**TERMS OF REFERENCE**

**Heat Risk Perception Study**

1. **Background**

Extreme heat is rising globally and is posing health and livelihood risks to communities around the world. Often called the ‘silent killer,’ heatwaves have killed thousands of people in recent years. The past eight years have been the hottest on record and this trend is likely to continue due to climate change. Heat stress refers to conditions of high temperature and/or humidity, hazardous to human health and natural systems.

Heat stress can impact nearly all sectors of society. Most importantly, heat stress poses a serious threat to human health and well-being and can be deadly. Heat stress exacerbates pre-existing health conditions such as cardiovascular disease and respiratory illnesses, kidney disease, causes heat strokes, cramps and exhaustion, and increases the rate of transmission of food and waterborne diseases. In addition, heat stress makes outdoor work increasingly difficult and can have large economic and health consequences for a wide range of occupations as productivity decreases and work hours are lost.

The COCHAP project aims to build climate resilience of urban communities, with one component of the work focusing particularly on extreme heat and expanding risk knowledge and strengthening local action in San Lorenzo, Nacaome, and Choluteca in Honduras. The project will work with local governments, National Meteorological and Hydrological Services and communities to reduce the impact of extreme heat in cities.

In many countries there is a lack of public heat risk perception, which results in inadequate preparedness and response during periods of heat stress. A lack of risk perception, both by the public and in some cases, leaders, can result in inadequate preparedness for current and future extreme heat risks; especially in tropical and sub-tropical regions where it is relatively warm year-round. Often, little is known around levels of perception among the public and which communication strategy is best to reach the respective target groups, particularly those most at risk.

1. **Objectives**

The goal of this research is to conduct a heat risk perception study of vulnerable groups in the cities of San Lorenzo, Nacaome, and Choluteca in Honduras. This study will help determine individual strengths and barriers to heat action and identify communication strategies to change behaviour and minimize heat impacts in these cities.

1. **Activities**

A researcher or research team will conduct a Heat Risk Perception Survey and Focus Group Discussions in order to meet the objectives of this research. The researcher may propose additional research methods to compliment.

The survey should cover the following themes:

* **Background information & demographics**

The survey should start with recording background information and demographic variables, such as: date of the survey, number of the survey, location, age, sex, income level, employment status, highest level of education attended, health condition, number of children in household, total household size, religion, and ethnicity.

**Note**: in order to adhere to ethical principles, the survey should only collect demographic and personalizable information that is absolutely required for the research.

* **Knowledge of heat stress and impacts**

This section should include questions around the level of knowledge of extreme heat. This includes questions around knowledge of temperature levels on hot days and nights, perception of change or increase in extreme heat over the past years, and causes or drivers of the heat.

* **Adaptation strategies and barriers**

This part should focus on identifying participants’ knowledge and barriers towards adapting/coping with heat. Questions can ask participants to list their top 3 most and least used methods to protect themselves from heat. This section should also make sure to identify barriers such as limited water, electricity, or any other barriers towards adaptation.

* **Information & communication channels**

This section should include questions around the information and communication of extreme heat from the government, other authorities, or community members. This section will be especially important for the design and dissemination of adaptation strategies.

The activities required to complete the research include:

* Determine sample size for survey
* Select target groups (inclusion and exclusion criteria)
* Select target neighborhoods
* Co-develop survey and focus group discussion (FGD) question
* Obtain ethics approval
* Train survey team/volunteers
* Pilot testing of survey
* Conduct survey and FGDs
* Data collection
* Data storage
* Data analysis and interpretation
1. **Deliverables and Timeline**
* Final survey questionnaire and Focus Group Discussion questionnaire(s) – [November 20, 2023]
* Training of volunteers – [December 15, 2023]
* Ethics Approval – [December 15, 2023]
* Report on Research Results and Recommendations – [April 15, 2023]
* PPT Deck on findings and recommendations – [April 15, 2023]
1. **Researcher [ or Research Team] Qualification and Skills**
* Master degree in environmental sciences, climate change, public health, or related field. A PhD in a similar field would be advantageous.
* Theoretical knowledge of climate change, heat risk and risk perception.
* Experience with qualitative reserach methods and survey design, e.g. designing and implementing surveys, qualitative research methods, focus group discussions, and analyzing survey data, with proven fieldwork experience.
* Experience with community engagement and outreach and ability to collaborate with diverse stakeholders.
* Excellent interpersonal, verbal and written communication skills.
* Ability to work in a virtual setting which is highly reliant on email as a primary mode of communication.
* Demonstrated ability to provide clear, concise, evidence-based, and client-oriented advice to decision-makers.
* Strong time management, and writing skills are required.
* Awareness of own positionality in working with vulnerable groups.
* Strong communication and organizational skills.
* Proficiency in written and spoken Spanish and English is required.
* *[any other qualifications you might want to add]*