# Project description

Water and Fire explored the experiences of and responses of residents in the Cape Flat region of South Africa to episodes of flooding, water scarcity and fire. South Africa's township residents are beset with legacy economic and social challenges of apartheid, poverty, and constrained development opportunities. The scale of this challenge is heightened by migration to cities, and rapid, extensive growth of formal and informal settlements, which are extremely susceptible to environmental risks. Climate change has exacerbated the risk of disasters as destructive events and episodes such as flood, drought and fire have increased in severity and frequency. The project worked with residents in three townships of varying levels of informality to find out about people’s experiences of each of these hazards: Sweet Home Farm (floods), Delft (water scarcity) and Overcome Heights (fires).

The project team worked with locally-based co-researchers with the aim of developing a set of community-driven resilience actions – the ‘Best Bets’ of the project title. The first step in this process was for the co-researchers to work with members of the core team to carry out household surveys (conducted using structured interviews) with approximately 200 households in each of the three sites. These data are available via Reshare. Following this, a series of creative and visual methods were used to facilitate the identification and selection of resilience actions that were ultimately shared with City of Cape Town officials.

# Data description

These data are responses to surveys administer via structured interviews with households in three Cape Flats townships in 2019. The surveys focused on household experiences of and responses to episodes of flooding (Sweet Home Farm); water scarcity (Delft South); and runaway fires (Overcome Heights). Responses were recorded from approximately 200 adults representing their households in each site. Due to the Covid-19 restrictions in place at the time, survey data was collected via telephone/digital device interviews. All interviews were undertaken in the language of the respondent’s choice – generally isiXhosa, Afrikaans or English. Responses have been translated into English to produce this final data set.

The survey was organised in two parts: Section One recorded mainly demographic and macro-level quantitative data. Section Two focused on respondent disaster and resilience experiences and included both quantitative and open-ended, qualitative responses.

# Understanding the data

The data were collected in response to questions included in the spreadsheets.

The Excel workbook is organised in three sheets: Sweet Home Farm, Overcome Heights and Delft South.

Each sheet includes columns that identify the day the survey was undertaken, a username that indicates the researcher who recorded the response, a code to indicate the respondent, and the mobile network the data were collected over. Following these are columns recording answers to each of the survey questions. The first row in each sheet is a header row that describes the column contents.