



Climate Centre



German Red Cross



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Bishkek

Kyrgyzstan



Heatwaves



Cold waves

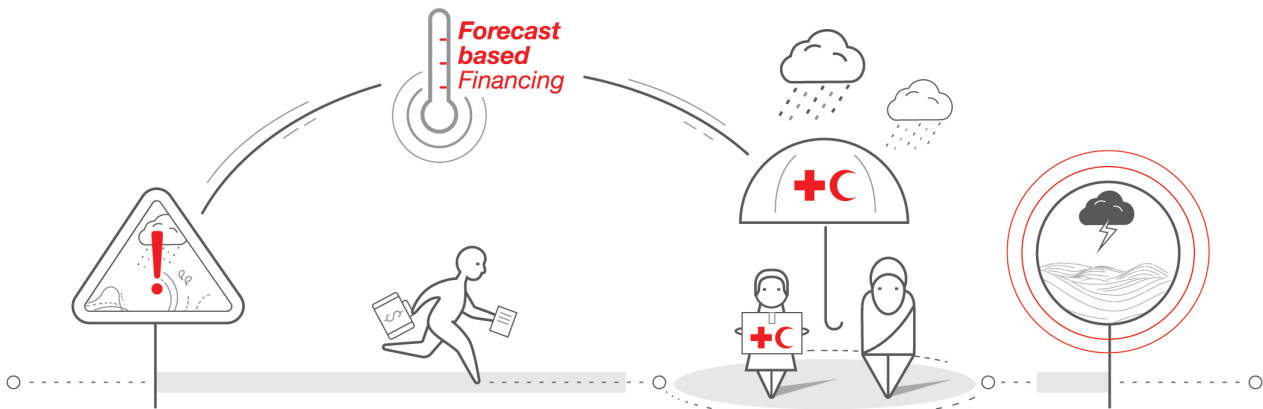
Forecast-based Financing

Kyrgyzstan

Kyrgyzstan is located within the high mountains of Central Asia; a country streaked by thousands of rivers, where floods, landslides and mudflows occur regularly. Several seismic fault lines result in frequent earthquakes and the continental climate can lead to summers with extreme heat and freezing winters. In an average year, the country suffers from 200 calamities, affecting up to 200,000 people and causing approximately USD 35 million in damages. High poverty levels, specifically in the rural parts of the country, mean that the population is very vulnerable to natural hazards. Further, according to some climate scenarios, the average temperature in Central Asia may increase by 8°C in this century; action to address the humanitarian consequences of climate change and extreme events is thus high on the agenda of the Red Crescent Society of Kyrgyzstan (RCSK). Together with the German Red Cross, RCSK has started implementing Forecast-based Financing in 2019, to reduce the humanitarian impact of extreme events on the population using anticipatory action.

The concept of FbF

Anticipation instead of reaction: with **Forecast-based Financing (FbF)**, the International Red Cross and Red Crescent Movement is reshaping the future of the humanitarian system. Based on forecast information and risk analysis, FbF releases humanitarian funding for pre-agreed activities, referred to as **early actions**. These predefined measures aim to minimise the **impacts of extreme weather events and save human lives**. For early actions to be performed quickly and efficiently before disaster strikes, **funds are allocated automatically** when a **trigger** is reached, based on weather and climate forecasts. This is defined in the **Early Action Protocol (EAP)**. A **dedicated financing mechanism** is key for taking fast and effective action before disaster strikes: **Forecast-based Action by the DREF**.



The FbF project in Kyrgyzstan

The **German Red Cross (GRC)** and the **Red Crescent Society of Kyrgyzstan (RCSK)** have been working on establishing FbF in Kyrgyzstan since early 2019, with technical support of the **Red Cross Red Crescent Climate Centre (RCCC)**, and financial support of the **Deutsche Bank Stiftung**. The project has developed and tested an EAP on heat waves and started work on the elaboration of a cold-wave scenario to be tested during the 2019–2020 winter season.

The overall objective of the project is to support the local population with early actions to protect themselves and their belongings from the impacts of extreme events and thus to prevent or at least reduce suffering and losses through timely intervention. In addition, the project aims to contribute to a strengthened cooperation between the RCSK, the National Hydro-Meteorological Service and the Ministry of Emergency Situations with regard to disaster response in the country.

and the **RCCC**.

- Kyrgyzstan's National Hydro-meteorological Service **Kyrgyzhydromet** has been involved in trigger development and provides operational weather forecasting support.
- The **Ministry of Emergency Situations (MoES)** is a special ministry in Kyrgyzstan dedicated to the response to disasters such as earthquakes, landslides or other serious incidents.
- **Provincial municipalities and community leaders** are involved in activities in their communities.
- Activations of EAPs will be funded through the **International Federation of Red Cross and Red Crescent Societies' (IFRC) FbA by the DREF**. IFRC will further provide guidance and support for procurement, Planning Monitoring Evaluation and Reporting (PMER) and finance.

Partners in Kyrgyzstan

FbF and the EAPs in Kyrgyzstan are jointly developed and implemented by the following stakeholders:

- The **RCSK** is the main implementing organisation and provides the organisational and staff capacity on the ground and is technically supported by the **GRC**



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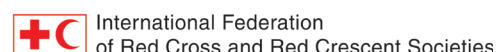
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Red Crescent Society
of Kyrgyzstan



International Federation
of Red Cross and Red Crescent Societies



Early Action Protocol: Heatwaves

Heatwaves in Kyrgyzstan can be observed during July and August. In peak summer, the temperatures in the northern and southern regions of Kyrgyzstan can reach 44°C. Heatwave forecasts and associated warnings will be provided by Kyrgyzhydromet, and the EAP will be activated when the probability of an extreme heatwave exceeds 75%. After the event, the forecast quality will be assessed using observational data.

How do heatwaves affect the population?

Heatwaves do not leave behind destruction or other impacts that are easy to see like other disasters. However, they can have significant consequences as they affect the well-being of people in different ways. Extreme heat can increase mortality among young children and elderly, often due to cardiovascular stress. In Kyrgyzstan, heatwaves are suspected to cause a rise in acute enteric infections. Further, people are often unable to attend their work, crucially reducing income. This especially concerns men and women working outdoors such as market vendors, agricultural and construction workers, many of whom often depend on daily labor and earnings.



Heatwave Early Actions

The following early actions have been identified:

- **Distribution of cash and vouchers** for vulnerable families to purchase items of paramount importance (e.g. food and hygiene products), especially hygiene products for children (soap, hand spray, wet wipes, diapers, etc.)
- **Installation of air conditioning** in nursing homes to maintain comfortable indoor temperatures (below 25°C) in common areas
- **Installation of information boards** with a simple step-by-step guide on first aid measures for diseases and symptoms linked to heatwaves
- **Conducting information campaigns on heatwave protection measures** in places where large numbers of people gather (e.g. public parks, squares, shopping malls, open markets, and bazaars). The campaigns include:
 - (a) **Heatwave first aid master classes** (sunstroke, fainting)
 - (b) **Distribution of IEC materials** with valuable information and recommendations on heatwave protection measures (e.g. leaflets, brochures, etc.).
- **Alerting the local population** about upcoming extreme heatwaves (e.g. SMS to mobile phones through the MoES' early warning system)

Further, **awareness raising campaigns** are envisaged using animated videos on heatwave protection measures to be broadcast on local TV, as well as through the RCSK website and Facebook page.



Awareness campaigns on first aid under heatstroke conditions in Bishkek.



Cold waves

Early Action Protocol: Cold waves

During the Kyrgyz winter, cold waves often lead to disasters, usually between November and February. While most parts of the country are under threat, some regions are more likely to experience extreme winters due to their geographical characteristics and high altitudes. For instance, Suusamyр valley and At-Bashi districts experience the lowest temperatures; temperatures as low as -49°C in Suusamyр and -39°C in At-Bashi have been observed.

How do cold waves affect the population?

Cold waves with extremely low temperatures cause health problems among the vulnerable and poor population groups, affecting in particular young children and elderly. Poor families suffer from challenges related to heating their dwellings, taking in enough caloric food, getting around if transportation fails, and losing livestock to the cold.



Cold wave Early Actions

The following early actions have been identified:

- **Distribution of coal and electrical heaters** for the most vulnerable families to keep their houses warm enough
- **Distribution of blankets, mattresses and floor mats** as poor families often sleep on cold floors
- **Distribution of food parcels**
- **Conducting information campaigns on cold wave protection measures**, including the distribution of First Aid leaflets
- **Placing shelters with a mobile heating system** in locations with large needs in cities and providing hot drinks during very cold days to homeless people and the general public



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In a test activation during a recent cold spell, mattresses and isolation materials were distributed to mountain communities.



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Needs assessments in the field are a crucial component for designing a FbF project.

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