

EARLY ACTION PROTOCOL SUMMARY

Bangladesh | Heatwave EAP

17 August 2023



Bangladesh Red Crescent Youth Volunteers celebrating heat action day 2023 to raise heatwave awareness (Photo credit: BDRCS)

EAP No:
EAP2023BD05

EAP timeframe:
5 Years

EAP approved:
27/07/2023

Early action timeframe:
2 Months

Budget: 499,930 CHF
To assist: 123,700 people

SUMMARY OF THE EARLY ACTION PROTOCOL

The IFRC Disaster Response Emergency Fund (DREF) has approved a total of CHF 499,930 for Heatwave Early Action Protocol (EAP) for Bangladesh Red Crescent Society. The approved amount consists of an immediate allocation of CHF 206,061 for readiness, CHF 44,599 for Pre-positioning stocks and CHF 249,271 automatically allocated to implement early actions once the defined triggers are met. Allocations are made from the Anticipatory Pillar of the DREF, under the DREF appeal code MDR00001. Unearmarked contributions to the DREF are encouraged to guarantee enough funding is available for the Early Action Protocols being developed.

Summary

Due to its geographic location, land use characteristics such as unplanned urbanization with low green coverage, poor ventilation, poverty, and the pre-monsoon climate Dhaka City is highly exposed to heatwaves. Hot weather or heatwaves show an increasing trend of prevalence in recent years with high impacts on lives, livelihoods (e.g., loss in the number of workdays or hours, particularly for those who work outdoors), and the health of the poor and vulnerable population, especially elderly, pregnant, and lactating women (PLW), children, slum dwellers, people who live in tin sheds or temporary houses on the roadside without a false/dropped ceiling, rickshaw/van pullers, hawkers/street vendors, day-laborers, and people with disabilities.

A study conducted by Nissan et al. (2017) shows that temperature over the 95th percentile for both day and night, as well as humidity in combination with temperature over the 95th percentile for both day and night are the best predictors of mortality, and hence health impacts. For example, the increase in mortality on heatwave days accounted for 22.3% for the day-and night temperature and 24% for the heat index respectively. The heat index (HI) is an index that combines air temperature and relative humidity, in shaded areas, to posit a human-perceived equivalent temperature, as how hot it would feel if the humidity were some other values in the shade.

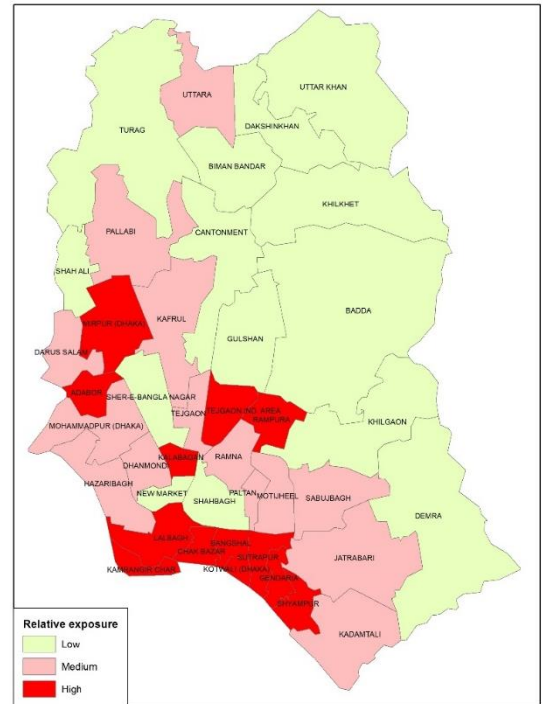
Heatwaves have the greatest impact on people who live in informal settlements/slums because those are congested and have less ventilation, most of the slums are in heat islands and have tin roof structures/Jhupri houses that absorb more heat and have less green coverage.

An analysis of data from the last 54 years (1972-2021) shows that the frequency of heat days, particularly mild heat days have been significantly increasing in the past ten years. The analysis revealed that Dhaka experienced 8 moderate heatwaves in the past 54 years. This analysis shows, the frequency of exceeding 38°C represents a 1 in a 7-year return period.

The heatwave AA pilot was started with a feasibility study in Dhaka city in 2020. The study report was finalised and published in 2021. Based on the findings and recommendation from the feasibility study a simulation was conducted in 2021 during the heatwave season to test the proposed early actions, trigger, and other mechanisms. Based on the findings from the feasibility study and learnings from the simulation the heatwave EAP for Dhaka city is developed.

Population to be served: 123,700 persons:

- 123,700 persons – Early Warning Messages (EWM) and awareness generation:
- 20,000 persons - Distribution of safe drinking water and oral saline (same beneficiaries from EWM)
- 23,500 persons (4,700 HHs) reached with Multi-purpose Cash Grants (MPCG) Each household will receive BDT 4500



Map of Dhaka city with relative exposure (Source: IFRC IM)

- 200 persons - two cooling stations
- Ambulance support inc. Persons from the cooling station + others so hard to estimate target

Impacts to be addressed:

1. Negative impact on livelihoods: outdoor workers, such as rickshaw/van pullers, workers, vendors who cannot work outside between 12:00-15:00 and lose about 3.27 days (due to illness) per season/year due to excessive heat.
2. Negative impact on health: i.e., heat rash, hyperthermia, Acute Respiratory Tract Infection (ARI)1 from excessive sweating, heat stroke, heat exhaustion, diarrhoeal diseases, dehydration, cardiovascular and respiratory problems. Exceeding day and night temperatures of 38.85°C and 35.30°C respectively will cause an increase in mortality rate by 22.3% [Nissan et al. (2017)]
3. Increase in health expenditure: particularly for those living in informal settlements i.e., during the heatwave feasibility study, 82.81% of interviewees (rickshaw/van puller, construction worker, hawker, pedestrians) reported an average increase of health expenditure by BDT 535 (in a season).

Forecast and lead time for this EAP:

Pre-Activation: When ECMWF and/or GFS issue a forecast temperature of at least 38°C (1 in 7-year return period) for 2 consecutive days or more and the heat index is 38 or more for 2 consecutive days, then BDRCS with support from IFRC will activate the pre-activation trigger and start the readiness actions. The expected lead time is 5-7 days.

Activation: When BMD and either ECMWF or GFS issues a forecast of temperature of 38°C (1 in 7-year return period) for 2 consecutive days (or more) and the heat index is 38, then BDRCS with support from IFRC will activate the EAP for a heatwave and implement early actions in the highly exposed areas, prioritizing the Thana/Ward with the highest vulnerability index. The expected lead time will be in the range of 2-3 days.

OPERATIONAL STRATEGY

1. Who will implement the EAP - The National Society

Below mentioned are the key actors who will support implementation of this EAP. They are divided into two: actors with an active role in the development and the implementation of the EAP; and actors with a potential or less active role in the EAP.

Key actors with an active role in the development and implementation of this EAP:

The Bangladesh Red Crescent Society (BDRCS)

Bangladesh Red Crescent Society (BDRCS) was constituted on 31 March 1973 by the country's President Order No. 26 with retrospective effect from 16 December 1971. The Society admitted to the IFRC on 2 November 1973. Since then, BDRCS is the member of the world's largest humanitarian network. Since its establishment, BDRCS, as an auxiliary to the government in the humanitarian field and as a member of the IFRC, uphold a large mission and vision and it offers a range of services to deal with national and international emergencies.

BDRCS has been working to prevent and alleviate human sufferings through rendering humanitarian services across all the districts of Bangladesh through its branches, in line with international humanitarian standards and adhering to the seven fundamental principles of the Red Cross Red Crescent Movement. The President of the People's Republic of Bangladesh is the ex-officio President of BDRCS. The President appoints the Chairman of the Society for a term of three years, who may hold two consecutive terms. The Secretary General, appointed by the Managing Board, heads the Society's Secretariat who is also the ex-officio Secretary to the Managing Board. The Secretariat is organized in five divisions: Disaster Management, Health Services, Organizational Development, Central Support Services and Finance and Accounts.

For implementing of this EAP, BDRCS DCRM department will play key role in coordination with other relevant departments within BDRCS particularly with the Disaster Response Department, Department of Youth and Volunteers, Department of Unit Affairs, etc.

In addition to that the Dhaka City Unit will be one of the key actors, particularly to implement the EAP on the ground. The City Unit, including RCYs and Unit Level Officers (ULOs), was engaged in the pilot phase and oriented in different components of the heatwave anticipatory action.

International Federation of Red Cross and Red Crescent Societies (IFRC)

The IFRC has been working with BDRCS for several decades since the inception of the country in 1971. The IFRC has a legal status in Bangladesh signed with the GoB. The areas of works include disaster preparedness, Anticipatory Actions (AA), response, community resilience, climate and environment crisis, health care, shelter, livelihood, WASH, and disaster risk reduction (DRR).

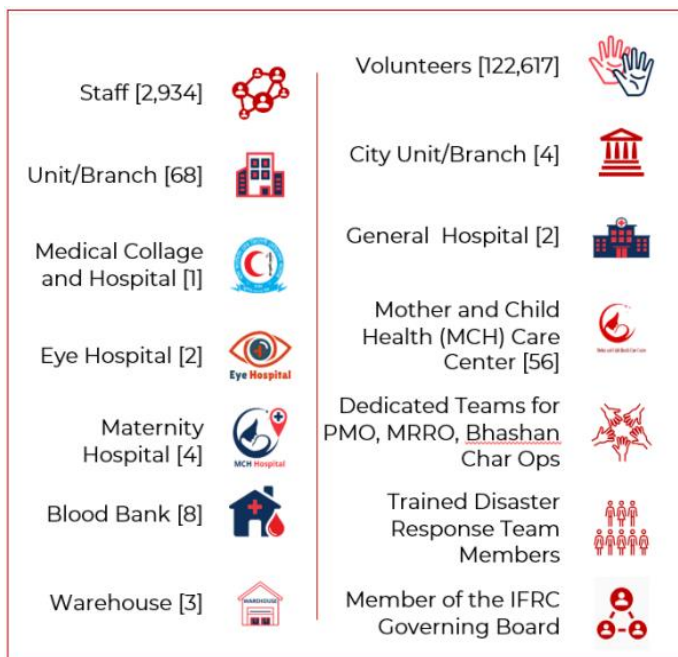
While the IFRC is continuously supporting BDRCS in Population Movement Operation (PMO) in Cox's Bazar to address the humanitarian need of the people who fled from the Rakhine state of Myanmar as well as the impacted local community for the last five years, the IFRC is also supporting BDRCS in different other programmes and humanitarian response operations with programmatic, technical, and financial supports. Currently (August 2022) it's country delegation (CD) in Dhaka and a sub-delegation in Cox's Bazar, have a team of 72 national and 9 international staff lead by the Head of Country Delegation based in Dhaka.

The IFRC is supporting BDRCS, as one of the piloting NSs of the Agenda for Renewal (AfR) – an ambition is that IFRC and its network must be known for quality, scale and leadership in early action, effective climate crisis resilience, migration, urban actions, AA, emergency response and last mile health activities. As the umbrella organization, IFRC engages in the broader strategic discussions of the Anticipatory Actions, EAP's development process and implementation and facilitates close cooperation within the Red Cross Red Crescent movement as well as with other humanitarian and governmental partners.

Linkages with other ongoing humanitarian programs and initiatives are established to ensure horizontal learning and avoid duplication of efforts. Ahead of an EAP activation, IFRC will be involved in preparatory steps such as the coordination and orientation of BDRCS Unit/s and the Framework Agreement with suppliers. In addition, IFRC will coordinate with IFRC HQ colleagues to ensure disbursement of funds as soon as the EAP is activated. During the implementation of the EAP, IFRC will provide support and guidance for the procurement, financial and PMER processes at the field level.

German Red Cross (GRC)

With more than 30 years of presence in Bangladesh and its global FbF experience, GRC is a strong technical partner for BDRCS and supports the development and implementation of the EAP. GRC provides substantial HR and technical support to ensure that BDRCS can leverage the strategic advantages of FbF. In close collaboration with BDRCS' DCRM department, GRC facilitates partnerships and alliances within the Red Cross Red Crescent movement as well as with other humanitarian and governmental partners such as the Bangladesh Meteorological Department, the Ministry of Disaster Management and Relief (MoDMR) and the Department of Disaster Management. Given that GRC is involved in FbF projects in other countries in the region, GRC Bangladesh ensures that regional linkages are established and maintained for horizontal learning and broader policy alignment. In the case of this EAP, GRC is providing overall coordination support through its FbF project staff in Dhaka. Once a trigger is reached, GRC will provide technical support to BDRCS to activate the heatwave EAP and implement the early actions.



Overview of BDRCS's strength

Red Cross Red Crescent Climate Centre (RCCC)

RCCC supports BDRCS, IFRC and GRC to anticipate changes in climate-related risks and provides technical support to the AA team by analysing hydro-met & climate data for early action triggers. In addition, RCCC fosters the exchange of climate scientists at the regional and global level and through its strong linkage with academic institutions. RCCC was instrumental in developing the trigger for heatwaves and will be consulted for its assessment when trigger conditions are reached. The RCCC together with BMD, BDRCS, GRC and IFRC will monitor the forecasts and trigger conditions.

Ministry of Disaster Management and Relief (MoDMR) and Department of Disaster Management (DDM), Bangladesh

Through its extensive humanitarian programming, BDRCS has already an excellent collaboration mechanism with the Ministry of Disaster Management and Relief (MoDMR) and the Department of Disaster Management (DDM) which is strengthened through continuous coordination and collaboration. Through advocacy effort by BDRCS and other actors, the Government of Bangladesh has mandated a taskforce on FbF/A in its revised Standing Orders on Disaster (SOD). In turn, MoDMR and DDM support BDRCS' EAP by granting access to government data on vulnerability and by discussing the best approaches to implement early actions in a logistically feasible way. The anticipatory approach provides an opportunity for MoDMR and DDM to adopt a more forward-looking humanitarian approach and integrate anticipatory action (AA) in its overall DRM strategy. During an activation, BDRCS will inform and coordinate with MoDMR and DDM.

Dhaka [South/North] City Corporation

Considering the heatwave early actions will be implemented in the Dhaka City area, the Dhaka [South/North] City Corporation is one of the key actors in this EAP. The heatwave simulation was conducted in the Dhaka South City Corporation (DSCC) area. In the simulation, the City Corporation played a key role in providing guidance, information, and necessary approval/support to implement the early actions. For implementation of this EAP, the City Corporation (South and/or North) will provide similar support with required information, approval, and other supports (water, venue etc.).

Bangladesh Post Office (BPO)

Under the government's Ministry of Posts, Telecommunications, and Information Technology (MoPTI), the Bangladesh Post Office (BPO) provides Electronic Money Transfer Services (EMTS) via its wide network of post offices. It provides nationwide coverage and has extensive experience in money transfers which makes BPO a reliable partner for distribution of cash under the EAP. The BPO was actively involved in the flood EAP simulation during which the process of cash distribution was successfully tested. In 2020, the EMTS of BPO has supported the transfer of cash to the beneficiaries under the flood EAP implementation/early action. BDRCS has signed an MoU with BPO for EMTS under FbF until 2025. In addition, IFRC signed a MoU with BPO in September 2018 with a particular focus on Cox's Bazar. The existing MoUs and experience of working with BPO (particularly with the flood EAP) will be used to transfer cash under the heatwave EAP.

"Nagad" is one of the key mobile money transfers (MMT) services in the country. It is owned and run by Posts and Telecommunications Division under the MoPTI. Considering the global pandemic and other similar events, MMT might prove a more convenient tool than physical cash. Hence, BDRCS is exploring how "Nagad" could be utilized. To formalize such an arrangement, BDRCS is in the process of signing a MoU with BPO to include Nagad in the scope of support from BPO. The signing of the agreement is expected to be completed by January 2023.

Bangladesh Meteorological Department (BMD)

Bangladesh Meteorological Department is the government institution tasked to monitor weather and provide weather forecast. Since the inception of the heatwave anticipatory action in 2021, BMD has been playing an important role. The thresholds for the heatwave EAP were finalized in consultation with BMD. BMD played an important role in conducting the heatwave simulation. BDRCS and BMD signed MoU on 11 February 2021. As part of the MoU, BDRCS has access to forecast data. Further, BMD will play an advisory role to improve the trigger model and build the capacity of BDRCS team members. In this EAP, BMD will support improving the thresholds and triggers as and when needed. BMD will provide forecast data to BDRCS and will jointly monitor the forecast, particularly during the summer season. Further, BMD will advise in the process of activation of the EAP.

Key actors with a potential or less active role in the EAP

Mobile Money Transfer (MMT) - bKash:

bKash is one of the mobile money transfers (MMT) service providers and is a subsidiary of BRAC Bank Limited. bKash provides different services to the customers, including depositing and receiving money, pay utility bills etc. For anticipatory action, the humanitarian agencies can deposit bulk amount into their wallet and transfer the money to many people electronically. The beneficiaries can either withdraw that money from the bKash agents or pay their utility bills with the money in their mobile wallet. During the heatwave simulation in 2021, considering the strict lockdown and spread of Covid-19, it was decided to distribute the money to the beneficiary through bKash which does not require physical gathering of the beneficiaries. For implementation of this EAP, bKash might be considered as one of the [alternate, back up] financial service providers (FSP) if such conditions (e.g. lockdown, pandemic etc.) prevail during the activation of this EAP.

In addition to bKash, there are other MMT services such as ROCKET & UPAY under the banks of Bangladesh available, namely Dutch-Bangla and United Commercial Bank respectively. They could also be engaged, if needed. BDRCS has a framework agreement with bKash.

AA TWG Technical Working Group

Since the inception of forecast-based financing in Bangladesh in 2015, the number of AA actors in country has dramatically increased. Hence, there was a need to harmonize and consolidate AA efforts in Bangladesh and provide a platform for collective actions on anticipatory action. Keeping this in mind, the AA Technical Working Group was established with the membership from the Red Cross Red Crescent Movement, UN Agencies, I/NGOs, and relevant cluster leads and co-leads. The members of this technical working group were consulted during the finalization of the thresholds, triggers, and early actions for the heatwave EAP. For this EAP, the members of this group might not play an active role in the implementation of the early action, but they will be instrumental in the lessons learnt and review process.

Health – Directorate General of Health Services (DGHS)

Heatwaves have a direct impact on human health which has emerged as a new public health concern for the Directorate General of Health Services (DGHS), Bangladesh. According to the National Health Policy 2011, the Government of Bangladesh is committed to find ways to reduce health impacts caused by climate change. DG Health's role in the implementation of the EAP includes sharing official information on health impacts of the heatwaves, accessing public health care facilities, advising on various precautionary measures and actions before the heatwaves. BDRCS will take the direction/suggestion/advice from DGHS to develop IEC/BCC, increase accessibility for the affected community in the public health services and coordinate with the public/private health service providers during the implementation of heatwave early actions, particularly health-related early actions.

2. How the EAP will be activated – The Trigger

Threshold for activation:

Pre-activation: to activate the pre-activation trigger, the forecast (from ECMWF and/or GFS) needs to meet two thresholds – a temperature of 38°C or more for 2 two consecutive days, and a heat index of 38 or more for two consecutive days. The expected lead time is 5–7 days.

Activation: the activation trigger has a same threshold as pre-activation. However, the source of the forecast is BMD and either ECMWF or GFS; and the expected lead time is 2-3 days.

Activation – process and responsibility: Since an automatic system to monitor the forecast does not exist, BDRCS' FbF focal point (DCRM) will monitor the forecast. BDRCS might request support from BMD and RCCC to monitor the forecast and facilitate the trigger activation. There is a two-stage trigger mechanism for this EAP: pre-activation and activation (see details below). Deputy Secretary General (DSG), BDRCS will preside the activation committee meeting.

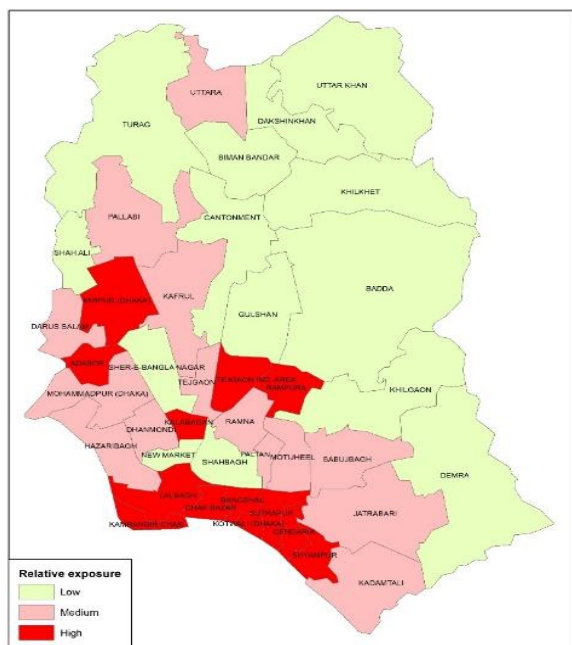
Once the trigger is reached, DSG will give instruction to Director DCRM and Director DR for taking necessary steps to implement the EAs. DR Director will lead the releasing of the BDRCS' contingency fund, HR under DR Department and resources mobilization including NDRTs. Simultaneously, the FbF technical staff of BDRCS will develop a map showing which Thanas of Dhaka city are expected to experience the most impact. The Thanas on the priority list will then be ranked according to the level of impact.

Stop mechanism: After the pre-action trigger (5-7 days lead time) the team will closely observe the forecast until the required lead-time for activation. The stop mechanism is set at Day 4, 3 and 2 (it will depend on the forecast) before the potential occurrence of the heatwave.

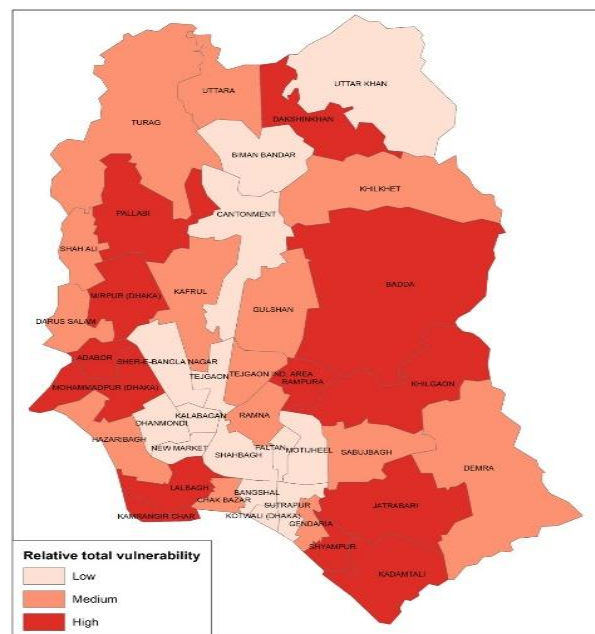
If the forecast (2 to 3 days prior to the heatwave) says that it will not hit the activation trigger, the trigger committee will stop the activation of the EAP and implementation of early actions. However, once the EAP is activated and distribution of cash and other early action started, the implementation of early actions will continue.

Selection of target groups, intervention area: the selection process is based on the following two stapes:

1. The outcomes of the risk analysis, particularly the vulnerability and exposure analysis of Dhaka city (please refer to Figure 4) will be overlaid with the forecast information to identify the target slums/wards/thanas.



(i) Relative exposure of heatwave after combining heat island, population density and built-up area using weightage



(ii) Relative vulnerability to heatwave in Dhaka city

2. This step will identify the target population. The second step will start once the pre-activation trigger is reached (with 5 to 7 days lead-time). At this stage, based on the early actions, there will be two types of targeting: a) the community (expected to be slums) as a whole (further narrowing down of the step 1); and b) the most vulnerable households/individuals. However, those two types of targeting (community or households/individuals) will depend on the requirements of each early action. Please refer below the targeting for each early action. Criteria for selection of beneficiary (with scoring) was developed and tested during the heatwave simulation in Dhaka in 2021. Those criteria will be applied (with modification, if needed) during the activation of this EAP.

Under this EAP, the target groups will be the workers (rickshaw/van pullers, construction workers, hawkers/street vendors); vulnerable groups including people living below the poverty line (elderly, PLW, PWD) and people living in tin sheds or temporary houses on the roadside without any false ceiling, slum dwellers and pedestrians. The targeting for each of the early actions has been further detailed below.

Targeting per Early Action:

a. Awareness generation and dissemination of early warning

Target: After selecting the highly impacted slums/wards/thanas, the areas for awareness generation will be selected. The selected slums/wards will be targeted as a whole. Apart from the general awareness raising, key stakeholders, including city authorities, will also be contacted with key messages and requests for their engagement and action. BDRCS targets to reach 100,000 persons.

b. Multi-Purpose Cash Grant (MPCG):

Target: BDRCS will reach out to 4,700 households through MPCG. Workers (rickshaw/van pullers, construction workers, hawkers/street vendors), vulnerable groups including people living below the poverty line such as elderly, PLW, PWD will be prioritized under the MPCG early action.

The beneficiary data collection starts with the pre-activation trigger which is 5 to 7 days before the heatwave event. At this stage, the heat island with the potentially highest impact is identified, this area however covers more affected people than this EAP can address. Therefore, beneficiary data will be collected for the whole area, but will be narrowed down when the activation trigger is reached, which is 3 days before the heatwave event. To narrow down the beneficiary data, a set of criteria was developed to identify the most vulnerable. Once the pre-activation trigger is reached, the volunteers will receive a half-day refresher training and they will go to the targeted communities/slums/wards (including rickshaw/van garages) to collect beneficiary data. BDRCS will prioritize the vulnerable livelihood groups (rickshaw/van pullers, street vendors etc.) and most vulnerable groups (PLW, PWD, chronically ill, children).

Logistically, BDRCS has sufficient capacity to carry out large-scale beneficiary identification activities. The Dhaka city unit of BDRCS has more volunteers compared to other units and will be able to use the volunteers for data collection and implementation. The volunteers will be using ODK software on smartphones to collect beneficiary information. The collected data can be analysed centrally and digitally. Data of a total of 5,000 households will be collected which will be further narrowed down (with the selection criteria/scoring) to 4,700 households. Once the list is prepared, it will be shared at the ward (ward office) and community level to ensure transparency as well as endorsement/agreement from the ward office and community.

BDRCS is exploring to select the elderly currently living below the poverty line via the MoSW's OAA programme digitized beneficiary lists, to make use of the lists to vertically expand "top-up" and give early cash transfers by pre-selecting beneficiaries in heatwave-prone areas to create waiting lists, or if this is not yet feasible then to utilize findings for future potential support to the OAA via other projects with additional resources. In the preparedness phase, a meeting will be conducted with the relevant officials to agree on data sharing of the OAA social registry with BDRCS. While BDRCS will prioritize these people (who are living in the targeted area) in the cash early action; the elderly who are identified through household data collection and not in the list of the OAA programme (but eligible), will be shared (post-activation stage) with the relevant authorities and advocate to include them in the beneficiary list.

c. Distribution of water & saline:

Target: There will be no specific targeting for the distribution of water and saline. BDRCS will distribute it alongside the early warning and awareness generation messaging and 10,000 persons will receive the water and saline. While there will be no targeting, the most vulnerable groups of people (PLW, elderly, PWD, chronically ill, children) and targeted livelihood groups (rickshaw/van puller, vendors etc.) will get priority.

d. Cooling stations and ambulance services

Target: Through the two cooling stations, BDRCS targets to reach out to 200 people. However, there is no specific target for the ambulance. Five ambulances will be on standby in the 5 communities selected for implementation of early actions. Persons with symptoms of heat related health impacts and most vulnerable people (chronically ill, PWD, elderly, PLW, children) will get priority. The ambulance service will be available for those who are in need it to go to the nearest health facility, also for non-heat related emergencies. Considering the experience from the activation of the flood and cyclone EAPs in 2020, as well as the heatwave simulation in 2021, BDRCS will ensure Covid-19 safety measures in all types of it early actions, if needed.

3. How the EAP will reduce the impact on the population – The Early Actions

Early actions, their selection and justification for selection and verification of feasibility:

This EAP based on the credible weather forecast and in-depth risk data analysis will trigger the DREF funding for implementing early actions before a disaster event or before acute impacts are experienced by the population at risk. It is an innovative approach in the humanitarian sector in terms of reducing disaster impacts through early actions.

By looking at the prioritized impact, the feasibility study report in the urban areas and an analysis of the expected impact reduction, as well as through joint discussions with key actors including, BDRCS, GRC, City Corporation, Meteorological Department, Health Institutions and after consultation and validation with major key stakeholders the following early actions were selected:

Awareness generation and dissemination of early warning: this early action will address the heat related adverse health impacts due to lack of knowledge and awareness on preventive actions. EWM will help people most vulnerable to heatwave impacts to understand and prepare extreme heat, encouraging them to take early action for themselves, and their children. For instance: the KII with health practitioners in 2022 stressed the need to sensitize government officials to consider heatwaves as a dangerous hazard. According to one Health Official in Dhaka City, if the government takes steps, the Dhaka City Corporation can play an important role in dealing with heatwaves: they can reach out to the grassroots in the urban community by visiting houses in the community, where they have the contact numbers of patients for communication; organize cluster meetings at their homesteads; have the records of 1,500 red card holders of free health services; have adolescent programmes; counselling services at community level, etc.

The KII added that heat affected people often don't know the reason why they feel like vomiting, headache, tired, etc., and therefore don't take any measures to protect themselves. Awareness raising is therefore extremely important.

In many households, the elderly and PWD are allocated to the corner of the house or a room without good ventilation (KII, HelpAge) so awareness generation will help households to understand how to take care of the most affected, such as elderly and PWD.

During the FGDs in the community (2022), people also shared that if they received weather information/early warning beforehand, they would save some money from their daily earning for the imminent heatwave days.

PLW understand heatwaves as an extreme event. Heavy sweating, heat rash (including itching), dehydration, cases of diarrhoea and ARI are some of common issues reported by PLW. Awareness needs to be raised among lactating women that they should continue breastfeeding and not replace breastmilk with water. Breast milk will keep the baby hydrated.

Distribution of water (for dehydration) & saline (as diarrheal supplement): it intends to address the heat related adverse health impacts (including heat cramps, heat exhaustion, heatstroke, and hyperthermia¹⁶) due to lack of access to safe drinking water and saline. BDRCS will distribute water and saline to reinforce the EWM. Each person, regardless of age or gender, will receive two liters of water plus two saline sachets – any person from the targeted slums, pedestrians, workers can receive the water and saline.

Multi-purpose cash grant: Heatwave can reduce income and increase expenses. This action expects to help vulnerable individuals / Household (HH) take early actions to avoid exposure to heat, reduce impact on their lives and livelihoods. This action will target outdoor workers (rickshaw/van puller, hawker etc.) and other vulnerable groups (elderly, PWD, small children, abandoned women, PLW, chronically ill, female and child headed HH, etc.)

During the FGD (2022) with PLW, many mentioned the need for an additional electric fan for their children and themselves but lack the financial capacity to buy it.

PLW have specific medical requirements during a heatwave, reporting several heat related health concerns such as heat rash, heat exhaustion, headache, etc. They are also in need of special dietary arrangements (e.g., more fluid). A mother shared her experience of a blackout during her C-section, "the blackout continued for two

hours just after my C-section, there was no power backup at the clinic. I sweated a lot, and it seemed like all the water came out of my body. Having a charger fan will be most useful at that time.”

One mother of under 5 children reported loss of appetite, restlessness, sleeplessness, headache for themselves and, sweating, itching, vomiting, stomach pain, ARI problems for their children and that they can't afford special care, such as buying an electric fan (rechargeable) for their children.

In KIIs (2022), an age friendly diet for heat waves came out as one of the recommendations for the elderly. The elderly and PWD mentioned that while they receive their Safety Net allowance in every quarter/bi-annual, they spend a major portion of the money to buy medicine. During the FGD with the chronically ill, elderly and PWD, they said that their pre-existing health concerns are aggravated during heatwave, but that they lack the money to visit a doctor or buy medicine, so they rely on home remedies. To highlight the importance of cash, one elderly shared, “if we have money in hand, we don't consider heat as a problem.”

Cooling stations: long exposure to heat can cause heat related illness (including heat cramps, heat exhaustion, heatstroke, and hyperthermia). People don't have cool places to rest during the extreme heat. This activity is primarily targeted to support those who are working outdoors and have been exposed to heat, as well as those whose health is severely affected by heatwave i.e., elderly, young babies, PLW, etc.

Heat can lead to a severe impact on health and aggravate underlying and chronic illnesses. The cooling stations will provide people with a cool place to rest and prevent people experiencing heat related illnesses such as heat cramps, heat exhaustion, heatstroke, and hyperthermia. Volunteers at the cooling stations will check for signs of heat related illnesses, also sensitizing people to these signs. This will help the targeted population to spot the signs of heat related illness themselves and to develop health seeking behaviour.

People reported a lack of cooling facilities or places where they can take a rest and to recover from long exposure to the extreme heat. during the extreme heat. Cooling stations will provide such a place of rest for outside working livelihood groups and other vulnerable groups such as elderly, PLW, children, PWD, pedestrians, etc.

Once this EAP is activated, BDRCS will take one or two days to prepare and set up the cooling stations. Hence, BDRCS will run the cooling station during the early action phase (1-2 days) and during the heatwave event (3-4 days).

Ambulance support for referral cases: the targeted communities do not have timely and adequate ambulance support. People interviewed said there were times when they failed to reach the health facility on time. The ambulance service is connected to the cooling stations and will be extended to all persons who begin to show early signs of heatwave-induced illness and who might need to go to the health facility.

The ambulance service, which will be on standby at the communities/slums itself can quickly transport sick people to health facilities to avert any kind of aggravation. BDRCS will provide this service to anyone who needs to be referred to hospital, either after observing at the cooling station or any other person who needs this support. Though the government hospitals have ambulance services, they are already overwhelmed with the high demand even during normal times.

Hospitals face excess demand and availing this service during a heatwave could be challenging with long wait/delay. Hence, the ambulance service as part of early action will fill this gap and will help vulnerable households to reach out to health facilities on time. Inadequacy of ambulance facilities and delays in their availability is a big challenge, particularly for people staying in informal and congested settlements. Because of this, people are not able to reach health facilities on time. Failing to reach health care facilities early might aggravate heat related illnesses and can even cause deaths.




PLANNED OPERATIONS

	Multi-purpose Cash	Female > 18: 7,960	Female < 18: 4,400	204,695 CHF
		Male > 18: 7,240	Male < 18: 3,900	AP Code: 081
Indicator:	Number of people (23,500 persons or 4,700 households) reached with multi-purpose cash in advance of a hazard			
Readiness Activities	<ol style="list-style-type: none"> 1. Framework agreement renew with financial service provider. 2. Cash package will revise for heatwave EAP 			
Priority Early Actions:	<ol style="list-style-type: none"> 1. Beneficiary selection and MPCG distribution as AA 2. Conduct Post distribution Monitoring (PDM) 			
	Health & Care	Female > 18: 6,430	Female < 18: 3,470	43,176 CHF
		Male > 18: 6,560	Male < 18: 3,540	AP Code: 108
Indicator:	Number of people reached with health and care interventions in advance of a hazard			
Readiness activities	Organize training on heatwave related first-aid			
Priority Early Actions:	<ol style="list-style-type: none"> 1. Ambulance support for referral case 2. Provide First Aid services. 3. Cooling station/centre 4. Distribution of safe drinking water and saline 			
	Protection, Gender and Inclusion	Female > 18: 160	Female < 18: 0	4,270 CHF
		Male > 18: 140	Male < 18: 0	AP Code: 114, 115, 117
Indicator:	Number of people reached with PGI interventions in advance of a hazard			
Readiness Activities:	5. 1.Training on PGI to the volunteers			
Priority Early Actions:	1. Ensure PGI standard throughout the operation			
	Risk Reduction, climate adaptation and recovery	Female > 18: 64,100	Female < 18: 88,400	26,309 CHF
		Male > 18: 160,900	Male < 18: 86,600	AP Code: 101, 103
Indicator:	Number of people reached with risk reduction and/or climate adaptation interventions in advance of a hazard			
Readiness Activities:	1. Orientation on Heatwave, Data Collection			
Priority Early Actions:	6. Dissemination of mass awareness message through miking			
	Community Engagement and Accountability	Female > 18: 15	Female < 18: 0	8,066 CHF
		Male > 18: 25	Male < 18: 0	AP Code: 129
Indicator:	Number of people reached with community engagement and accountability interventions in advance of a hazard			
Readiness Activities:	Training and orientation on Community Engagement & Accountability (CEA) for volunteers and staff. CEA is integrated throughout the EAP life span			

Priority Early Actions:

1. Community feedback is collected, responded to and used to guide the response.
2. Lesson learned workshop/evaluation if the EAP is activated

Enabling approaches

	Coordination and Partnerships	Female > 18: 80	Female < 18: 0	25,336 CHF AP Code: 118, 119, 127, 128
		Male > 18: 220	Male < 18: 0	
Objective:	Coordinated effort is ensured for effective implementation of heatwave early action			
Readiness Activities:	<ol style="list-style-type: none"> 1. Organize and attend meeting with different stakeholders (i.e.: City Corporation, DGHS, Hospitals, BMD, etc.) 2. International sharing & exchange visit 3. partnership, advocacy and coordination with relevant GoB and non-GO organization 			
Priority Early Actions:				
	National Society Strengthening	Female > 18: 400	Female < 18: 0	141,582 CHF AP Code: 124,125,126
		Male > 18: 400	Male < 18: 0	
Objective:	NS is strengthened and ready to implement the early action once the EAP is activated			
Readiness Activities:	<ol style="list-style-type: none"> 1. Orientation on Heatwave, Data Collection, FbF/A and EAP 2. Orientation of NDRT/NDWRT on FbF/A, Heatwave EAP & Early Actions 3. Training of volunteers on first aid (focusing on heatwave) 			
Priority Early Actions:	<ol style="list-style-type: none"> 1. Orientation on Kobo form and data collection 2. Orientation of cash distribution and monitoring to RCYs 			
	Secretariat Services			46,497 CHF AP Code: 122
Readiness Activities:	Ensure engagement of staff throughout the EAP to provide necessary support to BDRCS			
Priority Early Actions:	<ol style="list-style-type: none"> 1. Coordinate with IFRC regional and Geneva office to activate the EAP. 2. Provide technical support and guidance to BDRCS to implement early actions according to approved EAP. 			

Budget:

To implement the EAP CHF 499,930 have been allocated, split between readiness, pre-positioning of stock and early action costs as per below summary by area of intervention.

Early Action Protocol Summary

EAP2023BD05 - Bangladesh Red Crescent Society Heatwave



Operating Budget

	Readiness	Pre-Pos Stock	Early Action	TOTAL
Planned Operations	38,051	18,029	230,435	286,515
Shelter and Basic Household Items	0	0	0	0
Livelihoods	0	0	0	0
Multi-purpose Cash	1,993	0	202,702	204,695
Health	11,387	6,642	25,146	43,176
Water, Sanitation & Hygiene	0	0	0	0
Protection, Gender and Inclusion	3,321	0	949	4,270
Education	0	0	0	0
Migration	0	0	0	0
Risk Red., Climate Adapt. and Recovery	13,285	11,387	1,637	26,309
Community Engagement and Accountability	8,066	0	0	8,066
Environmental Sustainability	0	0	0	0
Enabling Approaches	168,009	26,570	18,836	213,415
Coordination and Partnerships	13,949	0	11,387	25,336
Secretariat Services	45,548	0	949	46,497
National Society Strengthening	108,512	26,570	6,500	141,582
TOTAL BUDGET	206,061	44,599	249,271	499,930

all amounts in Swiss Francs (CHF)

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