Climate Training | KIT

Photo: K. Falk / Danish Red Cross

Module 2d: Health, WASH and climate

Exercise 2A

January 2021

Exercises

Title	Timescales scenario exercise – preventative diarrhoeal diseases efforts in country Y
Introduction and background for facilitators:	Early warnings are available for different time scales. This exercise explores the actions that a National Society Health department could take based on early warning information available at different time scales – from years to hours – building on the regular "peace-time" activities of the National Society. The climate and risk scenarios offered are generic for 'country Y' but the facilitator could make it country-specific by adjusting the scenario information to local contexts.
Aim/learning objective:	At the completion of this exercise participants will realize how the existing health/WASH project activities of the National Society could be re-organised and adjusted to make better use of the early warning information also at longer time scales (climate projections).
Materials and preparation:	● Print the *empty* scenario tables at the bottom of this document – print them on A3 paper; several pieces for each group. Note that the tables can also be uploaded toa web-based platform (e.g. as a Google Document) and used for online collaboration among participants. ● Pens for each group ● In the tables below, some example answers (red text) are provided for the facilitator, which can be used to inspire the discussion ● Suggested 'take home discussion points' are provided after each sample sheet below
Duration:	Approx. 45 minutes
Participant numbers and/or arrangements:	Two groups, one for each 'scenario' (or 4 groups – 2 for each scenario – if you have many participants)

The exercise step by step:	1. Organise participants in groups at random.
	2. Hand out several copies of the printed scenarios and pens to each group
	3. Explain how the first row of empty cells in the scenario sheets can be filled with examples of activities the National Society would *normally* already do to prepare for and react to the warnings and risk information listed in the top row under "Information available"
	4. Next, coach participants to fill in the second row with ideas on *changes and improvements* to the 'normal' activities in the row above – what to do *differently* to incorporate the early warning information available on different time scales (i.e. activities are made more 'climate-smart')
	5. Note that the last column is for the specific recovery activities after an event
	6. The facilitator can circulate between groups and support the discussion with supplementary questions and ideas
Debriefing/ discussion:	Let each group provide examples of their ideas on *changes and improvements* in the second row in plenary – and invite for comments and discussion.
Tips:	Suggested 'take home discussion points' are provided after each sample sheet below.

Timescales scenario exercise: Diarrhoeal diseases & WASH – Facilitator notes

You work in country Y. Access to water and sanitation facilities are variable. During the rainy season outbreaks of diarrhoeal disease are common, and during the dry season, people living in areas with poor access to clean water have a high risk of diarrhoeal diseases; especially children are affected.

Weather trends in the past decades indicate that both more intense rainy periods and prolonged drought periods have become more frequent; future climate projections for the region suggest that the trend may continue, so future decades may see even more variable weather – and therefore there is a risk that health and WASH conditions may continue to become more challenging. Country Y is in the part of the world where La Niña events usually causes extra wet rainy seasons (click here if you like to learn more about la Niña, a regular climate phenomenon).

How can the National Society of country Y use the 'early warning' information (below) to scale up its efforts to address the rising risks?

Health and WASH strategic planning over time **Available information >>**	**Years trend – and projections:** More variable rain/drought patterns cause certain diseases to occur more often, or in new locations, and at unusual times of year. The pattern is likely to become even stronger in coming decades.	**Monthly/ seasonal climate information:** Wet season is approaching. A seasonal forecast for above average rainfall is provided by the Met office (due to La Niña) – this rainy season is likely to be extra wet – so increased chances of diarrhoeal disease.	**Weekly weather information:** Meteorological office warns that there is heavy rainfall coming which might lead to flooding in several locations, and several dry locations will likely see more rain than usual.	**Daily weather information:** Heavy rains are already falling in locations with poor waste treatment facilities and there is not yet any change in rainfall likely in the coming few days.	**Hourly weather monitoring:** Rains will continue to peak in the coming few hours; latrines have been washed away.	**Response and recovery:** Rainy season is over.
1. What are National Society's health and disaster management programmes *already* doing to address these impacts? Examples in red font	CBHFA projects in several districts; emergency WASH capacity at HQ.	Coordinated plans across departments (health/WASH/DM etc.) – and other agencies – for best use of local capacity. Revisit WASH contingency plans and consider pre-positioning the emergency WASH packages (relief items) in potentially affected areas. In community-based projects, most vulnerable population groups (to diarrhoeal diseases) are identified and mapped.	Mobilize volunteers and prepare them for switching roles from awareness raising to emergency WASH assistance; Preposition emergency WASH relief items (incl. water purification and jerrycans) to most likely flood affected areas.	In coordination across departments, make use of all capacity (volunteers/staff) in initiating the emergency operations in affected areas.	Emergency operations coordinated across departments. Emergency WASH facilities in action.	Recovery/reconstruction with to affected population. Reconstruction of WASH facilities

2. As rain/ drought patterns change what can the National Society do **differently** to support communities? Provide ideas for changes and improvements to the activities listed in the row above. Examples in red font	Train more community-based health workers on the health consequences of climate change and how it may affect their surveillance activities. Seek support to establish emergency WASH and Health capacity at District level in specific at-risk areas. Seek advice from weather and flood modelling specialists to identify likely new extreme flood levels and at-risk areas for coming decades. Consider targeting more at-risk areas and/or vulnerable groups for preventive health. In long-term programming, plan for protecting WASH hardware (latrines, wells, water harvesting structures etc.) based on projections of likely new flood/drought extremes. Consider supporting watershed management for better run-off control (and multiple benefits). Run a table-top simulation exercise with different stakeholders involved in preparedness, response and recovery to train preparedness for new extreme events. Link preparedness efforts to the national climate adaptation plan.	Re-activate and support all health volunteers (refresher training if needed) in districts for health awareness raising campaigns and community-based surveillance in advance of the likely intense rainy season. Scale up the actions the National Society is already doing, and train and prepare all personnel for: ● situations that may be more extreme (more rains/higher floods and more prolonged droughts) ● possible interventions (preventive CBHFA as well as emergencies) in new areas that have been spared the worst effects in the past. ● In addition, consider if training in accessing and interpreting the seasonal forecasts can be relevant for district branches. Work with technicians and government to discuss strategic positions near very likely affected areas for pre-positioning WASH-related emergency relief material.	As above. In addition disseminate probabilistic forecast information and prepare local branches and volunteers for possibly higher flood levels than previously experienced. In communities where National Society supports community-based projects, conduct house-to-house visits to deliver health messages and information on diarrhoeal diseases prevention and WASH interventions – and warn of possibly new extreme flood levels this time.	As above. Only difference is that all involved should have been trained in being ready to face an unprecedented extreme event. Initiate community-based surveillance coordinated with other agencies.	As above. Only difference is that all involved should stand ready to face an unpre-cedented extreme event and establish emergency WASH facilities at new safe sites. Keep community-based surveillance efforts.	Support to reconstruction of WASH facilities with future risk levels in mind: flood-protected latrines and drinking water supply Consider "extra-safe" location of water source for emergen-cies. Keep community-based surveillance efforts.

3. What information sources are available at different times to aid decision-making (years, months, weeks, days, hours ahead)? Examples in red font	Climate projections from Weather Agency and IPCC (but National Society needs assistance in interpreting likely implications and targeting areas for WASH programming). Diarrhoeal disease burden information in the region of interest (distribution, incidence, vulnerable populations, etc.).	Seasonal forecasts available on Weather Agency website – but mainly useful in La Niña and El Niño years; IFRC MapRoom seasonal forecasts are distributed monthly to subscribers.	Weather forecasts available through all media. NS gets direct mail with warnings. Weekly reports of diarrhoeal disease at the local level from health authorities.	Weather forecasts available through all media. Daily reports of diarrhoeal disease at the local level.	Local DM authorities report local situation via government channels; NS can access information. Cases identified.	

Take-home messages for the discussion on Health and WASH strategic planning over time:

1. When people have better water and sanitation facilities, they are less vulnerable to heavy rainfall. (Re)construction of WASH facilities should be planned with the risk of more extreme rain/drought events in mind (e.g. better protection of water/latrine facilities, and enhancing water harvesting structures instead of 'just' drilling deeper' for more water, depending of local context, of course).
2. Community-based surveillance can help reduce disease spread and disease burden, especially on the most vulnerable populations.
3. Better risk reduction, preparedness and response to floods is key in a changing climate.
4. Early warning information (seasonal rainfall forecasts and more short-term forecasts) can be a good way to better prepare for the health effects of extreme rainfall. It is a neutral (non-political) determinant for action, and can now be coupled to DREF Forecast based Action (FbA).
5. Early Action Protocols (for the FBA DREF window) will need to contain multiple health related preventative actions: actions that can be taken to reduce the burden of disaster related diseases.

Some more suggestions for questions to guide the discussion:
- What can the National Society do to improve the water and sanitation coverage in the country?

- What can the National Society do to prevent diarrhoeal diseases in the country?

- Why will appropriate water and sanitation even more crucial as climate change manifests itself more clearly?

- Thinking about climate change impacts, are there any areas or population groups that you feel should be prioritized in your country? Explain.

- How do the disaster management, health and WASH teams collaborate within the National Society?

- As climate change is predicted to result in an increase of health issues related to extreme events, is the current way of working within the National Society as good as it could be? What kind of long-term planning for change – and extreme events – within WASH and Health might be relevant?

- How can community-based surveillance better prepare for and respond to health consequences of climate change?

- What actions to protect health can be taken if there is a warning that the next three months are likely to be unusually wet? And where does the NS staff get such seasonal warnings?

- Is the National Society currently using such *seasonal* early warning information to plan for health effects of extreme rainfall? Are health staff using this information? How can the use of such information be improved?

- Is the National Society currently using *short-term* (measured in days) early-warning information to plan for health effects of extreme rainfall? Are health staff using this information? How can the use of such information be improved?

- Communicating on climate change to communities can often be challenging. What messages should the National Society give to communities on health implications of heavy rainfall and floods? How can we encourage behaviour change communication?

- It is important to couple such messages with a message about action that communities can take. What action can the National Society advocate?

Timescales scenario exercise: Water, sanitation and health

You work in country Y. Access to water and sanitation facilities is variable. During the rainy season outbreaks of diarrhoeal disease are common, and during the dry season, people living in areas with poor access to clean water have a high risk of diarrhoeal diseases; especially children are affected.

Weather trends in the past decades indicate that both more intense rainy periods and prolonged drought periods have become more frequent; future climate projections for the region suggest that the trend may continue, so future decades may see even more variable weather – and therefore there is a risk that health and WASH conditions may continue to become more challenging. Country Y is in the part of the world where La Niña events usually causes extra wet rainy seasons (click here if you like to learn more about la Niña, a regular climate phenomenon).

How can the National Society of country Y use the 'early warning' information (below) to scale up its efforts to address the rising risks?

Health and WASH strategic planning over time **Available information** ☐	Years trend – and projections: More variable rain/drought patterns cause certain diseases to occur more often, or in new locations, and at unusual times of year. The pattern is likely to become even stronger in coming decades.	Monthly/ seasonal climate information: Wet season is approaching. A seasonal forecast for above average rainfall is provided by the Met office (due to La Niña) – this rainy season is likely to be extra wet – so increased chances of diarrhoeal disease.	Weekly weather information: Meteorological office warns that there is heavy rainfall coming which might lead to flooding in several locations, and several dry locations will likely see more rain than usual.	Daily weather information: Heavy rains are already falling in locations with poor waste treatment facilities and there is not yet any change in rainfall likely in the coming few days.	Hourly weather monitoring: Rains will continue to peak in the coming few hours; latrines have been washed away.	Response and recovery: Rainy season is over.
1. What are national/local health and disaster management programmes *already* doing to address these impacts?						

2. As rain/ drought patterns change what can the National Society do **differently** to support communities? Provide ideas for changes and improvements to the activities listed in the row above.					
3. What information sources are available at different times to aid decision-making (years, months, weeks, days, hours ahead)?					