OVERVIEW

SHOCK WAVES

Managing the Impacts of Climate Change on Poverty

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Climate Change Cross-Cutting Solutions Area
The World Bank Group

Main Message #1

Climate-related shocks and stresses, **already a major obstacle** to poverty reduction, **will worsen** with climate change


Madhya Pradesh
West Bengal
Gujarat
Chhattisgarh
India
Odisha
Myanmar (Burma)
Maharashtra
Karnataka
Bay of Bengal
Tamil Nadu
Kerala
Sri Lanka
Colombo
Laccadive Sea
US Dept of State Geographer
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat
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Google earth

Poverty dynamics
An example in India (Andhra Pradesh)

Flows out of poverty
14% per year

Decreasing the flow from 14% to 13% would halve poverty reduction

Weather events keep people poor through asset and human capital destruction

Drought, irrigation failure, or crop disease involved in 44% of the cases

Increasing the flow from 12% to 13% would halve poverty reduction

Flows into poverty
12% per year

Net flows
2% per year

Non-poor

Poor

Source: Krishna, 2007

Common shocks that drive or keep people in poverty....

Spikes in food prices and shocks to agricultural or ecosystem-based income

Natural disasters such as droughts, floods, and storms

Disease and health shocks, such as malaria, diarrhea, stunting, and mental disorders

... will be worsened by climate change

Poor people are often more exposed to these shocks – take the case of Nigeria

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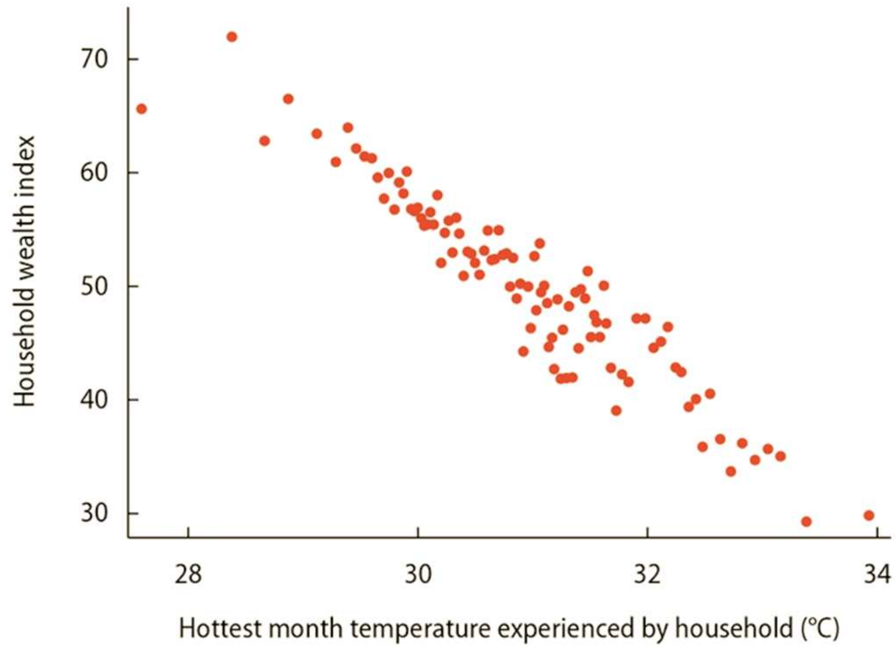
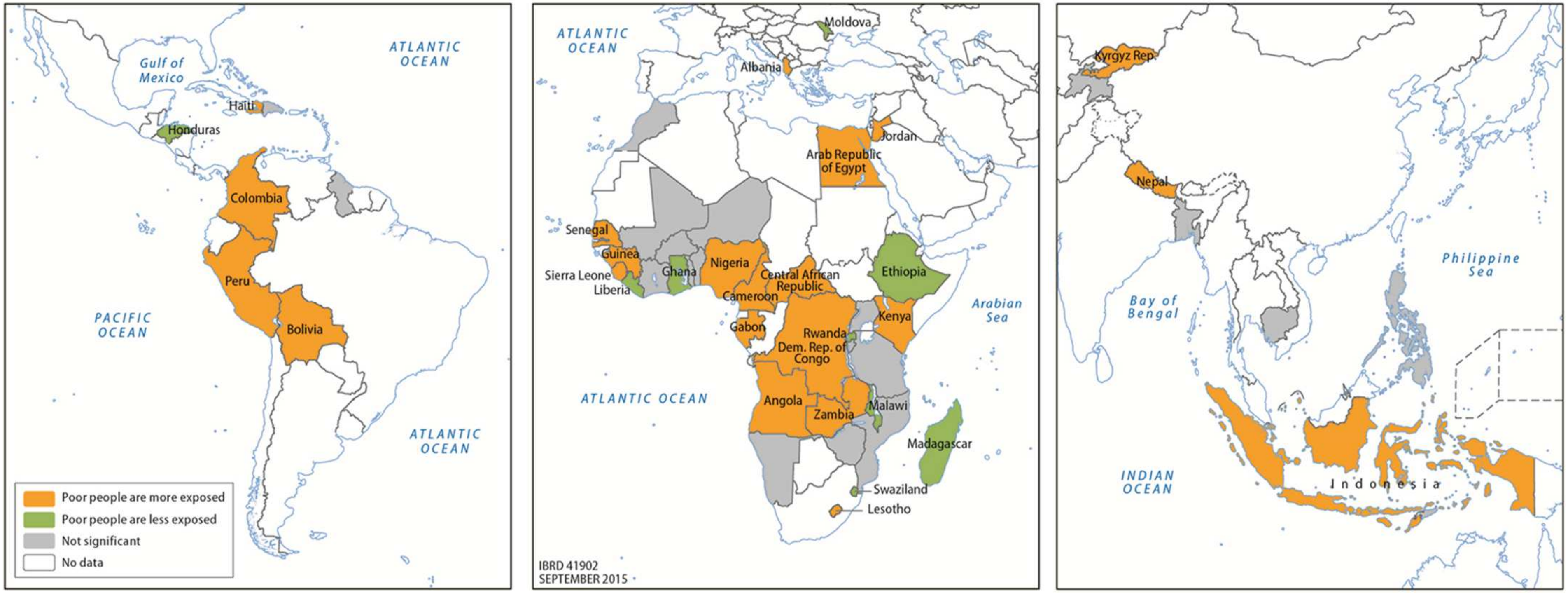
Poor people are 80% more likely to be affected by extreme heat



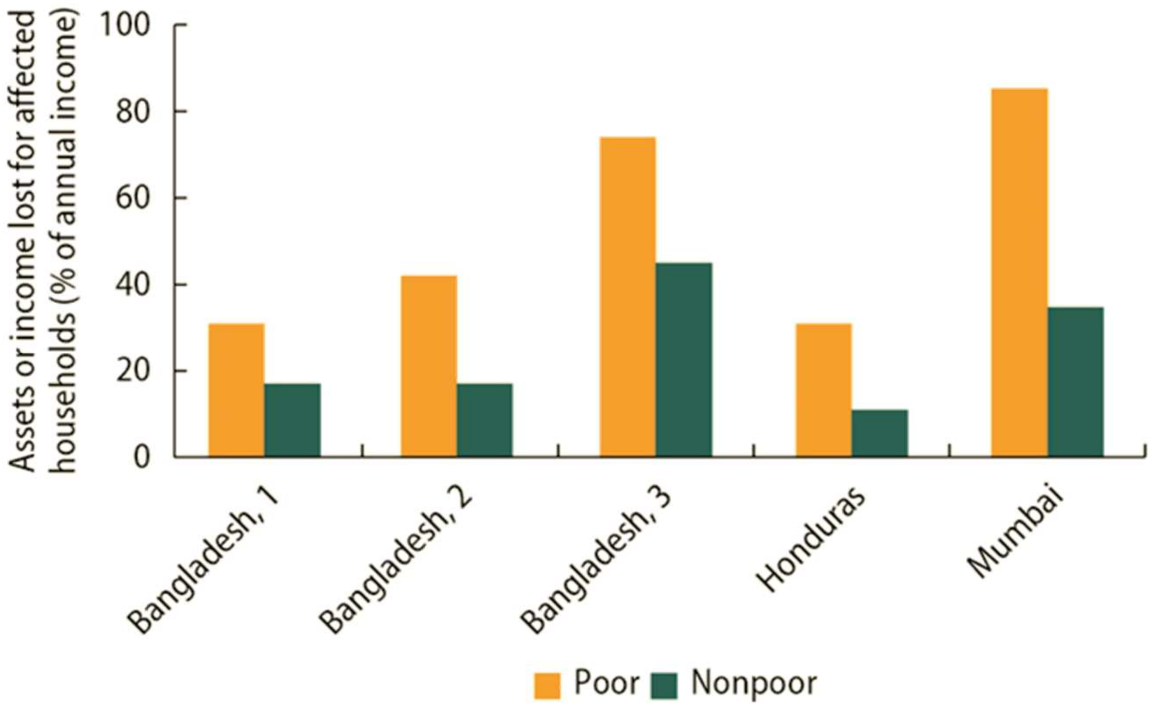
Poor people are often more exposed to these shocks – take the case of urban floods

In most (but not all) countries, poorer urban dwellers are more likely to live in flood zones



based on Winsemius et al., forthcoming

Poor people are always much more vulnerable to natural hazards



But most importantly, poor people also have less access to support

		Saved at a financial institution	Average transfer from social protection
Indonesia	Poor	8%	$0.5/day
	Non-poor	21%	$2/day

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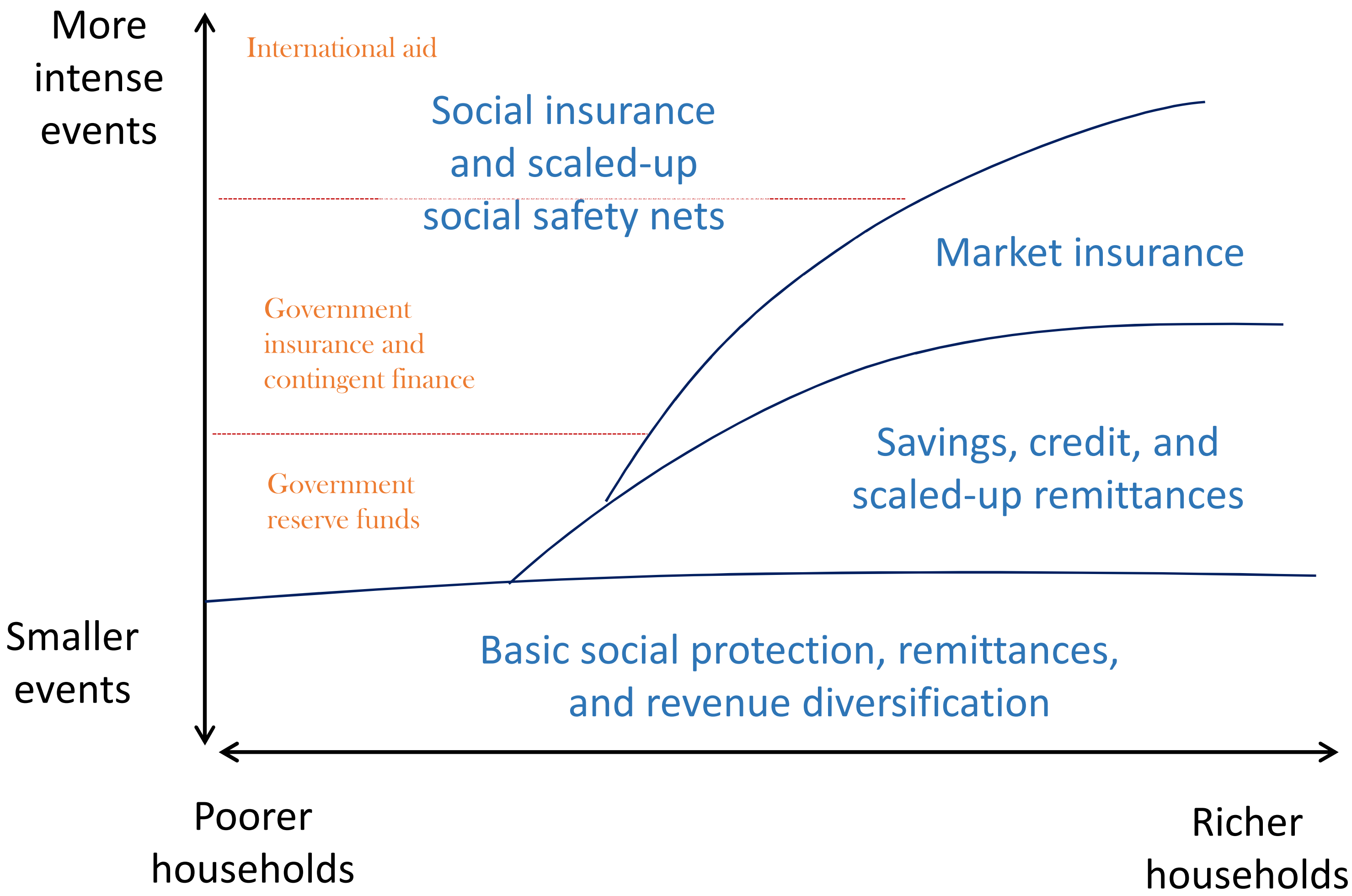
		Saved at a financial institution	Average transfer from social protection
Indonesia	Poor	8%	$0.5/day
	Non-poor	21%	$2/day
Malawi	Poor	4%	$0.05/day
	Non-poor	11%	$0.17/day

Main Message #2

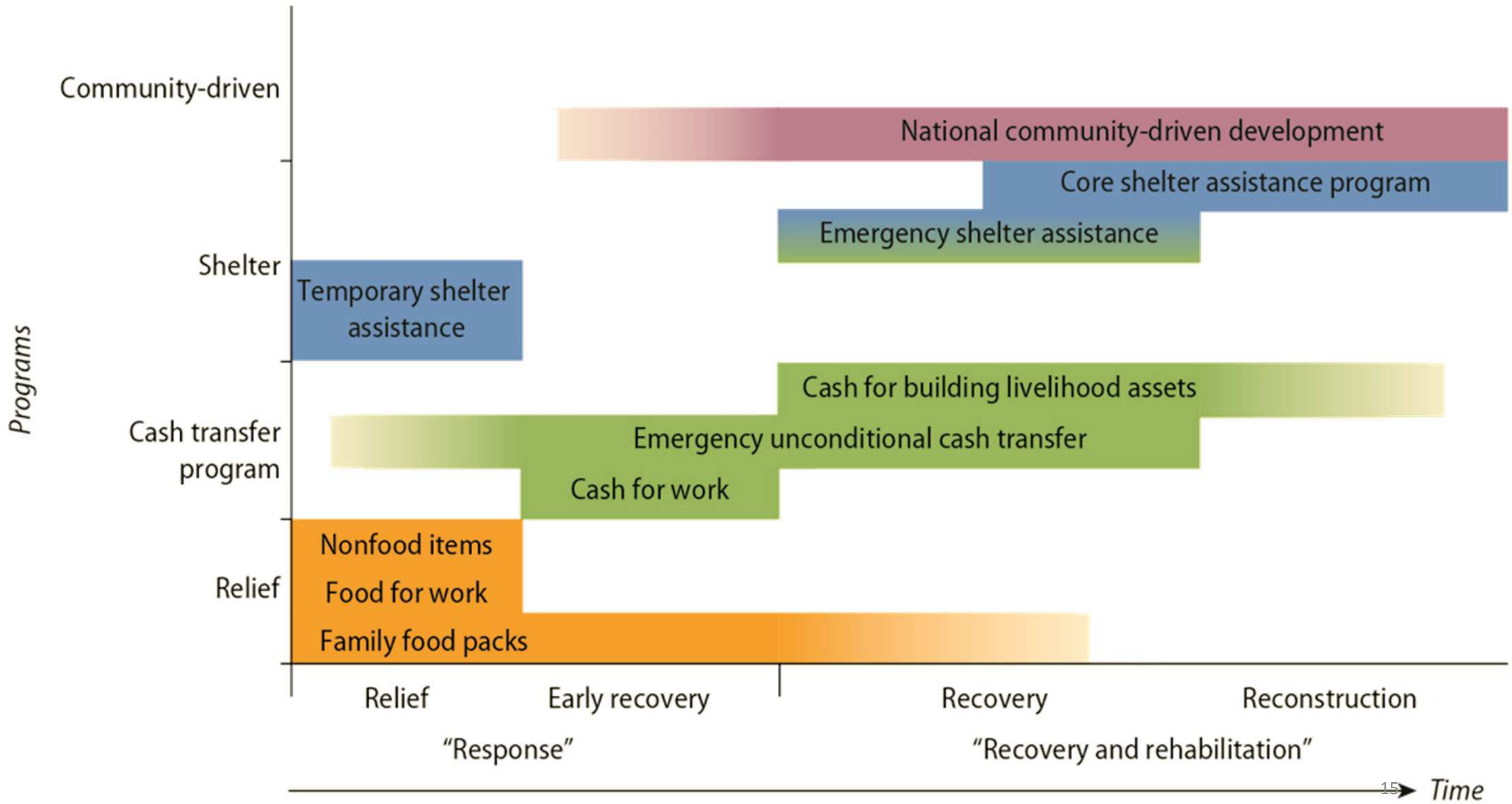
Social protection and insurance are efficient tools to protect people against these shocks and avoid irreversible impacts

People are best protected by a package of instruments



Balancing quick response and narrow targeting

The Philippines' Response to Typhoon Yolanda



Scaled-up social protection to help households cope with shocks and avoid detrimental secondary effects

prospera®
CRECIENDO JUNTOS

- In Mexico, beneficiaries of Prospera are less likely to withdraw their children from school when hit by shocks.

- In Kenya, the Hunger Safety Net Program prevented a 5 percent increase in poverty among beneficiaries following the 2011 drought.

- In the report we discuss how to scale up social protection after a shock:
  - Increase coverage (Ethiopia PNSP)
  - Increase amounts (Philippine 4Ps)
  - Create a new program (Pakistan *Citizen's Damage Compensation Program)*

- And we discuss how to finance this scale up:
  - Reserve funds
  - Insurance and risk sharing facilities
  - Contingent finance (CatDDOs)

FERDI workshop, Clermont-Ferrand, France

DISASTER RISK FINANCING AND INSURANCE PROGRAM (DRFIP)

Planning for Disasters

And the economics of disaster risk financing and insurance

Daniel Clarke and Stefan Dercon

World Bank Group and DFID/University of Oxford




GFDRR

WORLD BANK GROUP

UKaid from the British people

UNIVERSITY OF OXFORD

Main Message #3

A plan should be a **political choice**, not just a **technical exercise**

Examples where governments/donors have made a clear choice

	Mexico's FONDEN	Kenya's Hunger Safety Net Program	India's National Crop Insurance Program
Who/what to protect?	All public infrastructure	Pastoralists in Northern Kenya	Landowning farmers
Against what?	Named natural disasters	Drought-induced food insecurity	Crop loss
Preconditions?	Lower coverage for reconstructed buildings	Registration	Farmer must pay share of premium.
How implemented?	Private construction company contracted to 'build back better'	Cash transfer to bank account	Commercial crop insurance. Compulsory for farmers with agricultural production loans. Voluntary for all other farmers.
Who will pay?	Federal and State Governments (e.g. 50%/50% split for state-owned assets)	Government and donors (DFID & AusAid)	Central Government, State Government and farmers

Examples where governments/donors have made a clear choice

	Mongolia’s index based livestock insurance	Turkish Catastrophe Insurance Pool
Who/what to protect?	Herders	Homeowners
Against what?	Livestock mortality caused by dzud (extremely harsh winter)	Damage to property from earthquakes
Preconditions?	Herder must pay share of cost	As for normal home insurance
How implemented?	Voluntary commercial livestock insurance	Voluntary commercial earthquake insurance
Who will pay?	Insurer responsible for paying 6-30% area average mortality. Government responsible for paying >30% area average mortality.	Homeowners

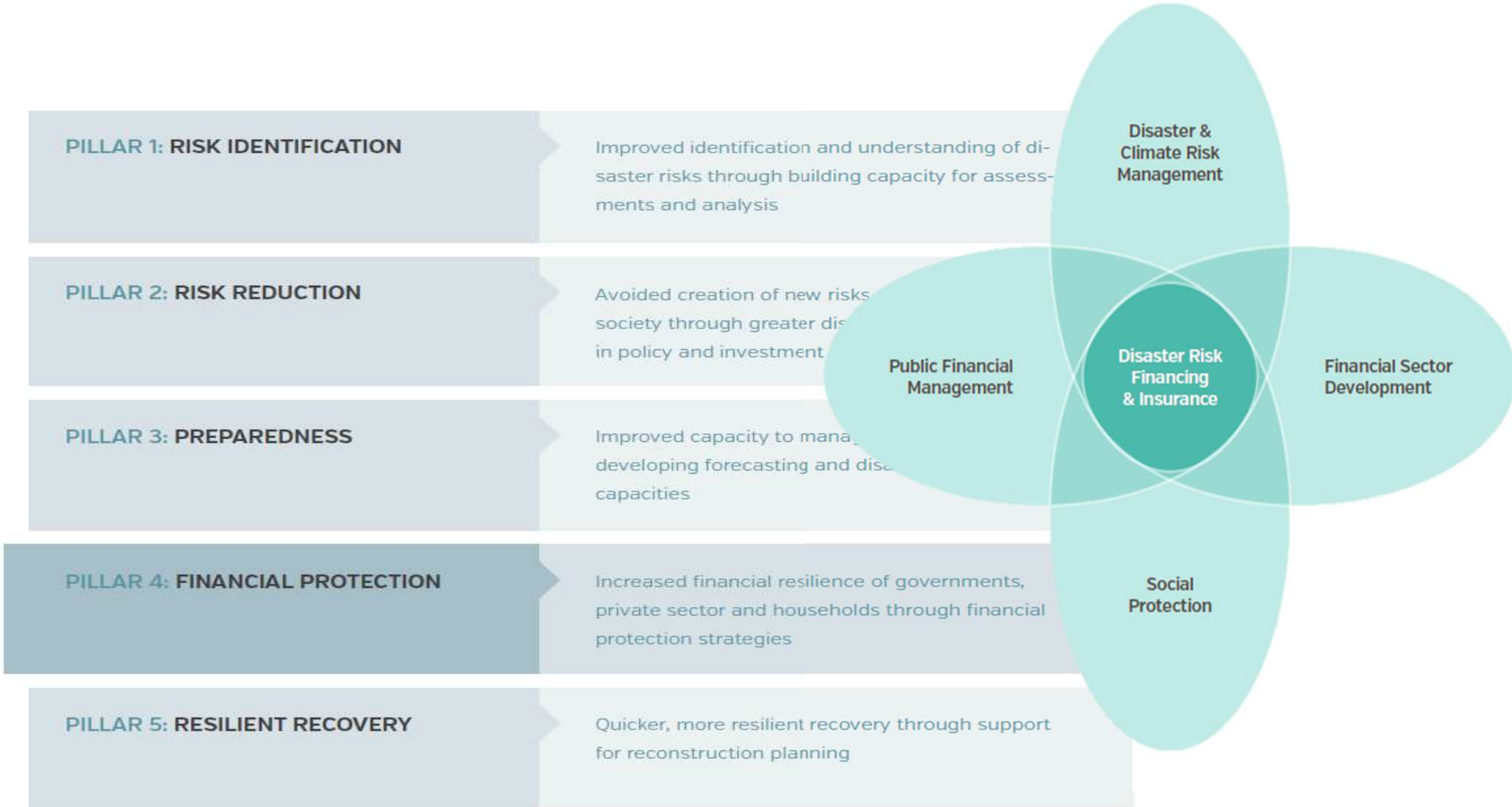
Note: Choice is either

1. Agreed by all parties; or
2. Agreed by all parties except the beneficiary. The beneficiary is then given the option to opt-in or not.

Main Message #4

A plan should be a **political choice**, not just a **technical exercise**, and it can be made more credible by **financial protection instruments**

Financial protection is one key pillar of sound Disaster Risk Management



Source: GFDRR (2012), WB-GFDRR Disaster Risk Financing and Insurance Program (2014)

But we believe that it is more than this – it binds all the pieces of a plan together and makes the plan credible

- Disasters can unravel the most carefully laid plans quite quickly
- Plans are typically just an input into highly-charged post disaster (re)negotiations
    - Drought-induced food insecurity in low-income countries
    - Agricultural production losses in middle income countries
    - Post-disaster reconstruction of public assets in devolved countries
    - Post-disaster reconstruction of private assets
- Need very strong commitment devices if want plans to actually lock stakeholders in – disaster risk finance can be strong a commitment device

A disaster risk financing strategy should be the servant, not the master, of the plan

- Easy to get seduced by individual financial instruments
  - But need to focus on the entire plan, not just one slice of it
- A good disaster risk financing strategy is the glue that holds the ex-ante plan together, makes it credible and encourages thinking through tradeoffs ex-ante:
  - Ensures money is available quickly when, and only when, it is required by the plan
  - Commits stakeholders to rules
  - Commits stakeholders to pay their share
  - Commits stakeholders to coordination on expenditures/logistics

Sensible disaster risk financing can also crowd in risk reduction

- Across developing and developed countries there is significant underinvestment in risk reduction
  - Myopic incentives given to politicians from voters
  - Governments and donors offer protection of last resort -> moral hazard
  - Well documented behavioural biases
- Credible ex-ante financial planning can clarify risk ownership, which can unlock investment in risk reduction:
  - Clarifies who is responsible for paying for the protection, and in what proportions (‘risk ownership’)
  - If investments in risk reduction would make the overall cost of protection cheaper these could be financed from the budget lines allocated for the protection.
  - Can move debate about risk reduction versus risk financing to a technical level