



Assessing the Demand for Climate Risk Insurance in Pakistan

DESIGNING A NATIONAL DISASTER INSURANCE FRAMEWORK FOR PAKISTAN

Over the last 30 years, hardly a corner of Pakistan has been spared the devastating impact of floods, earthquakes, droughts and other natural calamities. These hazards devastate poor communities by destroying their livelihoods, assets and opportunities for a better life. Many affected communities face not only immediate destruction, but also longer-term consequences that undermine their welfare: lost livelihoods, worsening food security and increasing poverty. Providing low-income persons with much needed financial assistance quickly, after a natural disaster, enables people to respond and recover faster, decreasing the likelihood of being pulled deeper into poverty. Increasing social resilience is the key to eradicating extreme poverty.

Vulnerable communities in Pakistan will experience more disruptive shocks that are typically associated with extreme weather events due to a rapidly changing climate. Rehabilitating affected communities in the aftermath of an extreme weather event puts a strain on the national budget and can hurt development efforts. It is highly likely that past development gains may be compromised and future developmental

goals may not be reached if there is an absence of appropriate disaster risk management measures to cope with the losses associated with natural disasters.

Following the 2010 floods, the Government of Pakistan mandated the National Disaster Management Authority (NDMA) to explore the option of developing a national disaster risk insurance framework to serve disaster prone communities in Pakistan. In collaboration with the Climate and Development Knowledge Network (CDKN), the Munich Climate Insurance Initiative (MCII) has been supporting NDMA in defining a national disaster risk insurance framework. At the heart of this framework is a national fund with adequate financial resources in place, and an effective, transparent distribution mechanism. This ensures that the money reaches affected communities in the shortest possible time after an extreme weather event. A representative demand study was carried out to get information on the awareness of the population with respect to weather risks and the willingness to insure themselves against it.



Goals of the Demand Assessment

- Confirm that weather-related events are a real threat to the resilience of low income communities in five study areas; improve understanding of weather-related risk and coping strategies to manage the associated loss and damage by at-risk communities;
- Assess the implicit and explicit demand for microinsurance to cover weather-related risks, designed to benefit the chronic and transitory poor in Pakistan, and use the results to inform product design and implementation;
- Inform the fund design process to determine the optimal design option that would cater to the needs of vulnerable low-income communities.

METHODOLOGY FOR THE DEMAND ASSESSMENT

Background: How does a demand assessment help Pakistan serve vulnerable people better?

To help decision makers make strategic decisions that are crucial for setting up a fund, the project undertook a rigorous climate risk insurance demand assessment of 1,413 households in Rawalpindi, Charsadda, Poonch, Ziarat and Tharparkar that are particularly prone to floods and droughts.

The selection of the five districts by project stakeholders was determined by two main factors:

- a) The frequency and intensity with which the selected districts experienced extreme weather events;
- b) Ease of access to communities and the security situation.

Methodology

The demand assessment framed a key set of questions within a solid methodological framework needed to fulfill crucial data and information requirements that would determine the size of the fund, capitalization requirements, risk exposure, as well as determine the level of payouts over time.

The survey provided valuable insights to the profile of the target group – socioeconomic data, gender and literacy to understand the types of climate stressors they faced and how these stressors affected them. At the heart of the survey

instrument lie two economic tools, *Willingness to Pay* and *Ability to Pay*, that are collectively used to forecast premium rates, future enrollment in the proposed climate risk insurance programme, as well as sustainability.

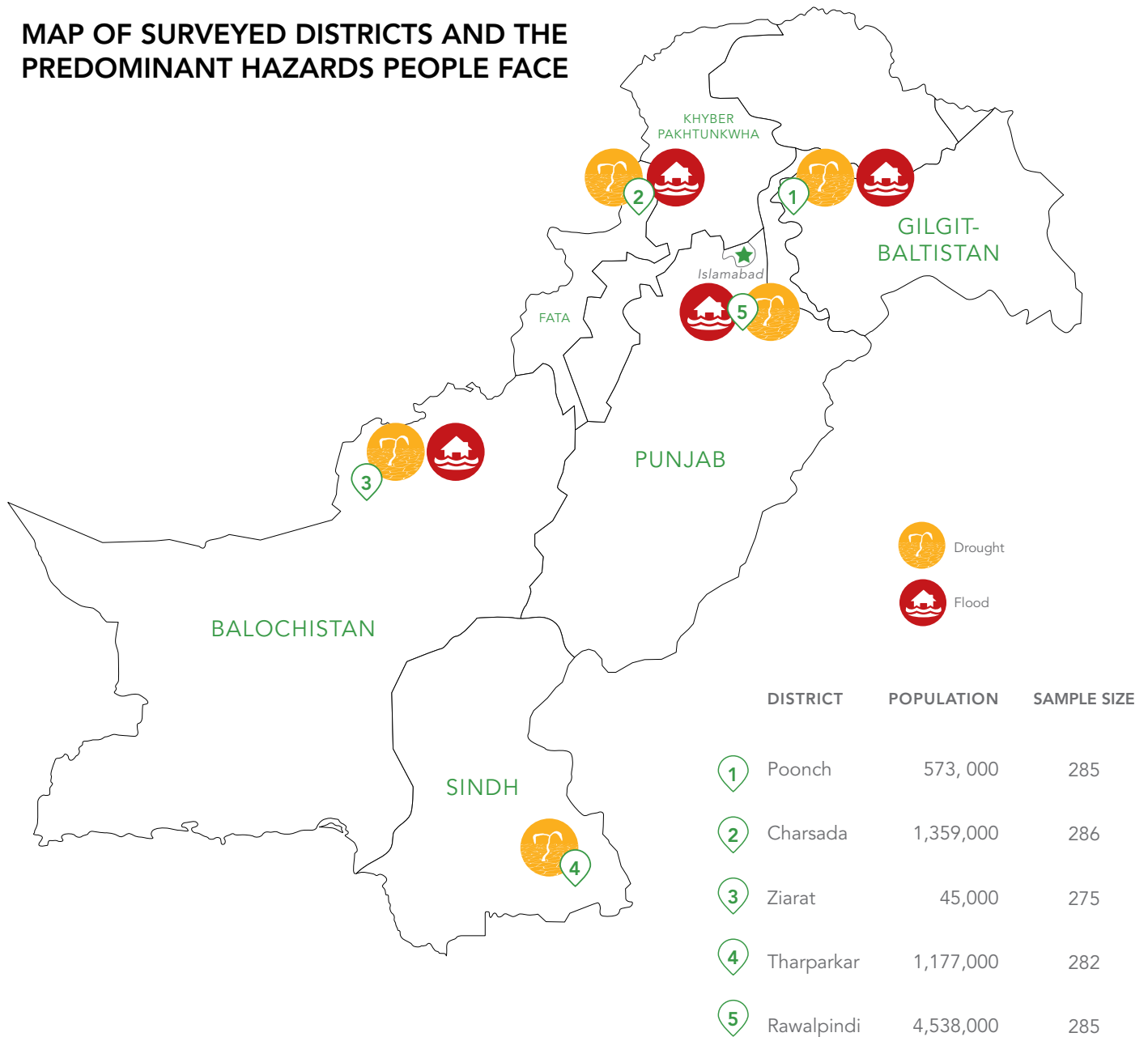
The socioeconomic information coupled with the cost benefit analyses derived from the survey, are inputs to the development of an insurance contract that addresses the needs of the vulnerable, low-income population.

Survey Instrument

Based on widely accepted sampling techniques, a total of 1,413 households were selected to be surveyed for the demand assessment by five teams of skilled and experienced enumerators coming from the same selected districts (see *map*). The surveys were assigned a specific reference number to track them to specific households and national ID cards were used to ensure authenticity of the data.

For the purposes of the demand assessment, a comprehensive survey instrument has been developed by MCII. The survey instrument builds upon international best practice, Pakistan's experiences with microinsurance and MCII's experience and expertise in designing and implementing weather index-based microinsurance solutions.

MAP OF SURVEYED DISTRICTS AND THE PREDOMINANT HAZARDS PEOPLE FACE

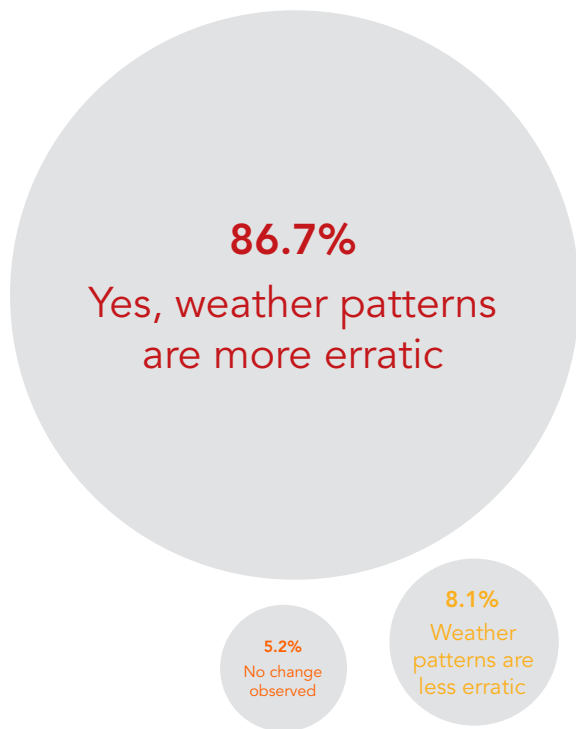


PROFILE OF A VULNERABLE HOUSEHOLD IN PAKISTAN



- Average family size is **6**
- Monthly expenditure is PKR **24,000**
- Monthly food expenditure is almost PKR **14,000**
- **65%** lack money to cope with natural disasters
- Only **13%** of households have a savings account
- Prevalence of Insurance is **3%**

RESPONDENTS' PERCEPTION OF CHANGES IN WEATHER CONDITIONS



MAIN CONSTRAINTS/ DIFFICULTIES IN ADJUSTMENT TO EXTREME WEATHER EVENTS

65%

LACK OF MONEY

26%

NONE

9%

LACK OF INFORMATION

0%

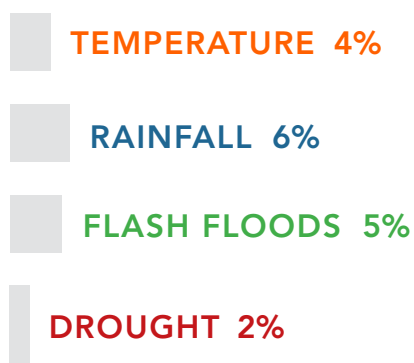
OTHER

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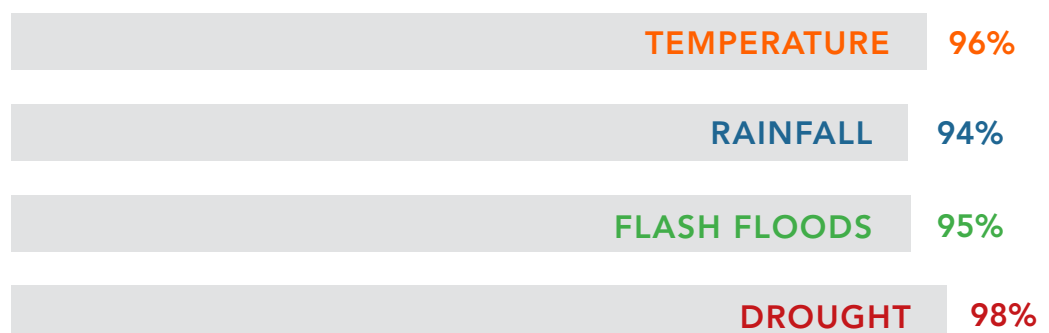
SHORTAGE OF LABOUR

DID PEOPLE ADJUST THEIR LIVELIHOODS BECAUSE OF EXTREME WEATHER CONDITIONS?

YES



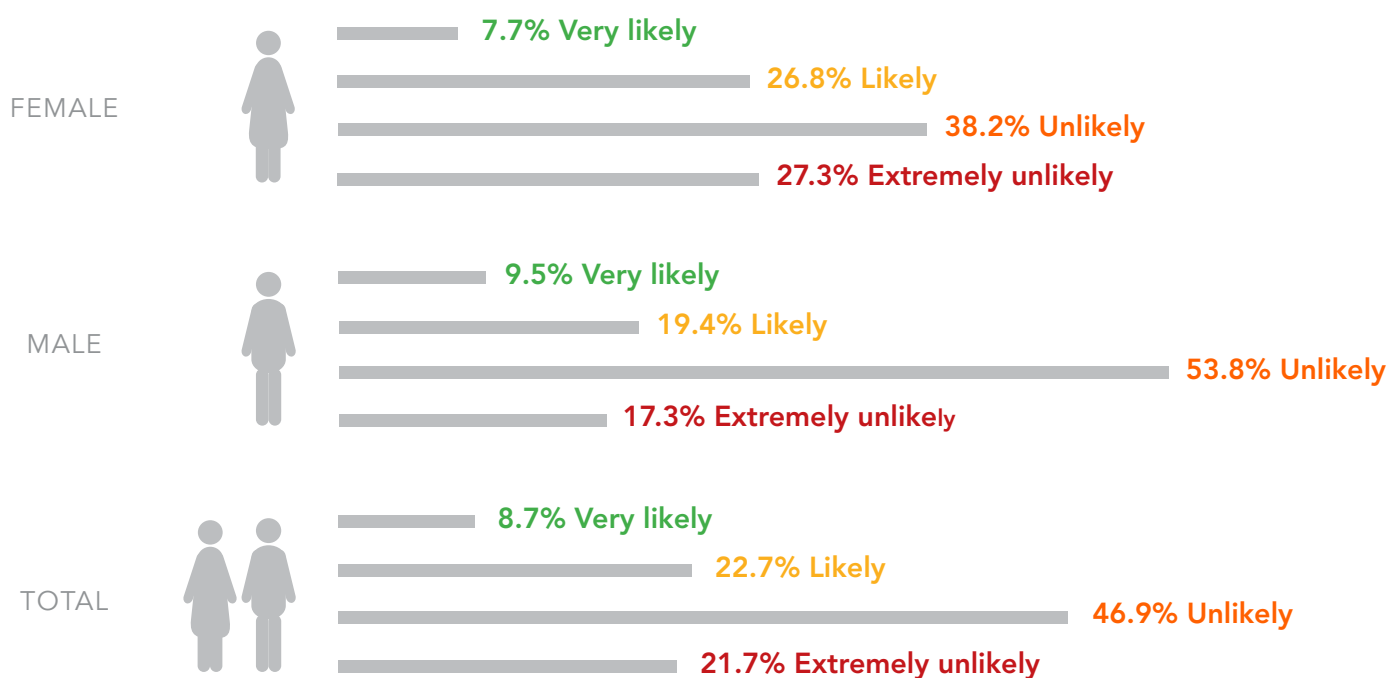
NO



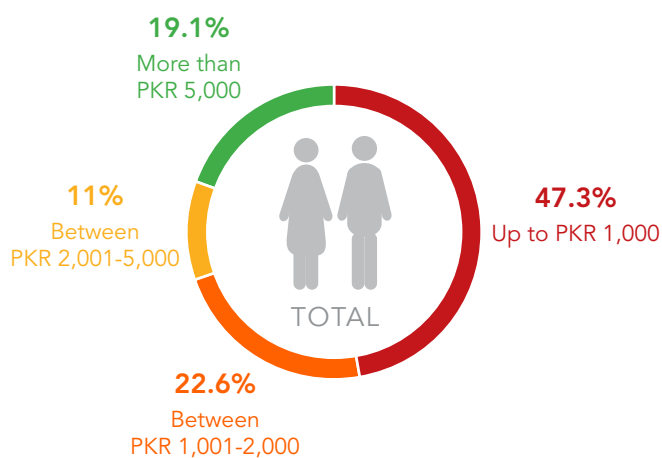
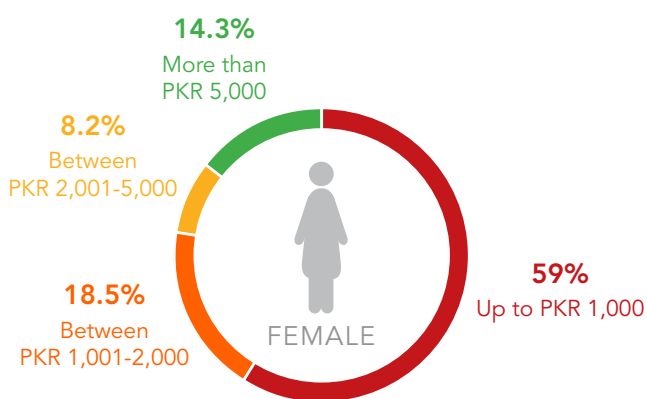
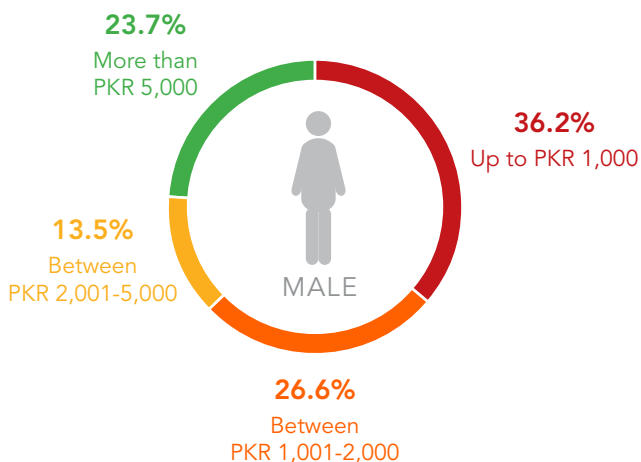
RESPONSES IN THE FACE OF EXTREME WEATHER EVENTS

EVENT	RESPONSE TO EXTREME WEATHER EVENTS (%)					
	Did nothing	Used savings	Borrowed from relatives/friends	Sold assets/jewelry	Borrowed from bank	Did not know what to do
Property/house damage	45.6	17	16.5	4.9	3.4	12.6
Crop/livestock loss	42.1	20.8	12.9	6.3	3.9	14
Heavy rain/flash flood	66.4	6	19	1.7	2.6	4.3
Drought	46.6	3.3	17.1	4.6	12.5	15.9

RESPONDENTS' LIKELIHOOD TO BUY WEATHER-BASED MICROINSURANCE



RESPONDENTS' WILLINGNESS TO PAY FOR WEATHER-BASED MICROINSURANCE



CONCLUSIONS

- The demand assessment findings reveal the severity of vulnerabilities induced by extreme weather which low-income communities experience on a very frequent basis. These findings highlight the need for appropriate risk management measures to help vulnerable persons cope with the adverse effects of climate change-driven weather extremes in their lives and livelihoods.
- The results illustrate that the measures vulnerable individuals often adopt after an extreme weather event has the potential to lead them deeper into disaster-induced poverty. Coping strategies such as doing nothing, relying on savings, borrowing from friends and family, taking credit at high interest rates, distressed sale of productive assets etc., all lead to deterioration of their livelihoods in the long term.
- There is an implicit as well as an explicit demand for climate risk insurance to increase the social resilience of affected communities and at-risk individuals over time.
- Initial estimations based on the findings reveal that the potential number of beneficiaries that could be served by the fund amounts to 247,000 households (20%) in the five study areas. However, the actual number of beneficiaries will be determined by two factors:

 - the outreach the government wants or is able to cover which, in turn, is decided by the resources available;
 - the number of people in the transitory low-income and the chronic low-income segment in each district.
- Distribution channels and aggregators must be able to make insurance payouts to vulnerable low-income persons in a timely and effective way. The selection of the right delivery channels is key to the success of this programme.
- Low insurance penetration is a result of low awareness as well as low-income levels in the five study areas. Therefore concerted efforts have to be put into client education and awareness raising, as well as developing alternative distribution mechanisms such as bundling insurance with loans in the case of people in the transitory low-income segment.

GLOSSARY

Climate risk insurance: Insurance that covers losses and damages caused by extreme weather such as flooding and drought.

Microinsurance: Simple insurance products that protect low-income individuals against specific perils, in exchange for regular premium payments tailored to their income and level of risk.

Parametric Index Insurance: Insurance payments are made based not on a policy holder's actual loss but on weather parameters reaching predefined thresholds (e.g. payments are made when rainfall exceeds a certain level).



ABOUT THE PROJECT

Funded by the Climate and Development Knowledge Network, the Munich Climate Insurance Initiative is supporting the Government of Pakistan, National Disaster Management Authority, to design a disaster insurance framework for Pakistan to help vulnerable, low-income communities rebuild lives and livelihoods in the aftermath of an extreme weather event.

TO FIND OUT MORE VISIT:

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