

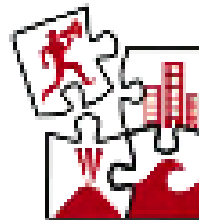
(Re) Production of Risk Reduction

Perspectives from the Development Planning Unit

Camillo Boano

Adriana Allen

Cassidy Johnson



**Disaster Risk Reduction
for Natural Hazards:
*Putting Research into Practice***

November 4th-6th 2009 at University College London





Aceh, Indonesia 2006 @Boano



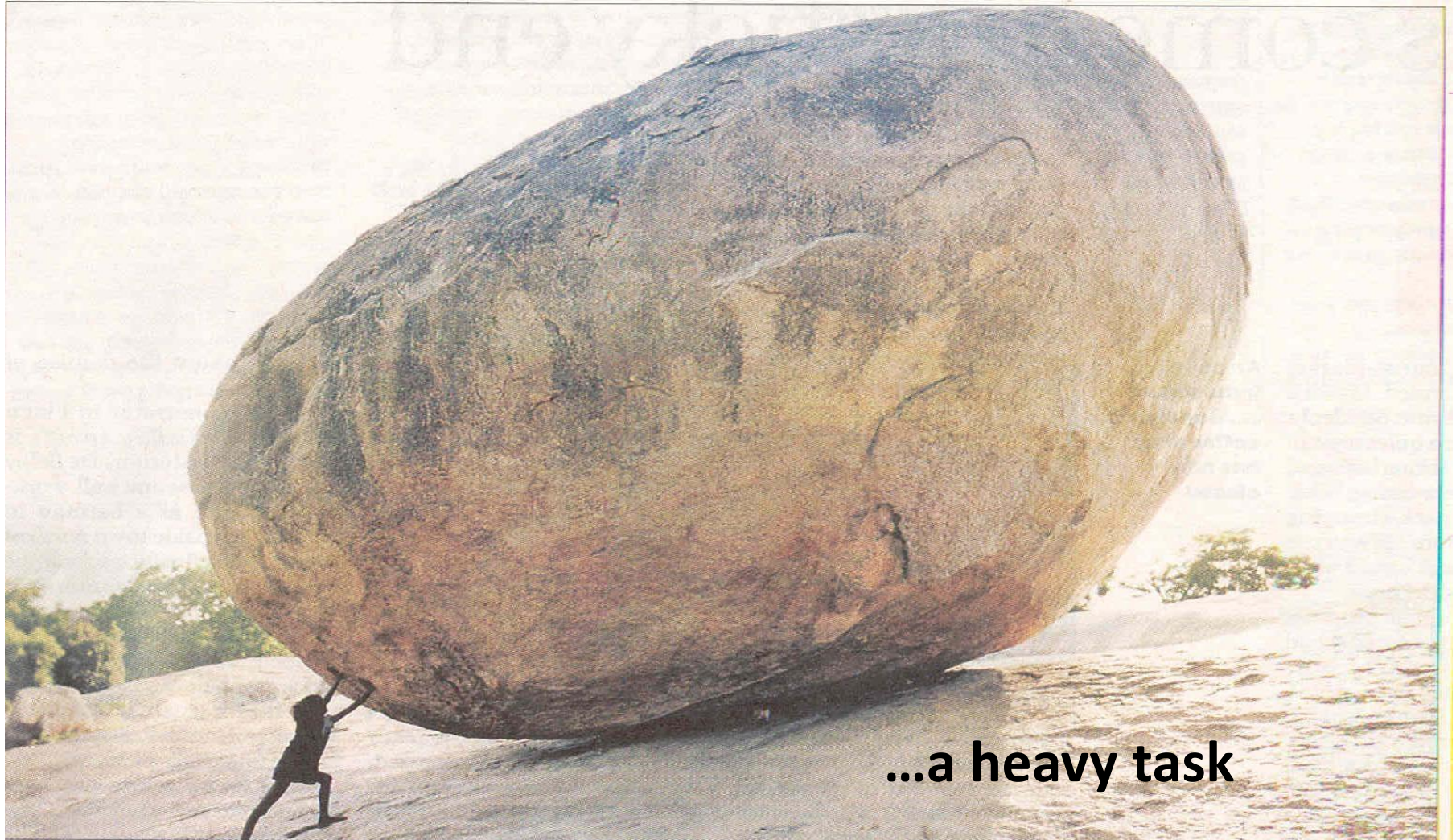
Vondh, India 2007 @Boano



Karitivu, Sri Lanka, 2008 @Boano



Integrating DRR in Planning is considered...



...a heavy task

Integrating DRR in Planning is considered...

**...everyone business... no
one business**

...another checklist



...much more work

Integrating DRR in Planning is...



...a challenge and...



...a creative change!

DRR and common responses



**The complex nature of
disaster risk**

Directly address the problems

**One-off
exercise**

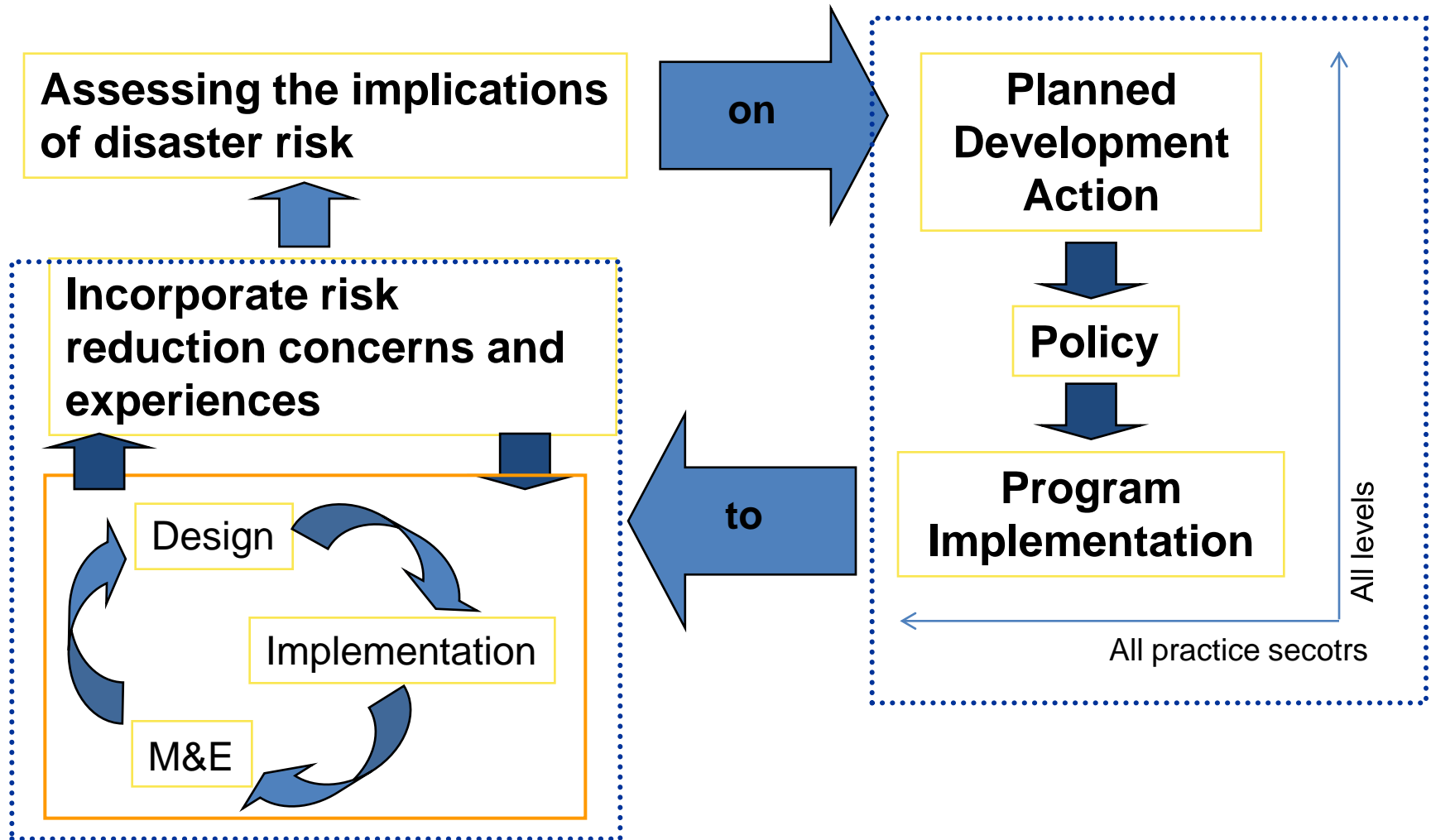
Indirectly address the problems

**Added one
project/component**

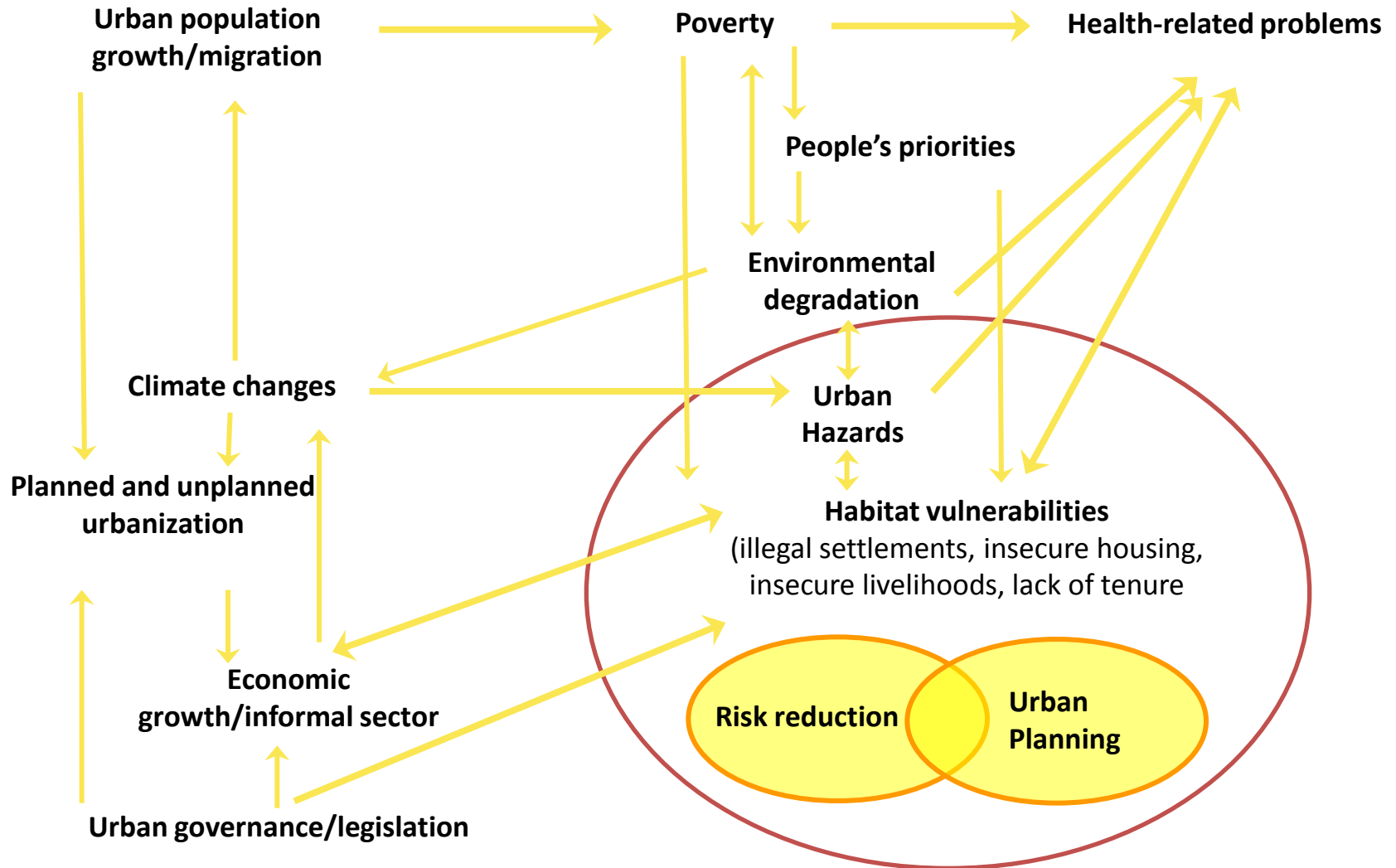
Mainstream DRR

Institutionalization

DRR is a process of...



Urban risks and urban vulnerabilities





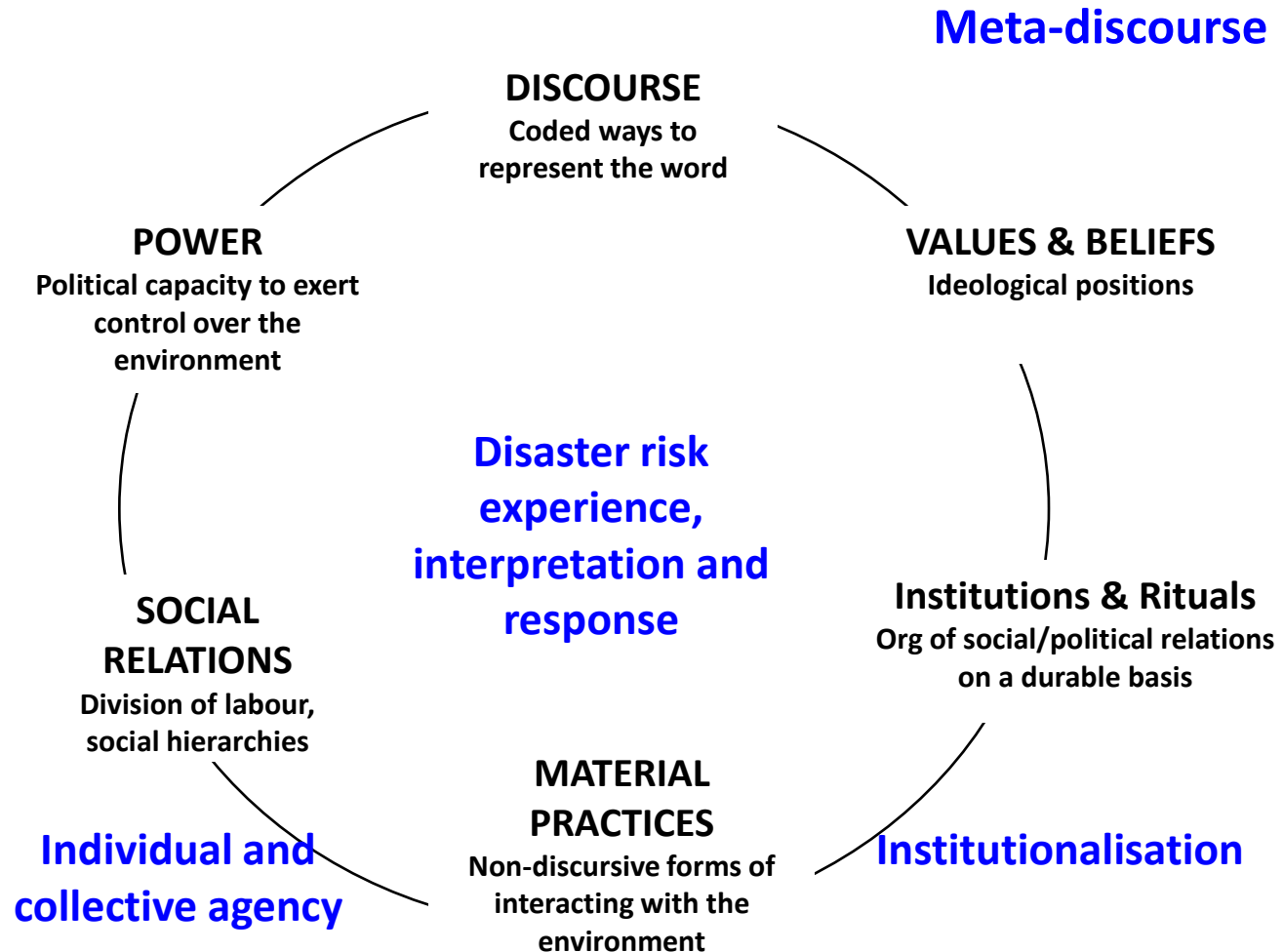
Unpacking the (re) production of DRR

Grassroots coping strategies: What role does individual and collective agency play in shaping material practices?

Political economy: How do social structures (e.g: social relations, institutions, and power relations) hinder or support the resilience built-in through grassroots coping strategies?

Meta-discourse: What are the epistemological and ontological frameworks that structure how we talk, understand, value and act upon risk?

Unpacking the (Re)production of DRR



Source: Elaborated on the basis of Harvey (1996:78).

Reframing the questions for DRR

- **How** do people experience and perceive risks?
- Based on these experiences and perceptions ('realities'), **how** do people prepare for and respond to disastrous events (coping capacities)?
- **How** and why do coping strategies contribute as built-in resilience?



Built-In-Resilience:

Learning from Grassroots Coping
Strategies to Climate Variability
DPU/BRAC research in Dhaka

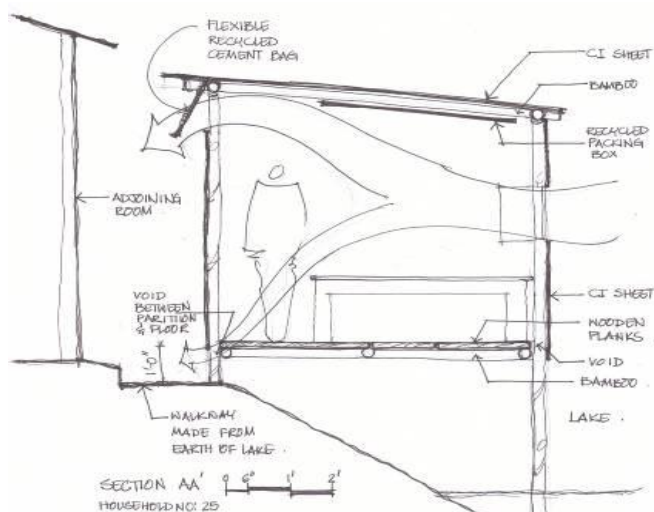
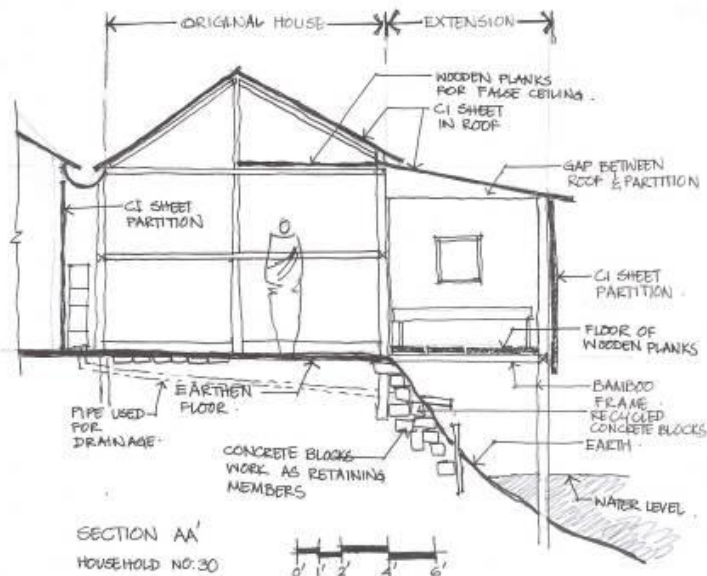
Objectives:

- Contribute to the **current understanding** of local coping strategies;
- Examine the coping mechanisms **developed and adopted** by the urban poor;
- Identify **strategies to mainstream** these mechanisms into urban planning responses to climate change adaptation





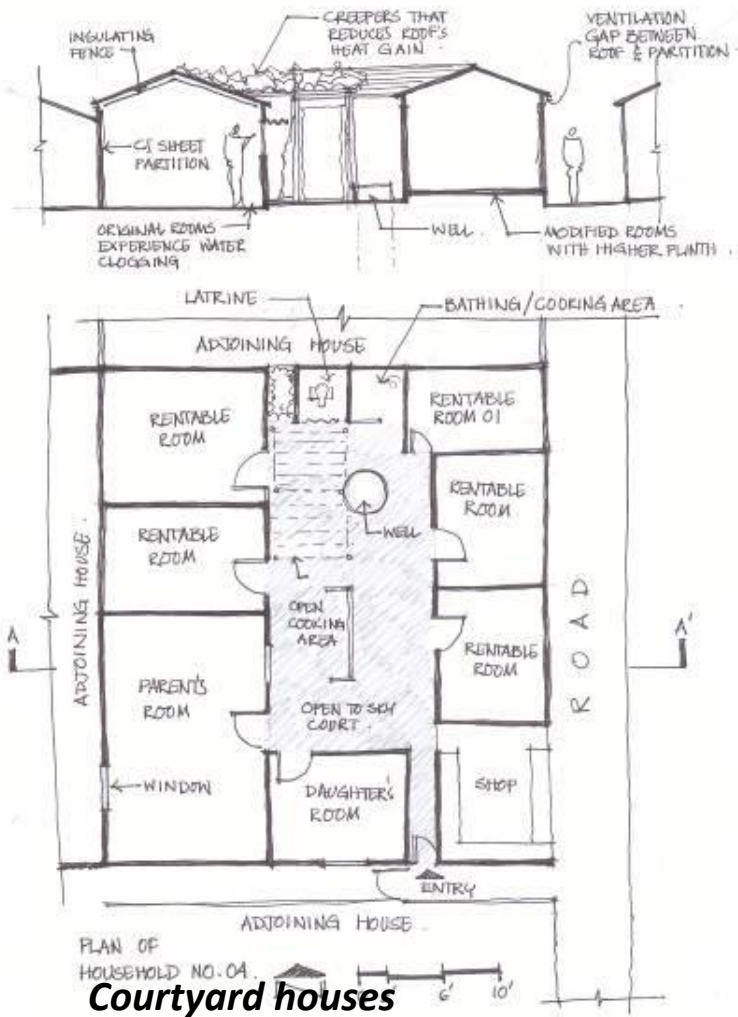
01 Physical modifications



Better ventilation reducing heat



01 Physical modifications



Courtyard houses



Rain gutter



Furniture height



Weather resistant column base

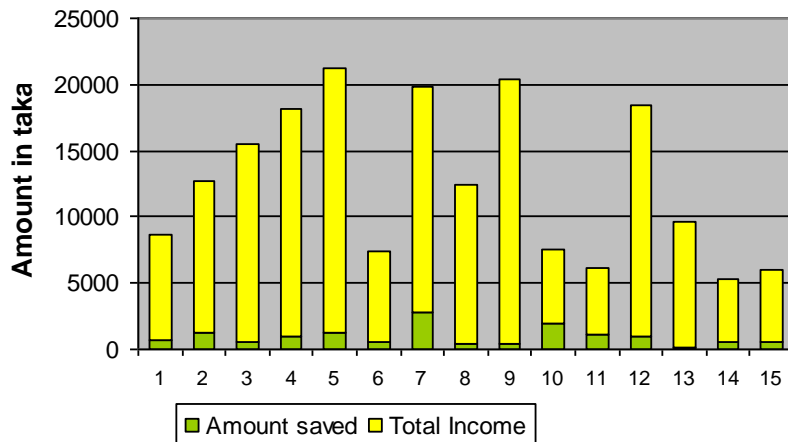


Barrier at door

02 Diversified income sources



Income and Savings pattern



03 Savings and access to credits

- ❖ 50% of the households are member of monthly savings groups and have access to credit from savings
- ❖ 16% households have personal savings (may or may not access to credits)
- ❖ Savings on average form 5-10% of the household income

04 Accumulation of Assets

Most of the households accumulates assets in some form:

- Saleable household assets
- Building materials
- Investing in children's education

05 Very strong social network

- 37% households are part of some form of social network and can seek assistance in case of emergency
- 16% shared food with neighbours to tackle hardship
- 30% shared services of the unaffected neighbours during disasters



Coping strategies are often complex depend on the assumption that

an event will follow a familiar pattern, and that actions taken before to cope are a reasonable guide for similar events

They operate within different scales: individual (e.g. household), community (e.g. neighbourhood) and institutional (e.g. city-wide or beyond):

- > Preventative strategies
- > Impact minimising strategies
- > Asset accumulations
- > Economic strategies
- > Development of social support networks

In the physical and built environment coping strategies can be identified at different scales:

- > Arrangements within the house
- > Modifications to the house structure
- > Modifications around the house
- > Improvements at the neighbourhood level

Research gaps and questions

- As this research has shown, the urban poor have certain level of built-in-resilience based on their existing coping capacities. However, the question remains: How to **establish the linkages between formal planning/institutions and built-in resilience of the communities** to work for a comprehensive disaster risk management?
- Our research has highlighted that people are responding to multiple perceived risks at the same time – possible flooding, possible job loss, future health problems, etc. **Our conception of disaster risk needs to be expanded beyond just disasters, to include multiple dimensions of risk at the same time.**
- Urban poor perception is based on their direct experience and knowledge accumulated in responding to the double exposure to climate variability and poverty. Until **municipal adaptation planning responses understand that poverty and the impact of climate variability are deeply articulated**, the poor are likely to continue to be unsupported.
- **Considering ‘climate variability’ rather than ‘climate change’ as major risk changes people’s perception and their responses to this risk.** i.e. climate variability is real and is becoming a regular event. Climate change is in the future, not well understood.

Reasoning disaster risk reduction from developmental perspective

- Profoundly semantic confusion on terms, meanings methods, and tools;
- Inherent complexity as practice and discipline as well as interdisciplinary arena;
- The materiality of built environment and the immateriality of places;
- Forces and focuses: the conflictive nature of urbanism;
- Technocracy and participatory rhetoric

Multiplicity

- Disaster risk reduction is a complex process profoundly developmental in nature, is risky because deal with sustainability and equality, and is multiple because takes place in different domains:
 - **Political and institutional** (multiples actors are involved with often-conflictive agendas, visions, mandate in a dense and tense environment characterised by the notion of speed, performance and numbers)
 - **Spatial** (massive needs for physical interventions, provision of new housing for the affected population, the conservation and restoring of building challenging a faster response and opening up opportunities for incorporating preventive measures in relation to the occurrence of future possible disasters;
 - **Societal** (restitutions, compensations, resettlement, loss and death as well as the erosion of livelihoods and security potentially trigger social cohesion and stability increasing social fragmentations)

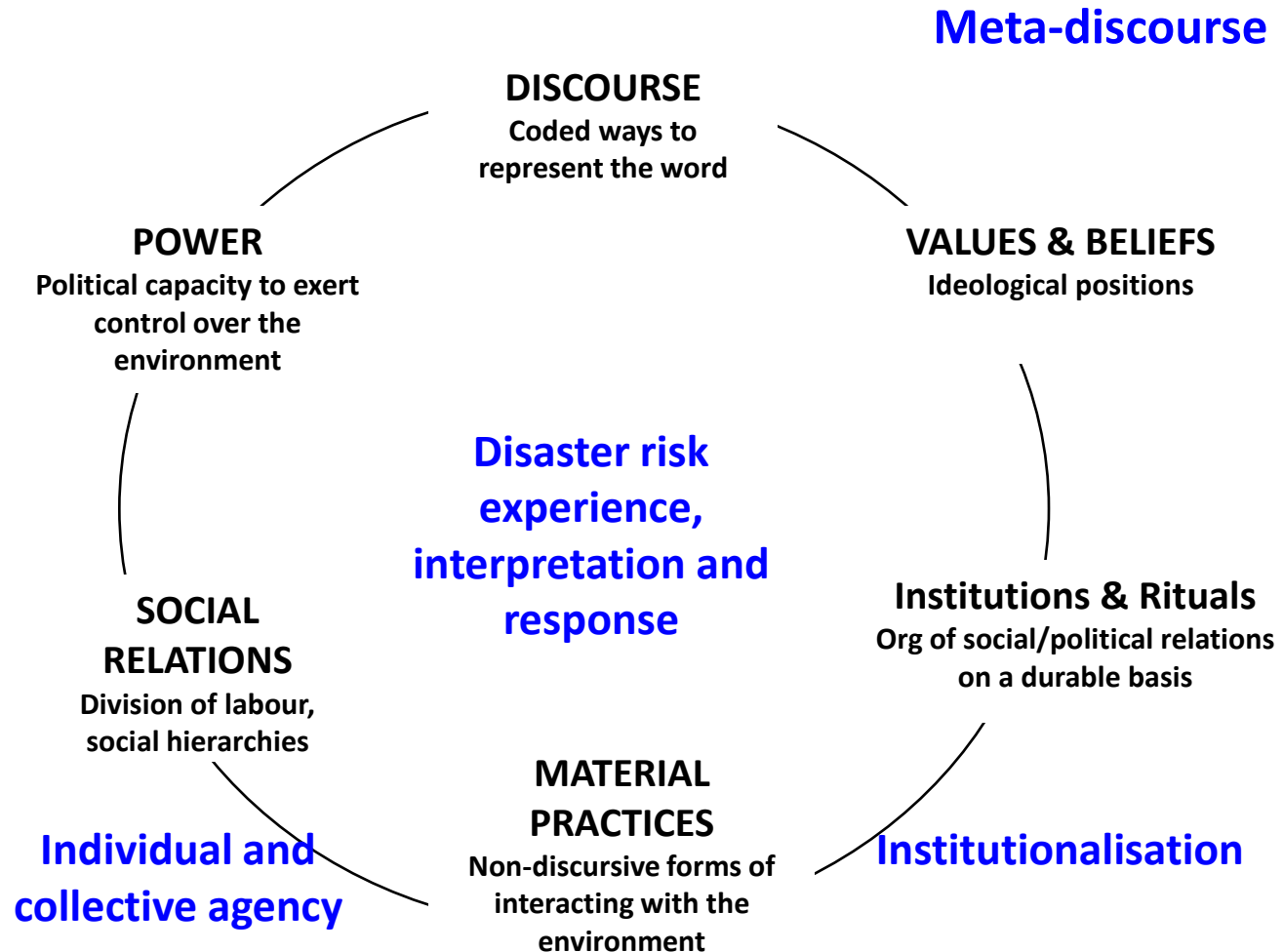
Contextualism

- Architecture is the most context-sensitive of the arts (Spector T., 2001, the ethical architect)
- ‘Every increment of construction must be made in such a way as to heal the city’ (Alexander, 1987, The Nature of Order)
- Architecture is a responsive cohesion where a ‘thing’ (creature, community, building) or process (learning, play, design) exhibits mutually beneficial interactions internally and contextually (Radford, 2009)

Space and Places

- the material and the social representation of built environment .
- “not only is it [home] a place, but it has psychological resonance and social meaning. It is part of the experience of dwelling – something we do, a way of weaving up a life in a particular geographical space” (Saegert’s 1985:76).
- it is as much about the house being placed in a particular social world, in a particular livelihood system and is locus in where the main activities of daily life are conducted and thus imbued with symbolically charged values.

Unpacking the (Re)production of DRR



Source: Elaborated on the basis of Harvey (1996:78).

Some arguments for debate

- The (re)production of DRR takes place in a '**politicised environment**' and cannot be understood in isolation from the political and economic contexts within which it emerges.
- Nature has to be re-embedded in the understanding of social change....but nature and society work by **different rules and laws**.
- Urban risk is a **systemic condition embedded** within techno-social structures and broader economic and political forces, notably associated with the spread of capitalism
- '**Whose environmental crisis**': Asymmetry between different actors - distribution of costs and benefits, but also in terms of their power and relative position in the decision making system.
- **Putting politics first**: "All ecological projects (and arguments) are simultaneously political-economic projects (and arguments) and vice versa" (Harvey 1993).