

Climate change and poverty report

Coordinated by
Office of the Chief Economist
Climate Change VP

LAC Workshop, September 4th

The poor are more vulnerable to climate change?

- The poor are more exposed?
- The poor have a higher direct vulnerability?
- The poor have lower ability to recover when affected?
- The poor have lower ability to adapt to changes?

- Now? And in the future?

4 Questions to Answer...

- Can climate change impacts threaten poverty eradication?
- Can poverty eradication reduce climate change impacts?
- Should we design poverty reduction differently to account for climate change?
- Should we design adaptation and mitigation policies differently because we care about poverty?

How successful are we
in mitigating climate
change by 2030?

Very successful
(and low climate
sensitivity)

Not successful (and
large climate
sensitivity)

Not so
successful

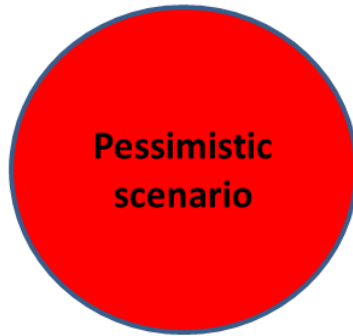
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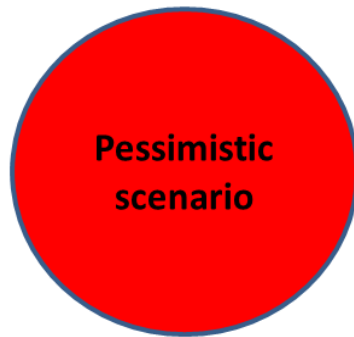
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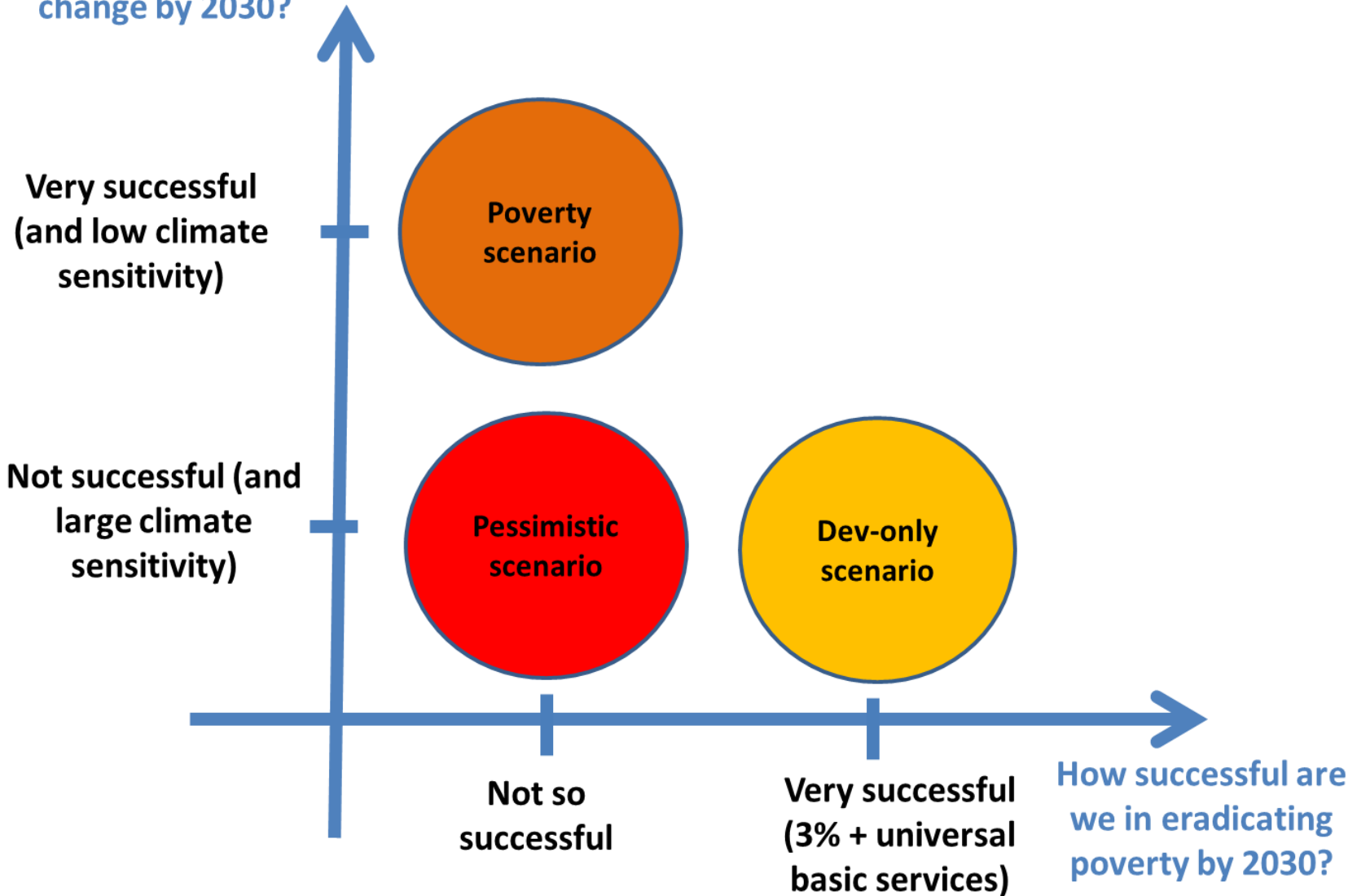


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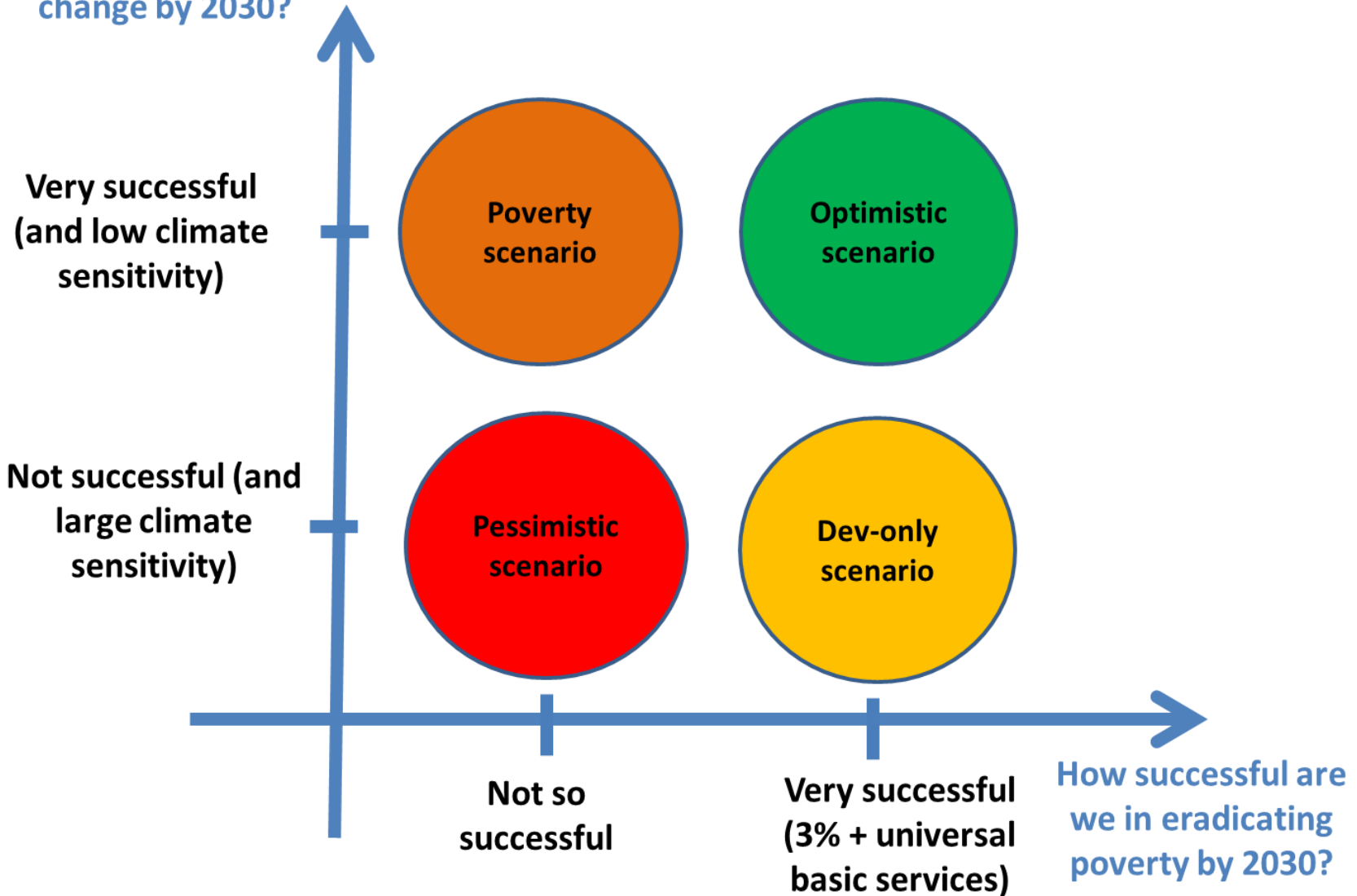
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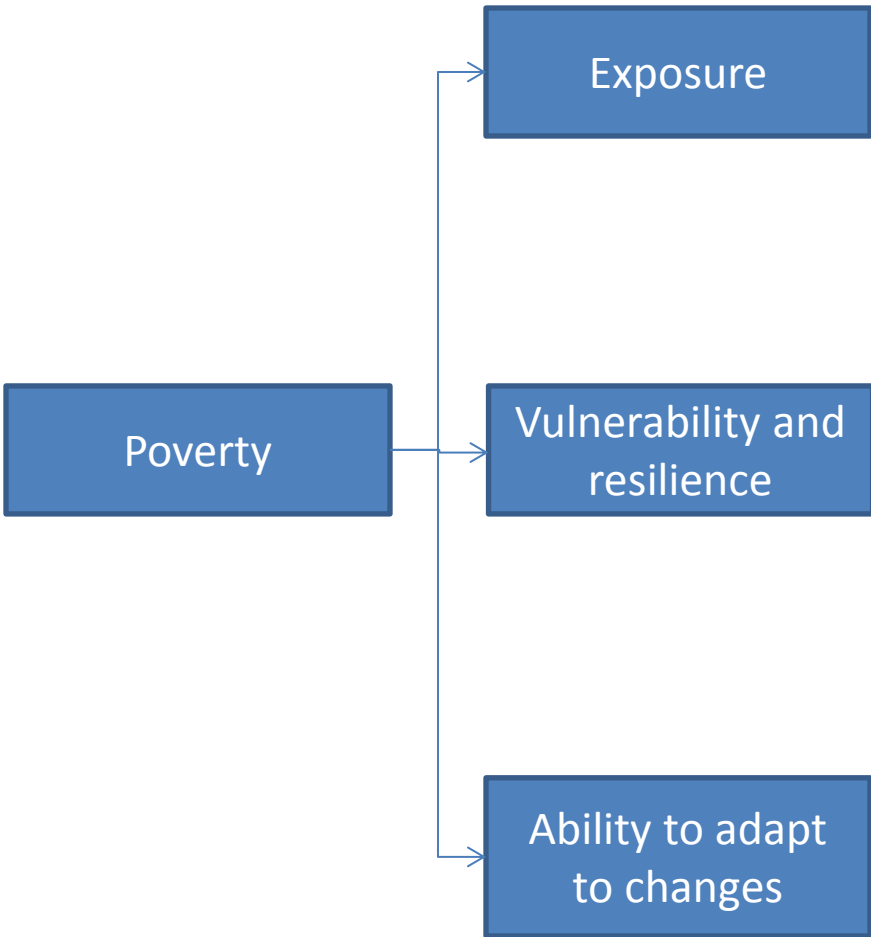
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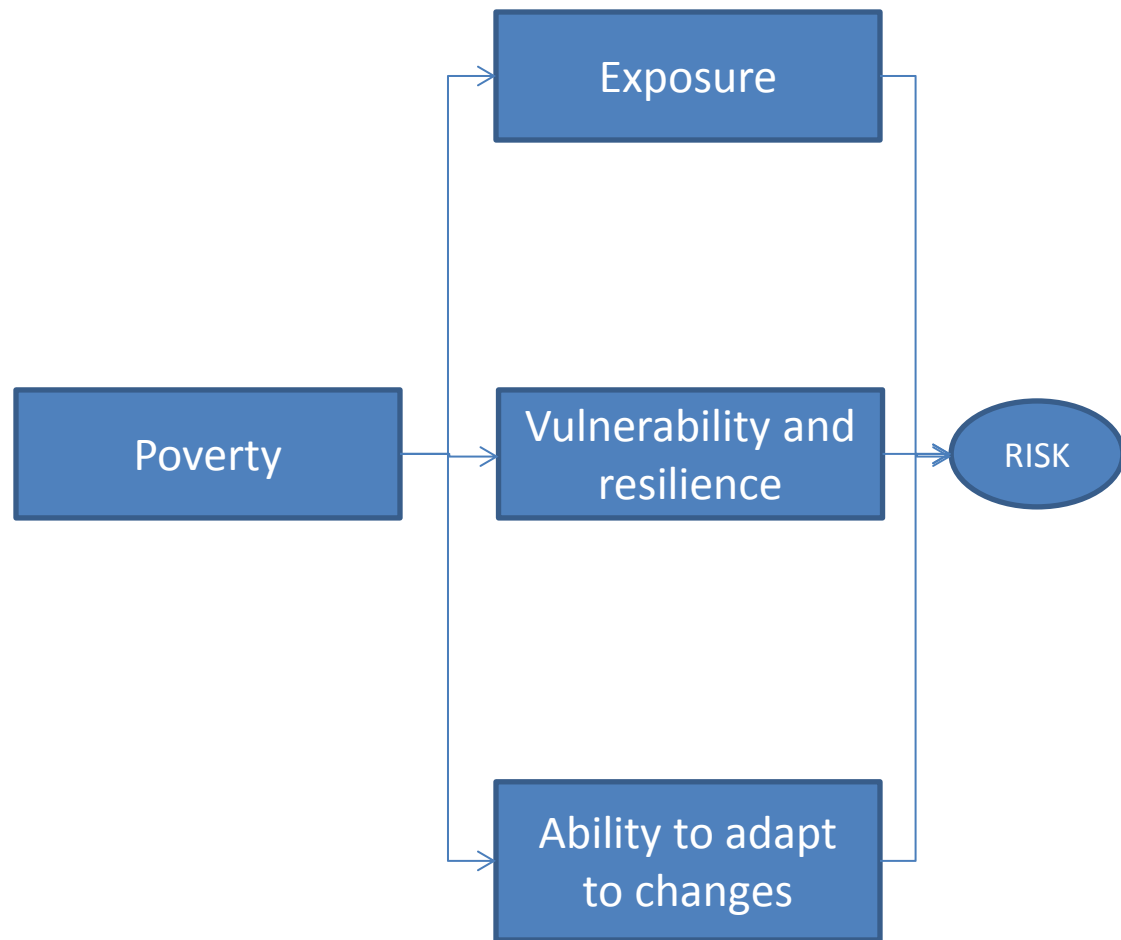


Channels

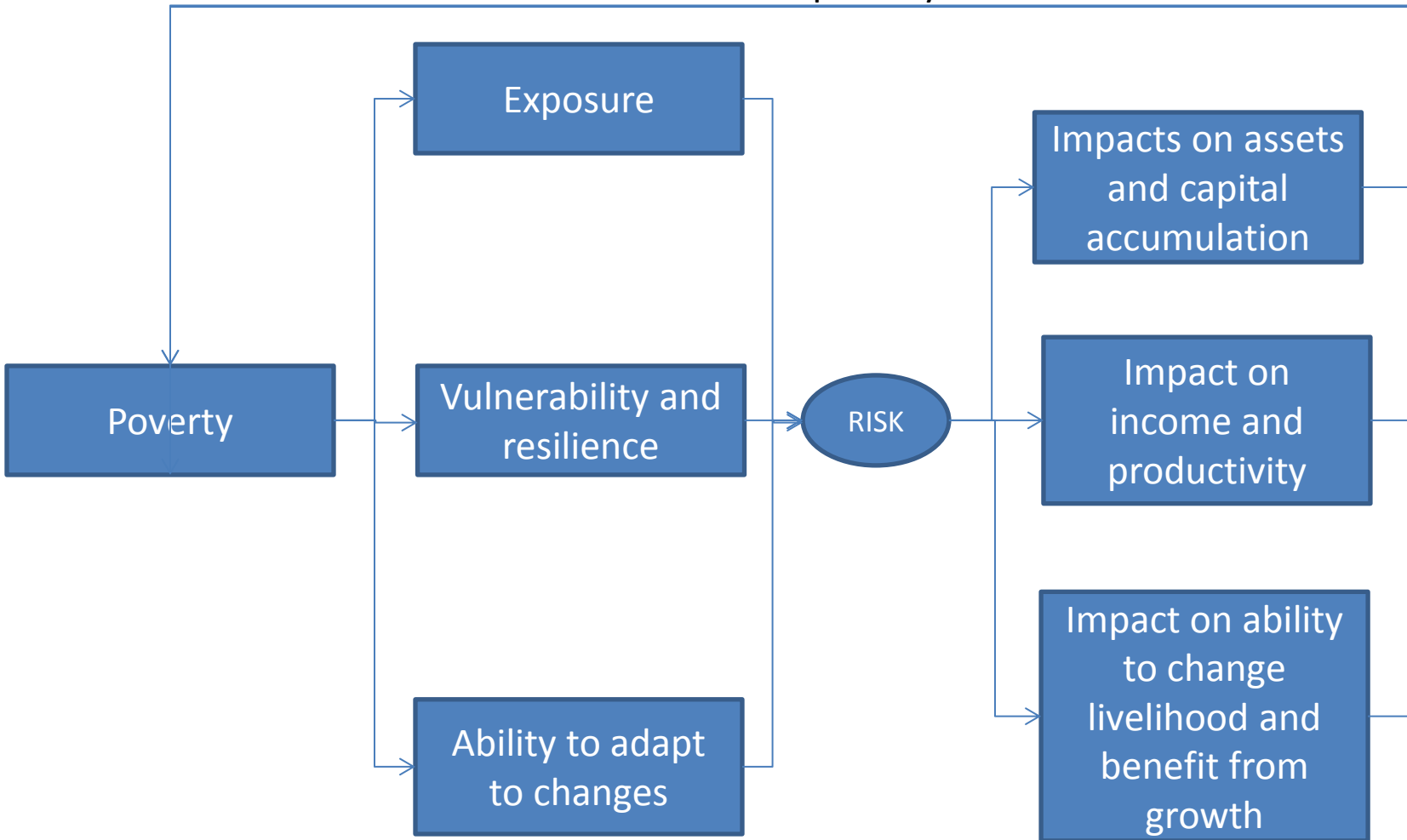
- Agriculture
 - Food prices
 - Productivity and income
- Ecosystem Services
- Health
- Natural disasters...

Poverty

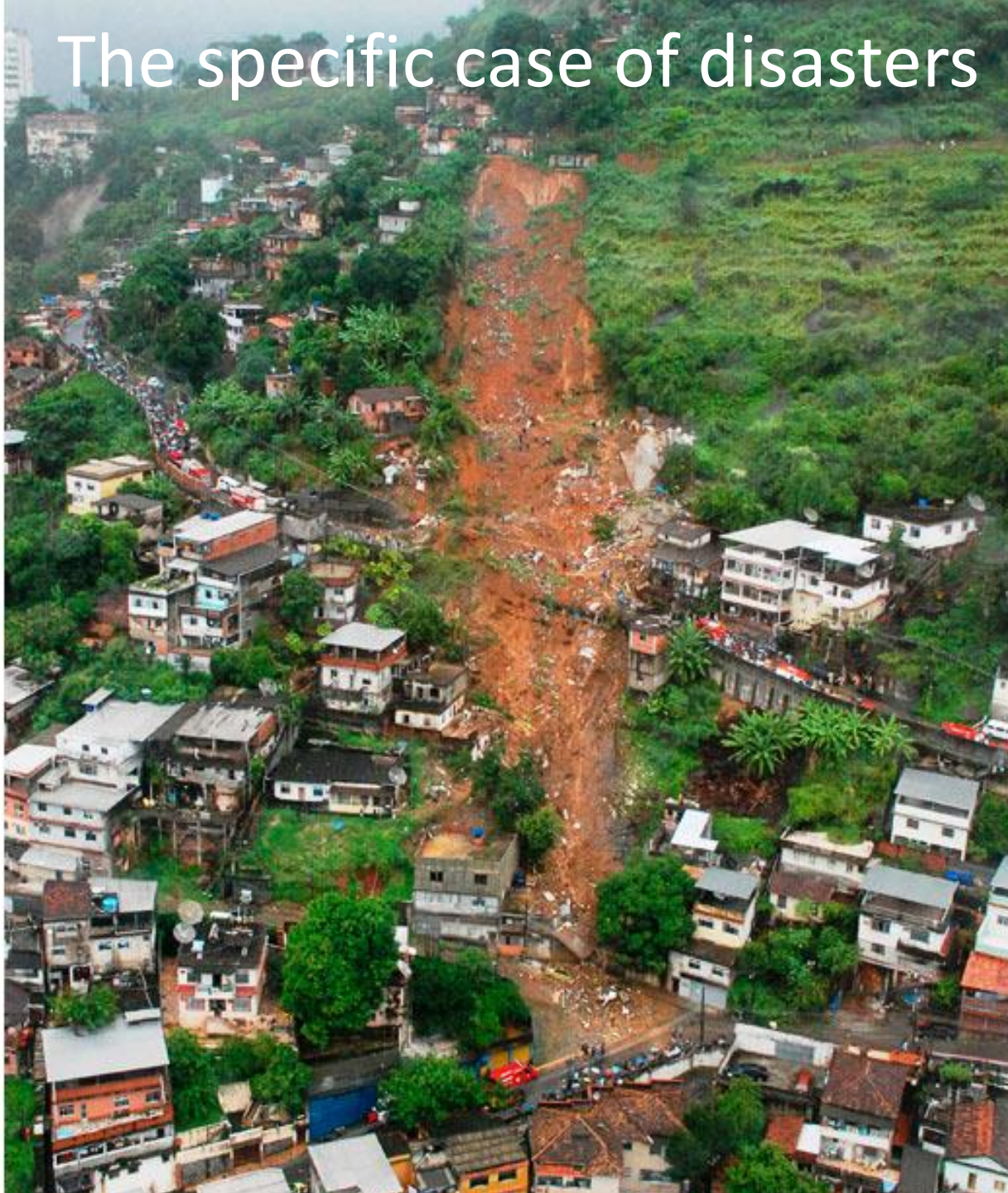


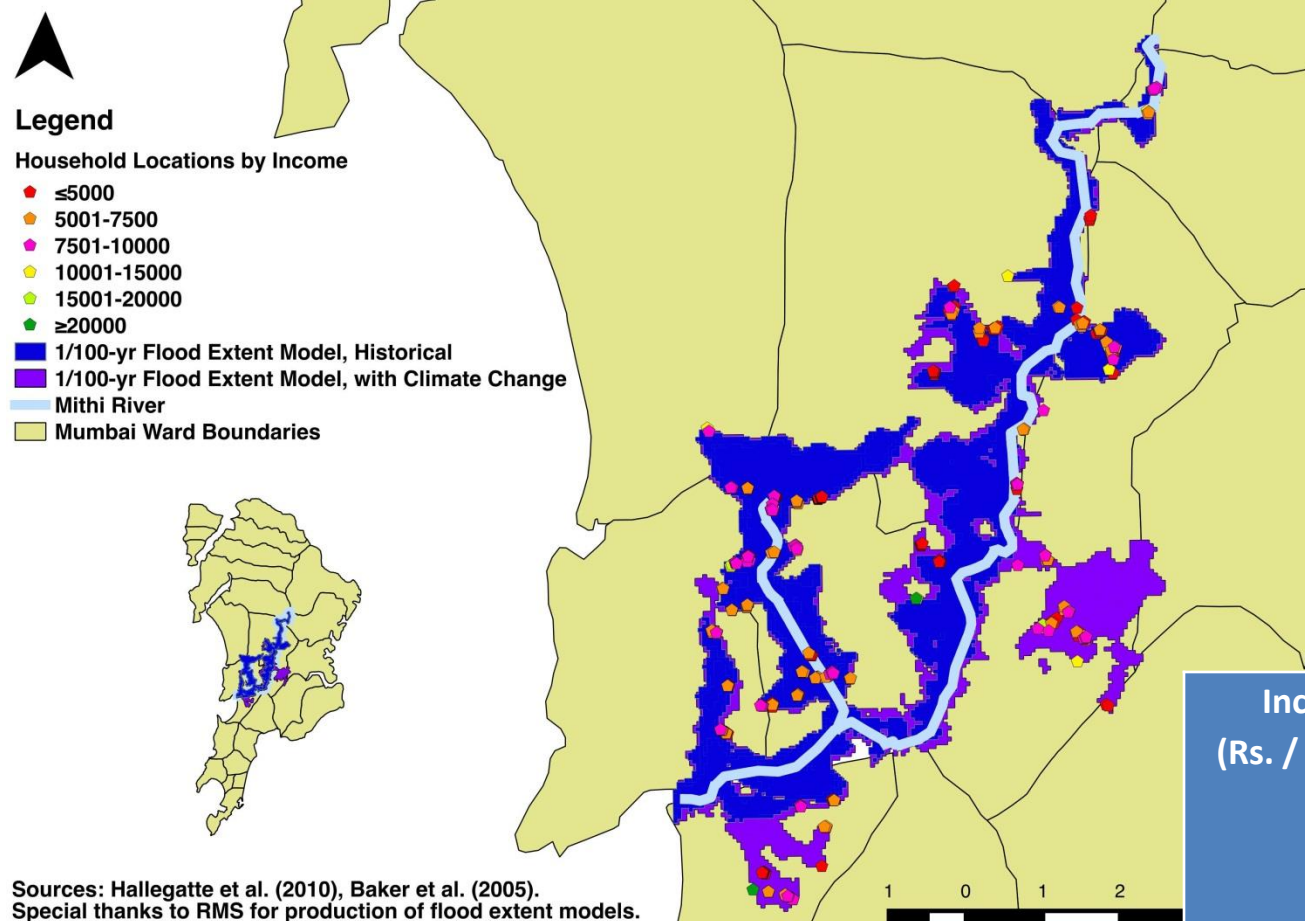


Feedback on poverty



The specific case of disasters





Income (Rs. / month)	% of all HH in Survey (Greater Mumbai Area)	% Exposed
<5000	27%	44%
5001 – 7500	28%	33%
7501 – 10000	22%	16%
10001 – 15000	12%	5%
15001 – 20000	6%	1%
>20000	6%	1%
All	100% n=4972	100% n=210

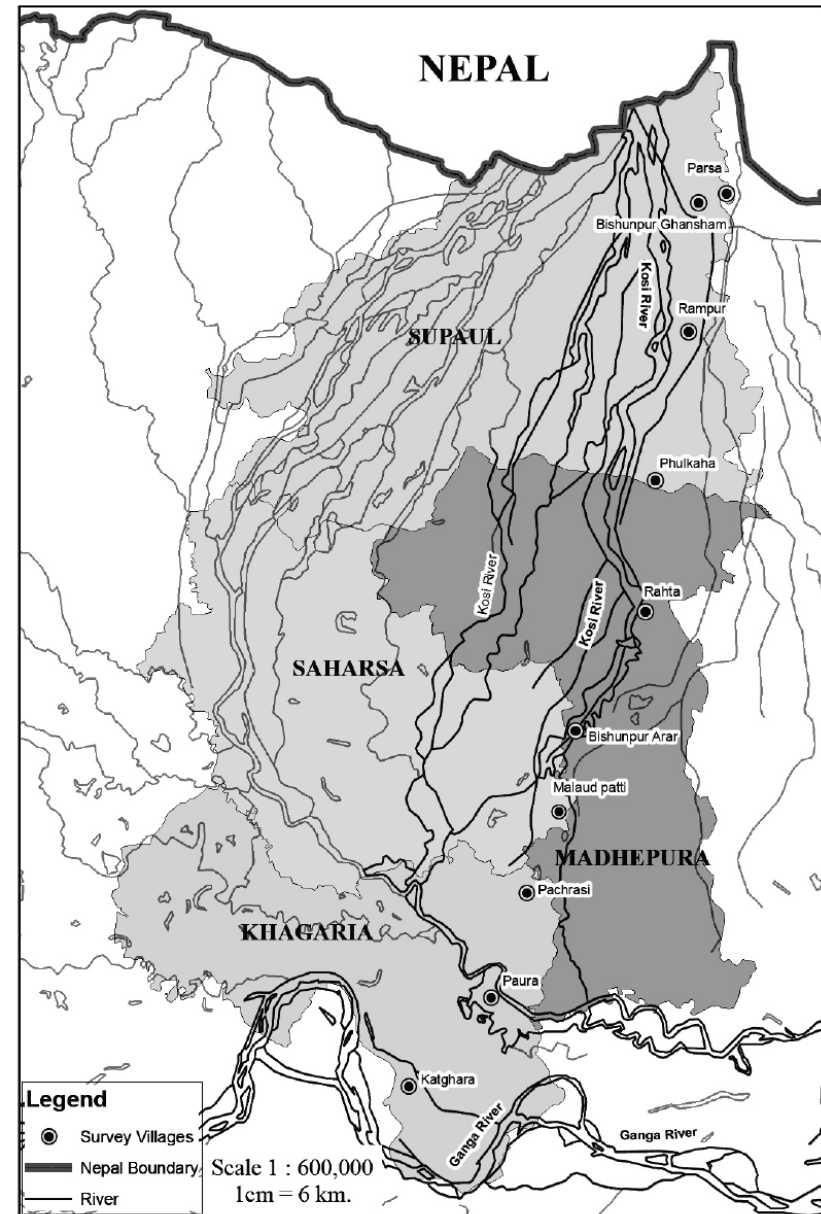
A case study on Mumbai and the 2005 floods

Climate Change: Challenges Facing India's Poor

E SOMANATHAN, ROHINI SOMANATHAN

And in India
(Kosi flood in Bihar
in 2008)

Figure 1: The Flooded Areas and Surveyed Villages



Impact on assets and income

Table 5: Average estimates of losses among the surveyed households (in INR)

	K East	H East	F North	F South	L Ward	P North
(Figures in bracket as % of average household monthly income)						
Income loss due to floods	10474 (69.8)	8543 (57.0)	5164 (25.8)	8323 (41.6)	22578 (112.9)	14894 (74.5)
Amount spent on repair/rebuilding of house/premises	22270 (148.5)	26191 (174.6)	34335 (171.7)	42967 (214.8)	22457 (112.3)	27118 (135.6)
Losses due to damage to household appliances (TV, refrigerator, music system, desktop, laptop, washing machine, stove)	13190 (87.9)	15469 (103.1)	13442 (67.2)	10081 (50.4)	11325 (56.6)	23923 (119.6)
Losses on account of damage to household assets (Furniture and utensils)	9735 (64.9)	11061 (73.7)	11756 (58.8)	6602 (33.0)	7121 (35.6)	10417 (52.1)
Losses due to damages to vehicles (Car, Motorcycle, Bicycle)	12974 (86.5)	9153 (61.0)	11833 (59.2)	1250 (6.3)	5478 (27.4)	7232 (36.2)

Source: Authors' calculations based on primary data

Patankar and Patwardhan (2014)

Table 5: Changes in Household Savings

	Village Number		
	1-4	4-8	9-10
Bank savings			
Households with savings on 1 August 2008 (%)	10	14	11
Median savings on 1 August 2008 (Rs if >0)	1,600	6,500	5,500
Households with savings on the date of survey	9	9	13
Median savings on the date of survey (Rs if >0)	650	2,500	1,000
Cash savings at home			
Households with savings on 1 August 2008 (%)	54	53	41
Median savings on 1 August 2008 (Rs if >0)	1,100	2,000	1,000
Households with savings on the date of survey (%)	8	13	29
Median savings on the date of survey (Rs if >0)	250	500	350

From Somanathan & Somanathan (2009)

Resilience and social protection

Table 6: Government Transfers and Stabilisation Programmes

	Village Number		
	1-4	4-8	9-10
NREGS			
Households who knew about NREGS (%)	83	71	80
Households receiving benefits before August 2008 (%)	8	4	14
Households receiving benefits since August 2008 (%)	2	0	0
Public distribution system (PDS)			
Households using PDS in the week before the survey (%)	10	18	29
Rice purchased by PDS households (kg/week)	10	11	11
Average payments for PDS rice (Rs/kg)	6.7	6.2	6.9
Average payments for open market rice (Rs/kg)	14	14	13
Value of cash and in-kind transfers from the government July 2007-June 2008			
Households receiving government transfers (%)	2	18	45
Mean value of government transfers (over all households)	177	771	1,307
Modal transfer (Rs)		1,200	1,200
Households receiving modal transfer (% total households)		23	21
After July 2008			
Households receiving government transfers (%)	99	95	2
Mean value of government transfers (if transfers > 0)	7,782	5,632	79
Modal transfer (Rs)	5,840	5,840	
Households receiving modal transfer (% total households)	22	36	

Thank you

- We look forward to discussing further!