

Post-Disaster Recovery in India

Case studies from Assam and Odisha

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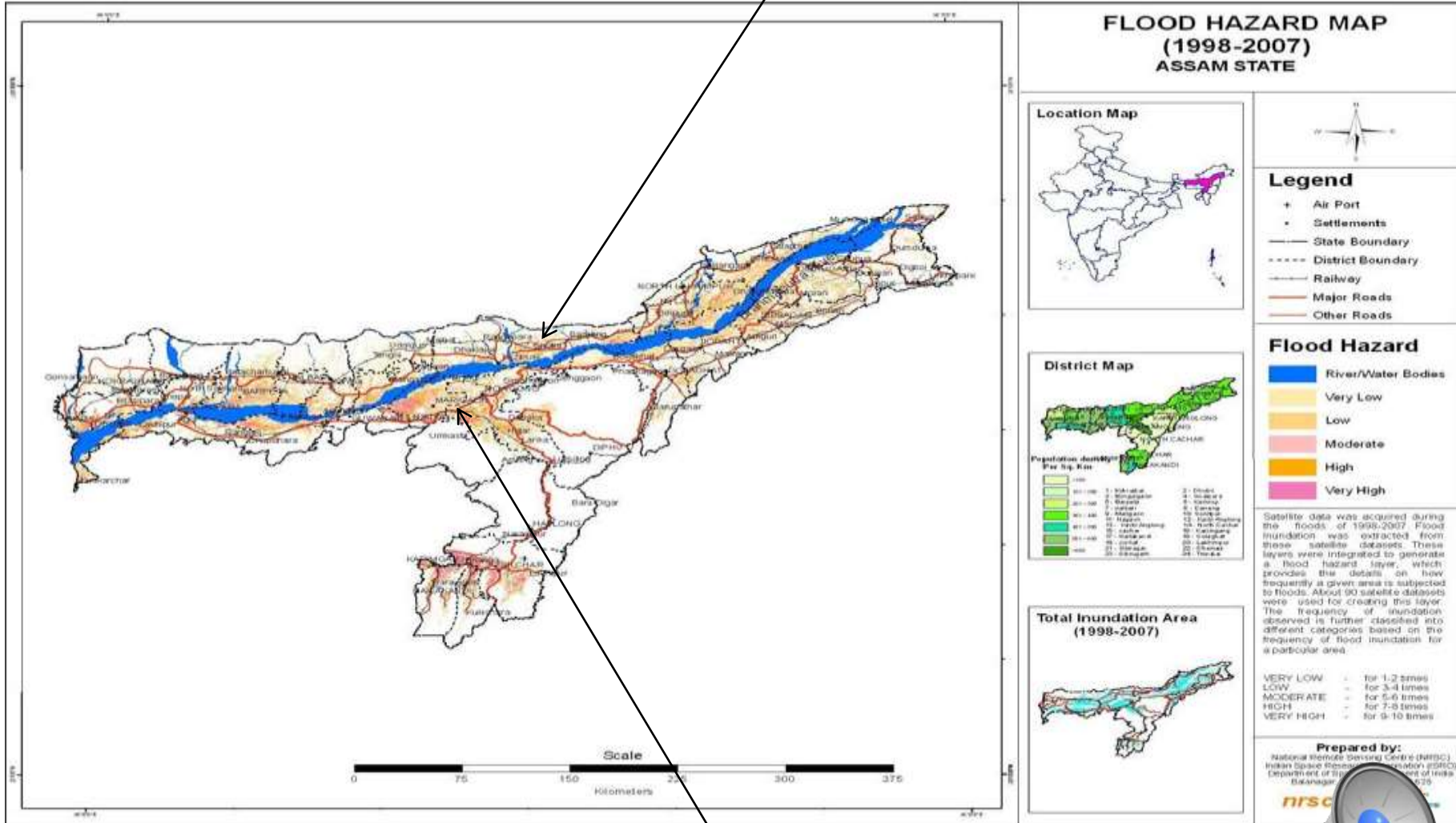
PhD, UCL

About Assam

- North-eastern state, strategic location
- Diversity: >250 ethnic groups
- Floodprone state: Brahmaputra & its tributaries
- 2012 floods - 48 breaches in embankments; 528 mm rainfall 28% increase; 5,43,088 displaced and 126 deaths and 19 missing (ASDMA, 2012)
- Followed by recurring floods and erosion in 2013

Sonitpur and Morigaon Districts of Assam, India

Sonitpur District



Morigaon



Community response

- Loss of land and livelihood, houses, crops, farmlands to floods and erosion
- Access to basic facilities – schools, health posts, roads and markets limited in char areas
- Land ownership struggles for Muslim settlers- Shifting with *chars* for productive value
- History of floods and frequent displacement
- Sharing risk of investments in land for housing and farming



Figure 1: Chang ghar - Houses on stilts in upper reaches of Brahmaputra in Assam



Figure 2: Houses built on raised plinths in Morigaon



Figure 3: Extensions to houses on raised plinths

Housing patterns in Assam based on hazard characteristics

Houses on stilts in flood inundated areas, local materials in areas suffering from erosion that can be easily dismantled with minimum losses

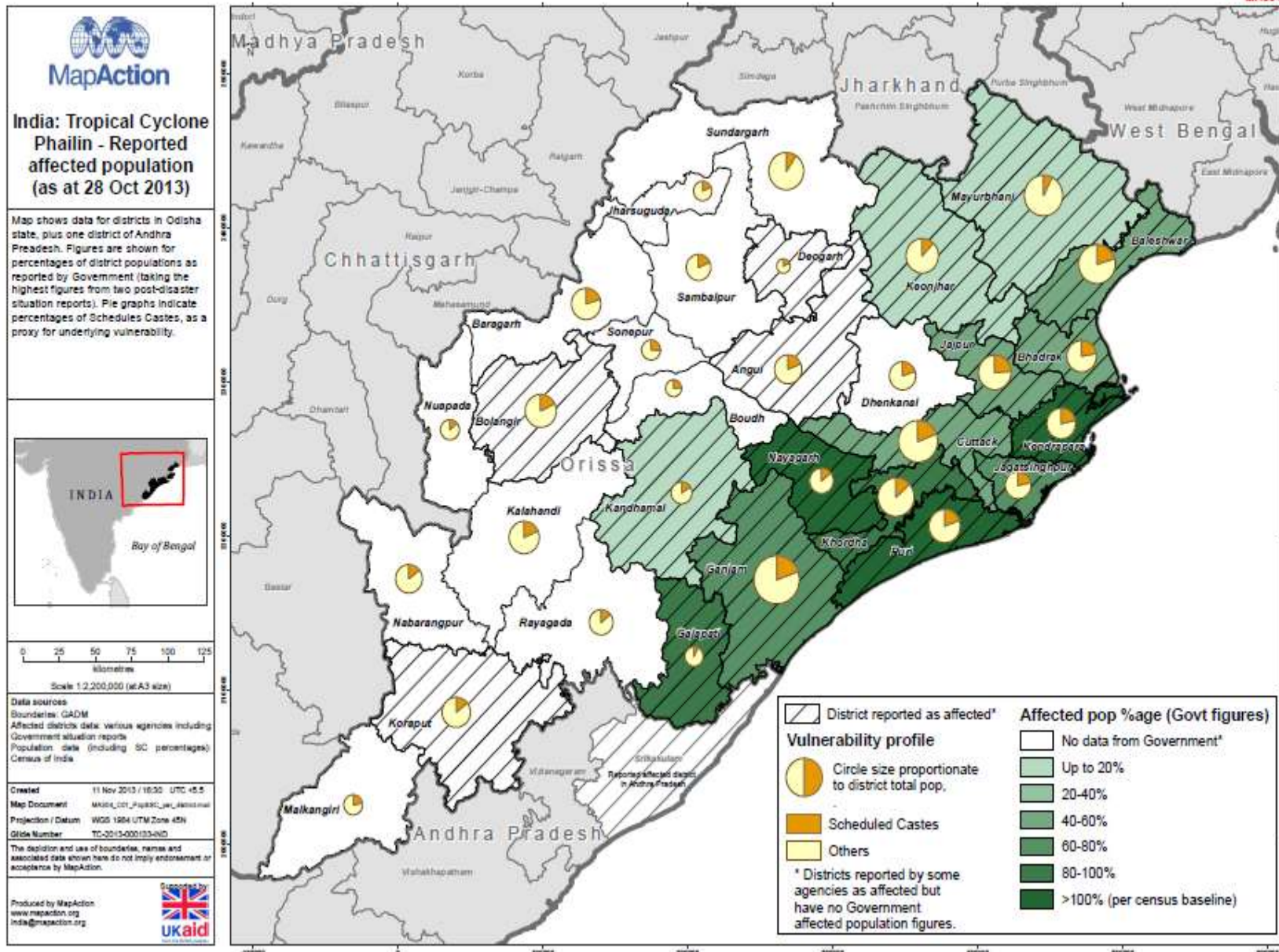
Shelter provision

- CGI Sheets, jute mats, bamboo poles, j- hooks
- Targeting: Women-headed households, disabled
- DRR Capacity Building: village masons as architect-engineer-constructor and labourers
- Integrated with CFW: households encouraged to lay mud for raining plinth levels through cash injections but WASH integration limited
- Boramari: Panchayat NOCs for land
- Shared homesteads as a risk-sharing mechanism

Cyclone Phailin and subsequent floods

- 234,000 houses were damaged and more than 870,000 people evacuated
- UK AID and ECHO funded 2 consortia
- OFDA and World Bank –led reconstruction
- This study included Puri and Balasore affected by cyclone, floods, and erosion

Cyclone Phailin and floods, 2013





  OXFAM

Intervensi under Phalin Response
and Recovery Programme

Wakil: Chudomono - Gian-Pengaya Pacinimal
Bilik: Jamban - Dinarik Balaora

No. of household covered hygiene and Emergency Shelter:
10/2
Vegetable food Supporting Shelter: 20
Provision of shelter with open: 1
Bathing Place: 1

Participatory Change Analyses

Aspects	Coastal villages	Island villages	Inland villages
Water supply	Raised hand pump, regulated artesian wells	Raised hand pump, regulated artesian wells	Raised hand pumps
Water treatment	Communal and HH water filters	HH water filters, and cloth as filters	Water filters, chlorine tablets
Defecation	Open defecation	Open defecation, few HHs used disabled-friendly toilet	Shared toilets
Handwashing	Infrequently	Yes, with ash	Yes, with soap
Bathing	Wells, Ponds, near tubewells	Ponds	Ponds Bathing cubicles
Shelter	Temporary housing	Own houses repaired	Temporary or repaired houses
Out-migration	Yes	Yes	Yes
Livelihoods	Fishing nets repaired, and business resumed, boats expensive	Fishing activities not resumed, farming disrupted due to salinization	Decrease in labour work opportunities, farmers lost cash crops and seed support

Assam Community Recovery Priorities

Priority issues	Solmari	Boramari
1	Safe shelter	Water sources, buckets
2	Safe land for housing and agriculture	Food supply/ration
3	Latrines	Tarpaulin sheets for shelter
4	Adequate water sources	Latrines
5	Electricity, protection from river	Protection from river and erosion

	Coastal	Island	Inland	Chadanamkhana	Gombhoria
Priority #1	Food security	Repair boats and fishing nets	Livelihoods support	Shelter	Housing
Priority #2	Income generation – repair boats and fishing nets	Drinking water supply	Drinking water facilities	Livelihood support	Latrine facilities
Priority #3	Housing	Housing	Latrine facilities	Land	Drinking water
Priority #4	Drinking water supply	Health support – disability access	Menstrual health	Stone pitching to prevent erosion	Livelihood support
Priority #5	Latrine facilities	Latrine facilities		Latrine facilities	Health support

Odisha Community Recovery Priorities

Key Findings – Assam 2013

- Displacement due to erosion, materials reused
- Use of bamboo instead of concrete pillars helped
- DRR structural features compromised and materials shared among household members
- Gendered recovery processes, failure of embankments
- Household: Cheaper to dismantle and rebuild for HHs with earlier support
- Government: Focus on populist flood protection measures, no compensation provided to affected HHs, no recovery support

Key Findings – Odisha 2014

- Prioritisation of disasters: Flood and erosion affected villages received no recovery support
- HHs in Chadanamkhana continued living in tarpaulin and plastic sheeting houses for 6 months
- Cannot link with pre-existing dysfunctional government schemes on housing, rural employment
- Village committees non-functional after project ended
- Government: OSDMA coordinated recovery packages, Bank-led Rehabilitation Programme

Interpretations

- If resilience is key ability to organise and learn from previous experiences, agencies to equip communities for self-organisation and through knowledge coproduction
- Different priorities and perspectives on recovery at household level, for communities, government and humanitarian NGOs
- Inequality exacerbated if resilience measures ignore CONTEXT – multi-hazard, local practices and historical response
- Emphasis not on providing physical buildings to withstand future disasters but on community deciding what they normally do
- In Linking relief, recovery and development – recovery is often missing in government action and humanitarian ‘exit’ strategies ineffective in the long-term

HOUSEHOLD TRAJECTORIES IN WaSH DURING RECOVERY

