From the 18th to the 21st of July 2019, Hanoi was affected by a heatwave with a heat index peaking at 47.5 °C. Three days before, alerted by early warnings issued by the Vietnam Institute of Meteorology, Hydrology and Climate Change (IMHEN), the VNRC and GRC took anticipatory actions by preparing the opening of Red Cross cooling centres.

One pre-identified facility (local ward Red Cross office) and one tent equipped with cooling system were set up to offer an air-conditioned rest place for vulnerable populations of the Co Nhue 1 ward. These facilities have been managed by VNRC volunteers who provided water, cold tea and fresh towels to the visitors. In each community cooling centre, volunteers trained in First Aid were present and awareness for preventing and dealing with heat related health impacts was provided. The community cooling centres allowed street vendors and other vulnerable persons working in the streets (builders, shippers) to have a much-needed rest to recover from long exposure to high temperatures.

Opening community cooling centres is one of the Early Actions selected for the “FbF Ready” project. Another action consists in the retrofitting of habitations in slums (shading roof) and the procurement of fans with cooling systems. In addition, as income has been identified as a key barrier to access to cooling device ownership and use, cash distribution to subsidize utility bills will also be also tested for the poorest households. The community cooling centres will be complemented by Red Cross cooling buses which will travel the main streets of Hanoi and direct the vulnerable population to the pre-identified centres.

The Early Action test was honored by the presence of the VNRC Vice-President – Madame An, and coincides with the launching at UN headquarter in New York of the Heatwave Guide for cities by the IFRC President – Francesco Rocca. This new document from the RCRC Climate Centre aims to help cities to prepare for heatwaves that are among the world’s deadliest types of natural hazards.
EXPECTED OUTCOMES

Heat waves are a significant public health hazard in Vietnam, particularly for vulnerable population groups such as elderly and low-income group working in outdoor jobs. Heatwave event is associated with a 20.0% increase in hospital admissions for all causes and 45.9% for respiratory diseases. The results of KAP surveys conducted by the project team show that 66% of the persons from vulnerable groups (elderly, slum dwellers, builders, shippers, street vendors) have experienced four to six symptoms of heat exhaustion during heatwaves. Thus, the aim of the Early Actions is to reduce the occurrence of heat related symptoms in the targeted population by providing cool shading places during day-time to people earning their living in the streets and by improving sleeping conditions of people living in slums and poor habitations. Indeed, having regular rests in cooler environment is a very efficient way to avoid the body temperature to increase, and therefore to prevent from potentially dangerous effects of heat exposures such as a heatstroke.

Builders take much-needed rest in a Red Cross Cooling Centre to recover from long hours working under the sun.

Local biker in a Red Cross cooling Centre refreshes his face to recover from heat exposure.

Builders take much-needed rest in a Red Cross Cooling Centre to recover from long hours working under the sun.
INITIAL RESULTS

In total in 4 days the two centres received 479 visits. 211 persons stayed about 10 minutes in average in the centres, and 19% came more than once. 26% of the visitors were for-hire-daily-workers, 23% builders, 14% bikers/shippers and 9.5% street vendors. The main reason of their visit was to drink water (93%), to have a rest in a cool place (45.5%), and to receive advice about how to better cope with heat (20%). The visitors showed the same heat related symptoms than the ones observed in the KAP surveys: thirsty, excessive sweating, feeling hot / increased temperature, feeling weak/tired. After their visit to the cooling centre, 66.8% declared that they felt better or really better, and as a result 90% recommend to re-open the centres when an heatwave will be forecasted. Thus, the cooling centres reached the targeted groups and were socially well accepted by the local population and authorities. The test has been showcased on local and National TV, Facebook page and in Newspapers as an innovative and relevant initiative. Scaling up in 15 wards will further contribute to confirm the positive impacts of this Early Action and should provide information on the effectiveness of the action in reducing the occurrence of heat related symptoms.

HOW WERE THE EARLY ACTIONS SELECTED?

The selection of Early Actions started the first year of project by a literature review which aimed to better understand the impacts of heat waves on people’s health. Specific articles on Vietnam context allowed the project team to gradually target the most vulnerable populations and to focus mainly on street vendors, builders, shippers and elderly and young children living in slums.

The literature review was complemented with a stakeholder analysis to identify possible stakeholders interested in working on heat waves and to gather inputs.

Then the study was extended and deepened with one rapid Risks Assessment survey conducted in July 2018 during hot weather event, and by two Knowledge, Attitudes and Practices surveys conducted in six wards with more than 1,200 respondents selected randomly amongst street vendors, for-hire motorcycle drivers, construction workers, slum dwellers, elderly and parents of under 5 years old children (see Newsletter Update#3). The results of those surveys were completed with Focus Group Discussions and in-depth interviews to investigate the target population coping mechanisms to heatwaves and their possible barriers.

The next step consisted in participatory workshops involving local red cross and local health centres to brainstorm on the possible solutions and actions to lessen the effects of heat waves on the targeted groups. For this purpose, the results of the surveys served as the basis for a theory of change for each target group and for the selection of three Early actions.

Once tested, the three Early Actions will be assessed for final selection based on criteria such as their feasibility (possibility to be implemented within the lead-time of 4 to 6 days), effectiveness to reduce heat health impacts, social acceptability, value for Money/Efficiency, and potential to be scaled up / replicated.
Theory of Change for the setting up of Red Cross Cooling Centres