations. Some benefits: fewer deaths from cold are outweighed by negative effects. Snow decrease, glacier melt possibly lead to seasonal lack of water.	Early-warning systems, heat alarms through media, warning organizations concerned, education on medical impacts (within first-aid and social-care programmes), raising awareness of all risks.
Diseases related to air quality	Cardio-respiratory morbidity and mortality	Risks for air quality are due to: formation of ground-level ozone in urban areas with heat and sunlight; pollution from forest fires; changes in distribution and seasonality of allergenic pollen species, e.g. *Ambrosia artemisiifolia*.	Warning systems. Medical education. Raising awareness of all risks. Substantial health benefits from actions to reduce greenhouse gas emissions.
Effects of sea-level rise: salt- water intrusion and coastal erosion	Malnutrition, waterborne diseases	Effects of floods are listed above. Sea level rise will affect livelihood, agriculture: loss of crops, shortage of sweet water resources; loss of income from tourism, etc may lead to malnutrition. Displacement of populations may intensify malnutrition and diseases. These effects may be enhanced by coral bleaching/damage and decline of fisheries.	Education programmes for farmers by experts on different crop opportunities; planting of mangroves, protecting reefs.

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