Making the economic case for investing in risk reduction and resilience

Zurich Flood Resilience Alliance

WTO Natural Hazards and Trade Symposium – December 14, 2018
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Relevance to trade

• Trade-enablers are often not insured

• Supply chains take large hits and may never recover

• Risk management is seen as a cost, but risk is not

• Incorporate risk-informed decision-making into the build-up of trade channels
The pre-event prevention case is our starting point

We find 1$ INVESTED IN PREVENTION

Saves 5$ IN FUTURE LOSSES (1,2)

But only 13 % GO INTO PRE-EVENT RESILIENCE AND RISK REDUCTION

And 87 % GO TO POST-EVENT RELIEF (3)

OUR MOTIVATIONS:

- DEMONSTRATE AND MEASURE RESILIENCE-BUILDING IMPACT by our alliance working model, thus enhancing the social return on the Z Zurich Foundation’s investment
- CREATE INNOVATIVE RESILIENCE SOLUTIONS by bringing in our skills & expertise and scale them beyond our alliance
- ACHIEVE SHARED VALUE BY BENEFITTING COMMUNITIES, our NGO members, public decision-makers and our customers

1: Zurich Risk Nexus: Turning knowledge into action—processes and tools for increasing flood resilience, 2015.
The Alliance in words

The Zurich Flood Resilience Alliance (“the Alliance”) is a multi-sectoral collaboration focusing on finding practical ways to help communities in developed and developing countries strengthen their resilience to flood risk.

Vision
Floods have no negative impact on people’s and businesses’ ability to thrive.

North Star
To increase social, political and financial investment in community-based flood resilience-building through public, private and third sector partnerships.
Successes and Numbers from Phase 1, 2013-18

Beneficiaries:
225,000
The total number of direct beneficiaries of the Alliance is approximately 225,000.

Knowledge:
- 341 knowledge outputs from the alliance
- 3 Flood Resilience Portals
- 13 Post-Event Review Capability (PERC) studies reaching >> 1 million people

FRMC:
The last version of the Flood Resilience Measurement for Communities has been used in over 110 communities in 13 programs within 9 countries. During its use over 1.1 million data points have been created to measure flood resilience.

Advocacy:
- Understanding Risk June 2014 – Launch of the Alliance
- Momentum for Change Award December 2014 – COP Peru
- Convergences Special Climate Prize in April / May 2015
- Practical Action / IFRC / Zurich side-event UNISDR Sendai December 2015
- UNISDR GPDRR May 2017 side-event Zurich / Practical Action / IIASA

Funding:
Phase 1: CHF 36.83m
Phase 2: CHF 20.3m
Provided by the Z Zurich Foundation

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Program countries we work in

Map indicates community-based programs, post-event analysis (PERC), research studies and public policy advocacy.
Solutions the Alliance offers: 1 - We provide learning

Our Post Event Review Capability (PERC)

- A unique forensic methodology
- Unbiased event-level learning
- Understanding why events become disasters
- We provide practical recommendations for the future

Photo Source: Michael Szonyi
Solutions the Alliance offers:
2 - We are open source

Flood Resilience Portals for cross-cutting knowledge sharing

Knowledge from the Alliance and beyond on how to build community resilience published on the Alliance’s online portals:

Global
http://floodresilience.net/

Latin America
https://infoinundaciones.com/

Nepal
http://floodresilience.net.np/
Solutions the Alliance can offer: 3 - Deep thinking on resilience

The first practically applied flood resilience measurement for communities

- A fully integrated framework to community programming
- Helps analyze problems first before solutions
- Supports impact measurement

https://floodresilience.net/frmc
Overcoming some hurdles: Disincentives to acting early

• Ex-post compensation is “visible” and easy (whereas it is abstract and hard to act ex-ante)

• Difficult to invest early: Revenue, budget constrains, political cycles

• Competing interests in
  ➢ Land-zoning
  ➢ Building codes
  ➢ Finance flows in response and recovery mechanisms
  ➢ Risk ownership
The wake up call: Move from problem statement to agreeing how to find solutions

Last year’s protection gap from Natural Hazards amounts to a staggering USD 193 billion

- Under current assumptions for population growth, urbanization and climate change: We run the risk that floods and other natural hazards may become less and less insurable
- Often, the insurance industry is focused on the classic “policy-for-premium”. Explore a “non-traditional” role of insurance to make residual risk insurable → support DRR incentives

Source: Swiss Re Institute, Sigma1/18
Here’s what we need to do
The “asks for resilience”

Stop admiring the problem. We know impacts are bad (but while “floods” are natural, “disasters” are not!)

Start finding solutions

- Better incentivize risk reduction
- Showcase that prevention is easy and cost-effective (at large scale: ~1% add’l cost)
- Identify where the 4$ go: Asymmetry of the investment (“asymmetry of flooding”)

Highlight key challenges and work to solve them

- Flood is an asymmetric problem both in space and time: Co-own risk with all of society
- Act pre-event (difficult!) as opposed to react post-event (“easy”)

https://youtu.be/Bg4kSlgn67I?t=80
How you could get involved
Your “asks” for risk-informed trade

The role of trade

• Power to influence decision-making on public infrastructure

• Ask for any new infrastructure to be risk-informed

• Ensure risk management is seen as an investment: Prospective risk reduction

• Include resilience beyond physical protection: The 5C-4R resilience approach

• See resilience-building as an institutional investment opportunity – consider the enabling environment (e.g. access)

ZFRP definition of resilience

“The ability of a system, community, or society to pursue its social, ecological, and economic development and growth objectives, while managing its disaster risk over time in a mutually reinforcing way.”
Thank you

http://www.zurich.com/flood-resilience
http://knowledge.zurich.com
More resources to understand the Alliance

Zurich Flood Resilience Program webpage: https://www.zurich.com/flood-resilience


The Alliance knowledge & learning webpage: http://floodresilience.net/

More resources – Scientific output (selection)


Disaster forensics (PERC) cross-cutting lessons (NHESS): http://www.nat-hazards-earth-syst-sci.net/16/1603/2016/


Building resilience into our communities (Nature): http://www.nature.com/news/we-must-build-resilience-into-our-communities-1.18223

The PERC repository
Learning from past disasters

The PERC manual
Learning from disasters to build resilience: a simple guide to conducting a post event review
Available at: https://www.zurich.com/_/media/dbe/corporate/docs/corporate-responsibility/the-perc-manual.pdf

Or just google “Post-event review capability”

We are very keen to hear your feedback
Please be in touch with michael.szoenyi@zurich.com
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<tr>
<th>PERC report name</th>
<th>Country</th>
<th>Event date</th>
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<td>Central European floods 2013: a retrospective</td>
<td>Germany (focus), Austria, Czech Republic, Switzerland</td>
<td>June 2013</td>
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<td>Flooding in Boulder: A Study of Resilience</td>
<td>United States</td>
<td>September 2013</td>
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<td>After the storm: how the UK’s flood defenses performed</td>
<td>United Kingdom</td>
<td>December 2013</td>
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<td>Balkan floods of May 2014: challenges facing flood</td>
<td>Bosnia and Herzegovina, Serbia, Croatia</td>
<td>May 2014</td>
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<td>resilience in a former war zone</td>
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<td>Emmental, Switzerland floods of July 2014: On a hot,</td>
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<td>sunny day, a flood alert!</td>
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<td>Urgent case for recovery: what we can learn from the</td>
<td>Nepal</td>
<td>August 2014</td>
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<td>August 2014 Karnali River floods in Nepal</td>
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<td>Morocco floods of 2014: what we can learn from Guelmim</td>
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<td>Columbia and Charleston floods, South Carolina</td>
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<td>PERC Cumbria</td>
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<td>PERC Flash Floods</td>
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<td>PERC Peru coastal floods (in preparation)</td>
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