A coastal scene at sunset. The sun is low on the horizon, casting a warm glow over the sky and the water. Several small, simple boats are beached on the left side of the frame. The ocean is calm with gentle waves lapping at the shore. The overall mood is serene and contemplative.

The Nexus of Poverty Responses and Climate Change Responses: A Focus on Coastal Communities and SIDS

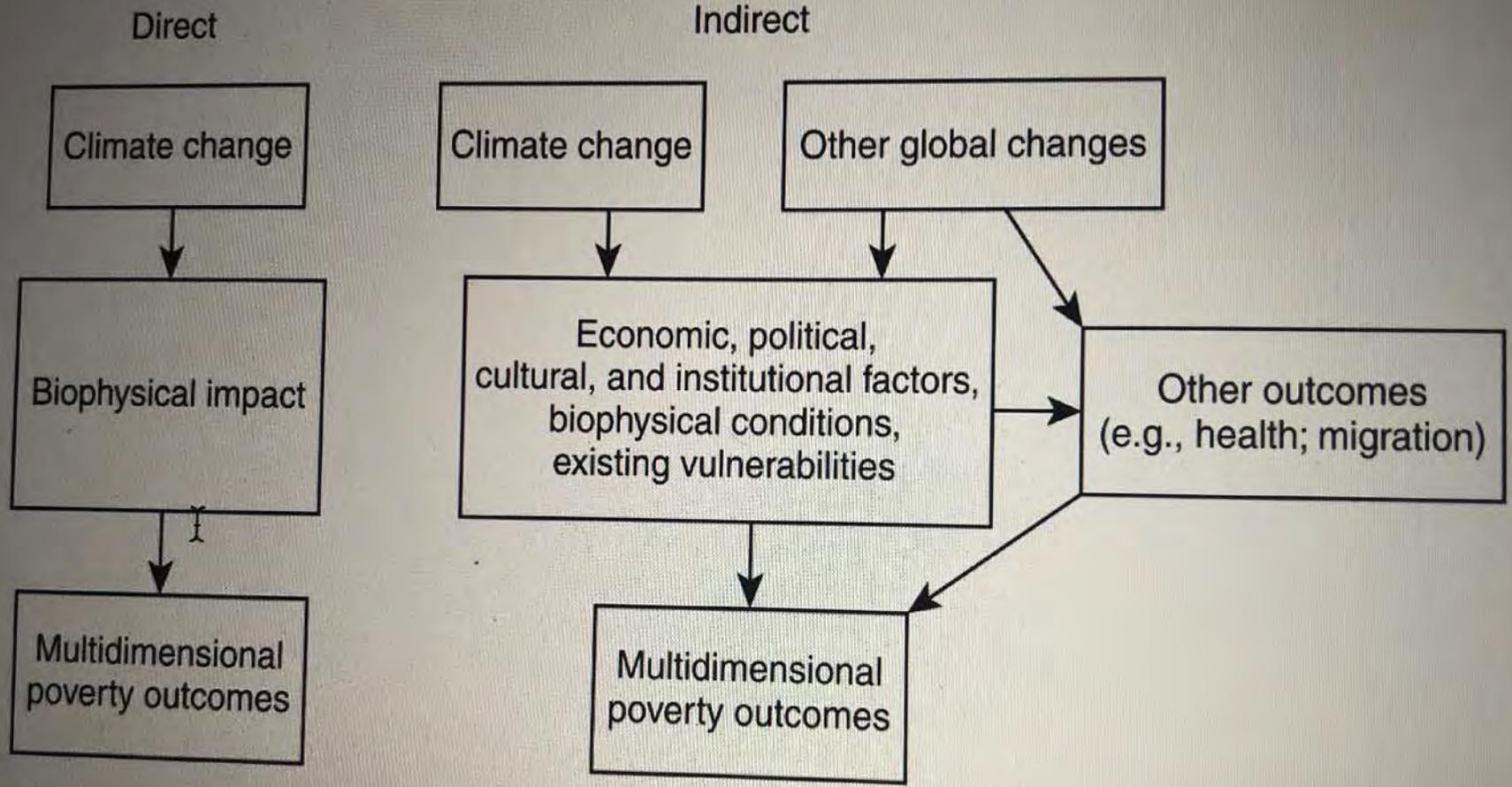
Anthony Charles & Daniela Kalikoski

Saint Mary's University (Halifax) & FAO (Rome)

Poverty and Climate Change Impacts

- **CC contributes to food insecurity and poverty.**
- **Poverty & food insecurity reduce capacity to adapt to CC.**
- **Poverty is multidimensional:** low income, food insecurity and malnutrition, poor health, low education, insecure tenure rights, marginalization, political discrimination, etc.
- **Climate impacts are multidimensional:** Slow processes (sea level rise, OA) and increasing frequency of rapidly-occurring events (disasters like floods, hurricanes).
- Coastal people and SIDS very vulnerable to CC, due to poverty and geography. Includes fisheries and small-scale aquaculture. Shifts in resources due to CC will harm poor communities in the tropics; add to conflict and migration.

Channels of CC Impact on Poverty



Poverty and Climate Change: Guidelines for Responses

1. Human-centred approach supports poverty eradication and food security; makes adaptation effective and sustainable.
2. Ability to adapt to climate change depends on economic resources, plus infrastructure & social safety nets, etc.
3. Poverty eradication essential in its own right, but also as it enhances climate resilience of people & communities.
4. Communities must be empowered legally, organizationally & with knowledge. Greater collective capacity is needed to deal with both CC and poverty eradication.
5. The impact on, and the role of, women is crucial in both poverty reduction and CC response.

Poverty and Climate Change: Guidelines for Responses

6. Poor and vulnerable less able to bear costs of adaptation. Those most exposed to CC have least capacity to adapt.
7. Social protection reduces impacts of CC on the poor, and gives people a better choice to adapt to CC impacts.
8. Pro-poor programs needed in short term and long-term (adaptive capacity to make communities more resilient).
9. Gender-responsive, participatory, integrated approaches...
10. SP3 Theory of Change: multi-sectoral, differentiated strategies, inclusive structural transformation, “enabling the poor to actively participate in... economic activity”.

Poverty and Climate Change: Guidelines for Responses

11. Link mitigation and adaptation to national policies on sustainable development, in an inclusive, pro-poor way.
12. Impact assessment to ensure mitigation and adaptation do not increase poverty, vulnerability & marginalization
13. Adaptation must also target those that risk falling into poverty as a consequence of CC & natural disasters.
14. Adaptation strategies must be brought to the level of the affected people themselves, and their communities.

Poverty and Climate Change: Global-Level Responses

- Paris Agreement aims to strengthen the global response to the threat of climate change, in context of sustainable development and efforts to eradicate poverty.
- New climate change-related goals are set in recognition of the need to better integrate with action on poverty.
- NDCs could explicitly include development strategies to build capability of the poor to adapt to climate change.
- Global Goal on Adaptation (enhance adaptive capacity, strengthen resilience, reduce vulnerability) references poverty, food security, and human rights integration.

Poverty and Climate Change: SDG-Based Responses

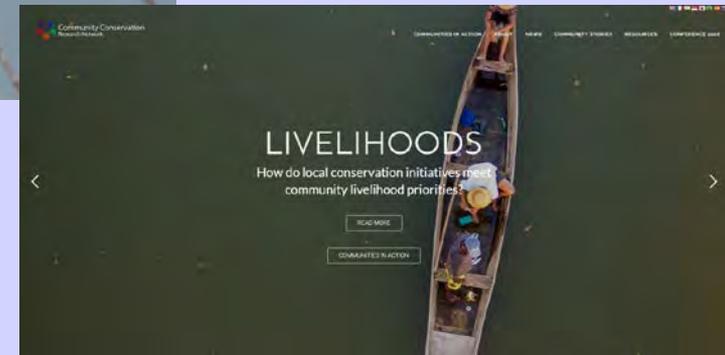
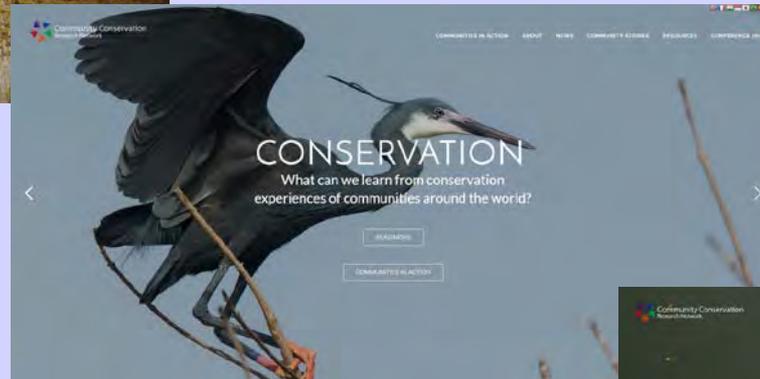
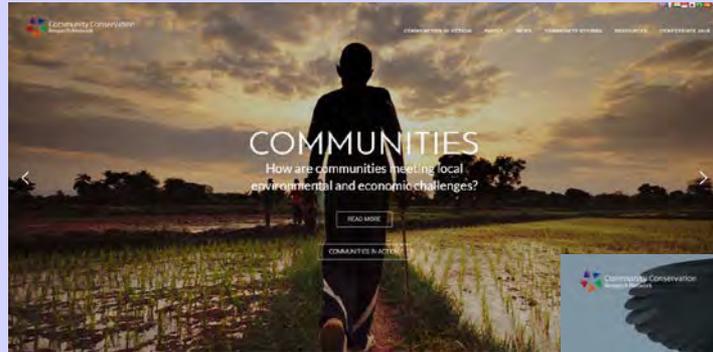
Strong national commitment to the SDGs is helpful since:

1. tackling climate change is a key strategy for moving people out of poverty, and for preventing them from descending into it, and
2. implementing SDGs that aim to bring people out of poverty is essential for capability to deal with impacts of climate change.





Community Conservation Research Network

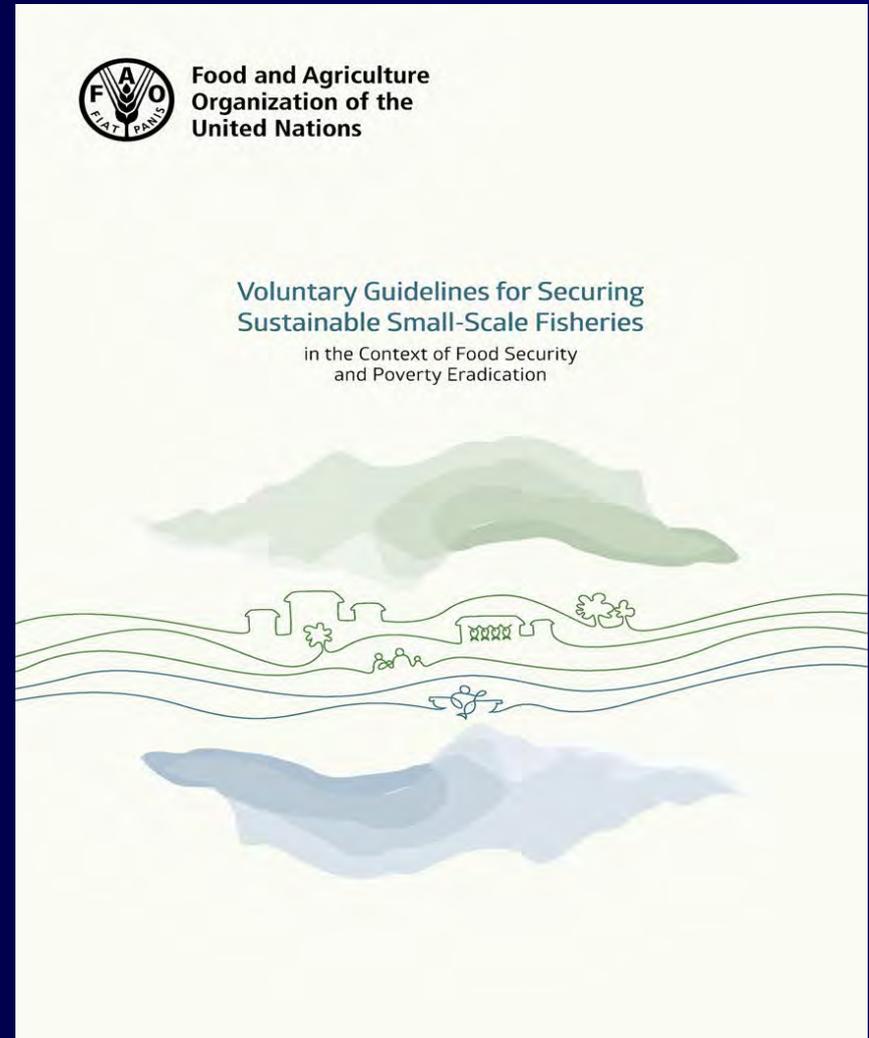


www.CommunityConservation.net

Poverty and Climate Change: Fisheries and Aquaculture Responses

- Implementing the small-scale fisheries guidelines is integral to the overall strategy for coping with climate change and poverty.

Daniela Kalikoski, Svein Jentoft, Anthony Charles, Daniella Salazar Herrera, Kate Cook, Christophe Béné & Edward Allison. Climate Change Implications for Fisheries and Aquaculture: Applying a Poverty Lens. FAO Tech. Paper 530 “Impacts of Climate Change on Fisheries and Aquaculture”.



Challenges/gaps identified in IPCC 2014 Report Ch. 13 - Livelihoods and Poverty (Olssen et al. 2014)

Climate change acts as a 'threat multiplier', exacerbating the impact of various directly/indirectly related stressors, leading to negative impacts on livelihoods and well-being.

Lack of knowledge concerning: (1) How structural inequalities, power imbalances, and intersecting axes of privilege and marginalization shape differential vulnerabilities to climate change; and (2) Climate change impacts on poor people and livelihoods in middle- to high-income countries.

Existing policy responses for climate mitigation/adaptation will result in mixed/detrimental outcomes for poor and marginalized, despite numerous potential synergies. Need to better consider distributional impacts of mitigation and adaptation policies and practices.

Need to better understand POVERTY DYNAMICS, and incorporate into climate research and responses. This includes considering multiple dimensions of poverty, distribution, spatial and temporal shifts, critical thresholds, poverty traps.

Need for better knowledge of the direct and indirect effects of climate-related mitigation and adaptation policies such as CDM, REDD+, biofuels and insurance on livelihoods, poverty and inequality, and corresponding improvements where needed.

Need to go beyond 'snapshot' studies of how climate change impacts livelihoods, to a better understanding of continuous struggles and trajectories.

Need for more rigorous data collection and analysis regarding small-scale disasters, whose accumulated effect may be significant in terms of loss and harm, but are currently poorly understood.

Elements of Analytical Framework: Assessing Poverty

- Relative poverty, near-poverty, Relational poverty (social relations)
- Chronic vs temporary poverty
- Approaches to poverty: monetary, capabilities, marginalization.
 - Each has different underlying assumptions & aspects of poverty.
 - Which approach to choose when and why?
- Look at agency and capacity
- Reducing exposure & vulnerability, increasing adaptive capacity and capabilities; how to do these: **Strategic, Tactical, Operational**
- Geographic scales in a continuum; actors/institutions work across levels. Responses must be at multiple levels. (Osbahr et al. 2008)
- Connectivity/linking between levels... What mechanisms are best?

Elements of Analytical Framework: Capabilities Approach

- Capability: ‘the substantive freedoms [a person] enjoys to lead the kind of life he or she has reason to value’ (Sen, 1999), e.g. the valuable activities and states that make up people’s well-being such as being healthy, well-nourished, safe, educated; having a good job, being able to visit loved ones.
- Agency: ability to pursue goals that one values and has reason to value. (Sen, 1999, p19)
- Explanation from Deneulin and Shahani (2009), available for download at: <https://www.idrc.ca/en/book/introduction-human-development-and-capability-approach-freedom-and-agency>

Elements of Analytical Framework: Coping vs. adaptation & ‘getting by’ vs. ‘getting better’

Several assumptions associated with temporal and spatial dichotomies in both adaptation and development thinking (from Osbahr et al. 2008)

- Local-level adaptation and poverty reduction actions = viewed as reactive
- Higher-level planning = assumed to be anticipatory, leading to better preparation and improvement
- Adaptation and poverty reduction actions often end up aiming at long-term improvement, but achieving short term ‘coping’ or ‘getting-by’ at best. How to improve this?
- What is the role of assessment/monitoring in this process? What can/should be measured?

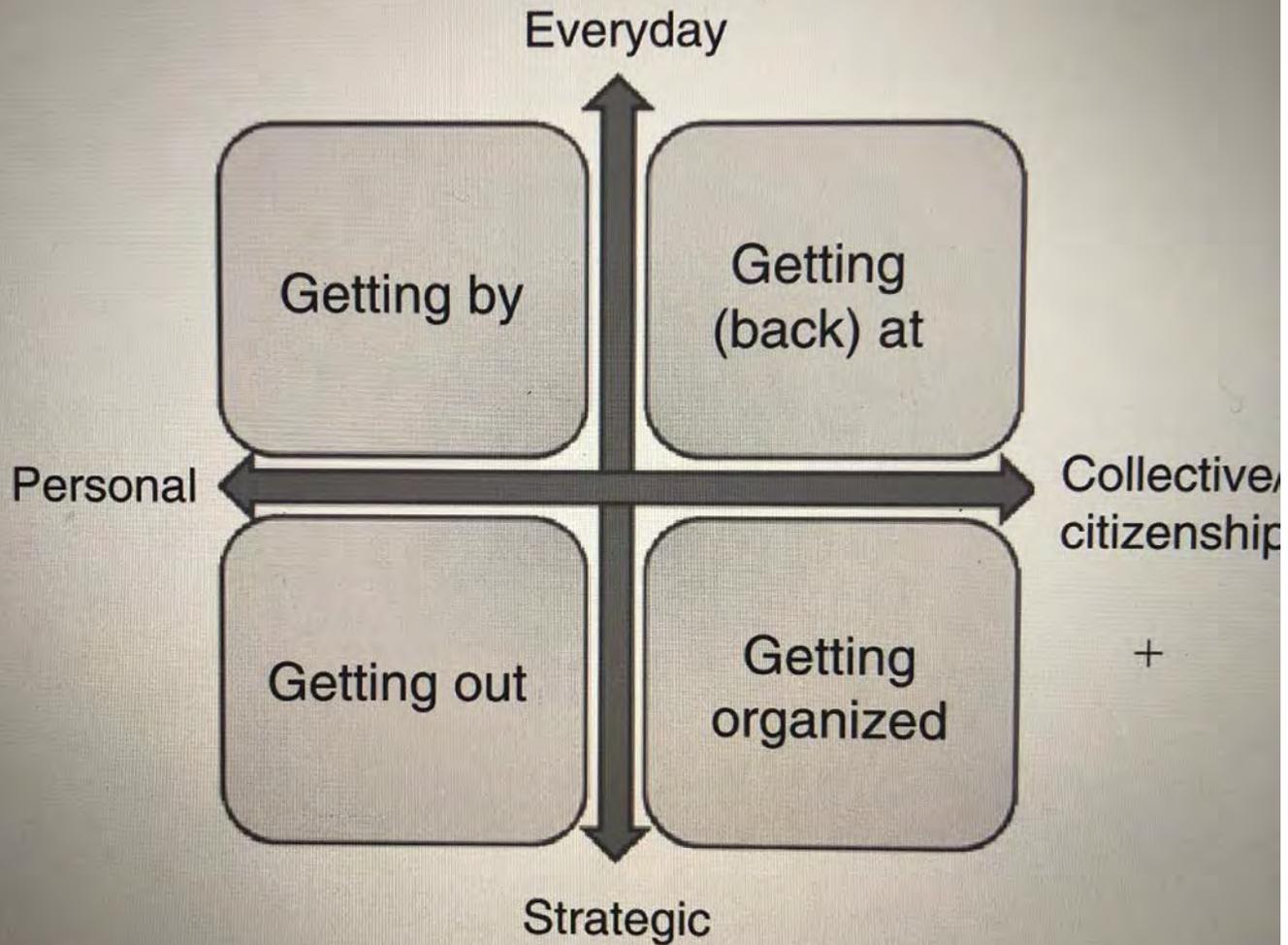


Figure 3

A taxonomy of agency. Adapted with permission from Lister (91).

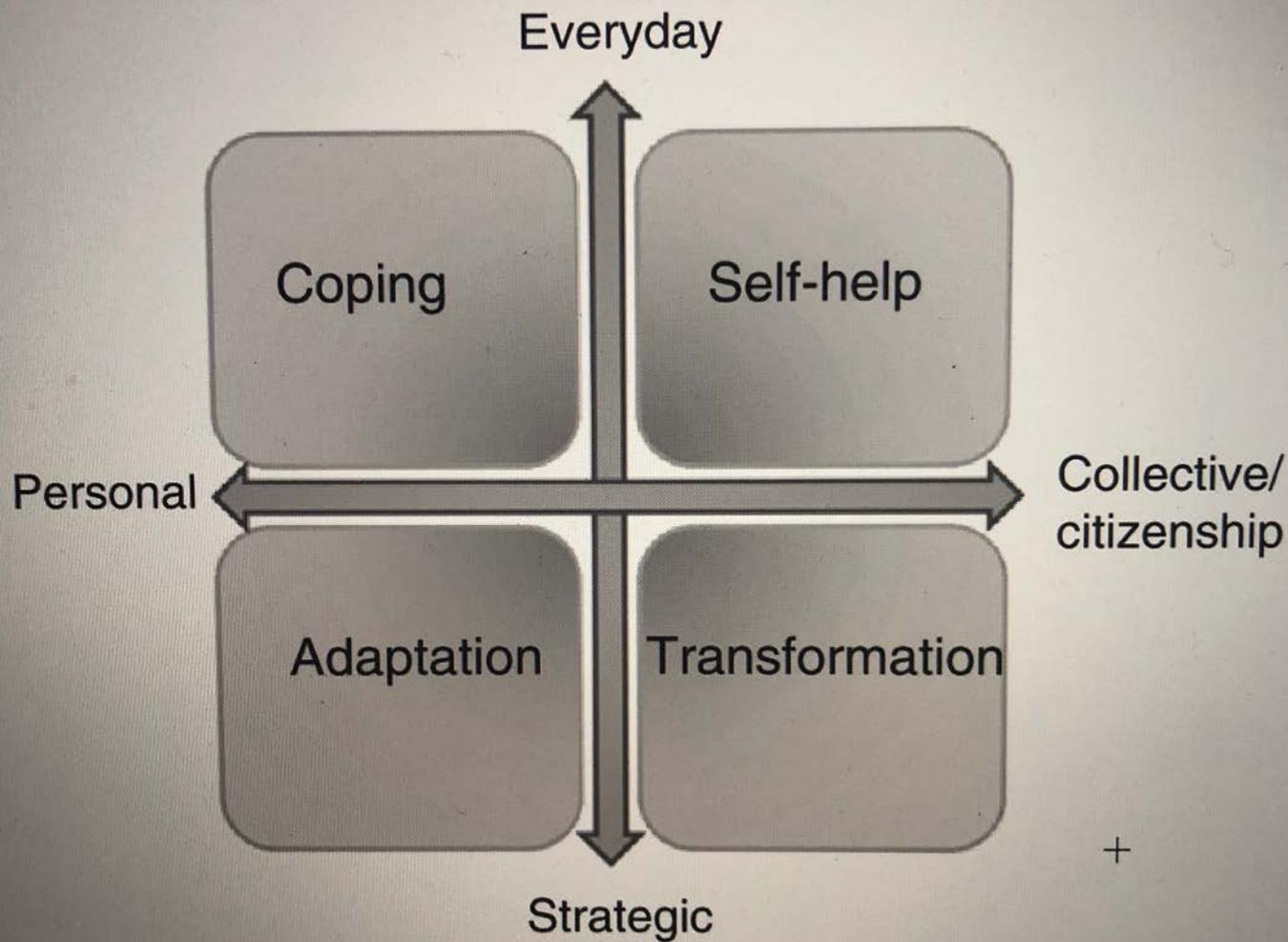


Figure 5

A taxonomy of responses to climate change.

Elements of Analytical Framework:

Pro-poor adaptation

- Disproportionate impact of climate change on vulnerable, marginalized and poor, but also inequality in how policy reaches these groups and addresses their needs,
- Access, equity, impact of CC policies needs to be more carefully considered with a poverty reduction lens. (beyond ‘coping’ or ‘getting by’)
- Accessibility of policies/programs
- Gender
- How to include consideration of indirect impacts?

Elements of Analytical Framework: Climate-sensitive development

- Consider potential interactions and cumulative impacts of: climate events, variability, less-than-extreme events
- How to address access, agency, distribution of risks and benefits?
- How to improve ex-ante risk-reduction strategies so that they don't result in less risk = less income
- How to make risk-reduction strategies like diversification more accessible?

Vietnam policies to address nexus of climate change and poverty

National level poverty reduction measures supporting climate adaptation

- District level infrastructure investments for places with special needs
- Supportive loans (international) to work on poverty reduction
- Support for increased production
- Support for increased livelihoods diversification
- Promoting labour export for the poor
- Direct grants
- Community and local staff capacity development
- Local level poverty reduction measures (mostly top-down to cover direct shortfalls of households.)
- Poverty reduction policy - moving away from 'giveaway' model, towards indirect investments.

Vietnam policies to address nexus of climate change and poverty

Local level poverty reduction measures that may support climate sensitive development

- Free healthcare for seniors
- Access to land and water for ethnic minorities
- Food assistance (pre-harvest times)
- Housing grants/loans for ethnic minorities
- Household energy expense subsidy
- Supportive policy for health insurance
- Tuition/study costs subsidy
- Cash assistance for poor households

Vietnam policies to address nexus of climate change and poverty

Indirect support mechanisms - supporting both poverty reduction and rural development

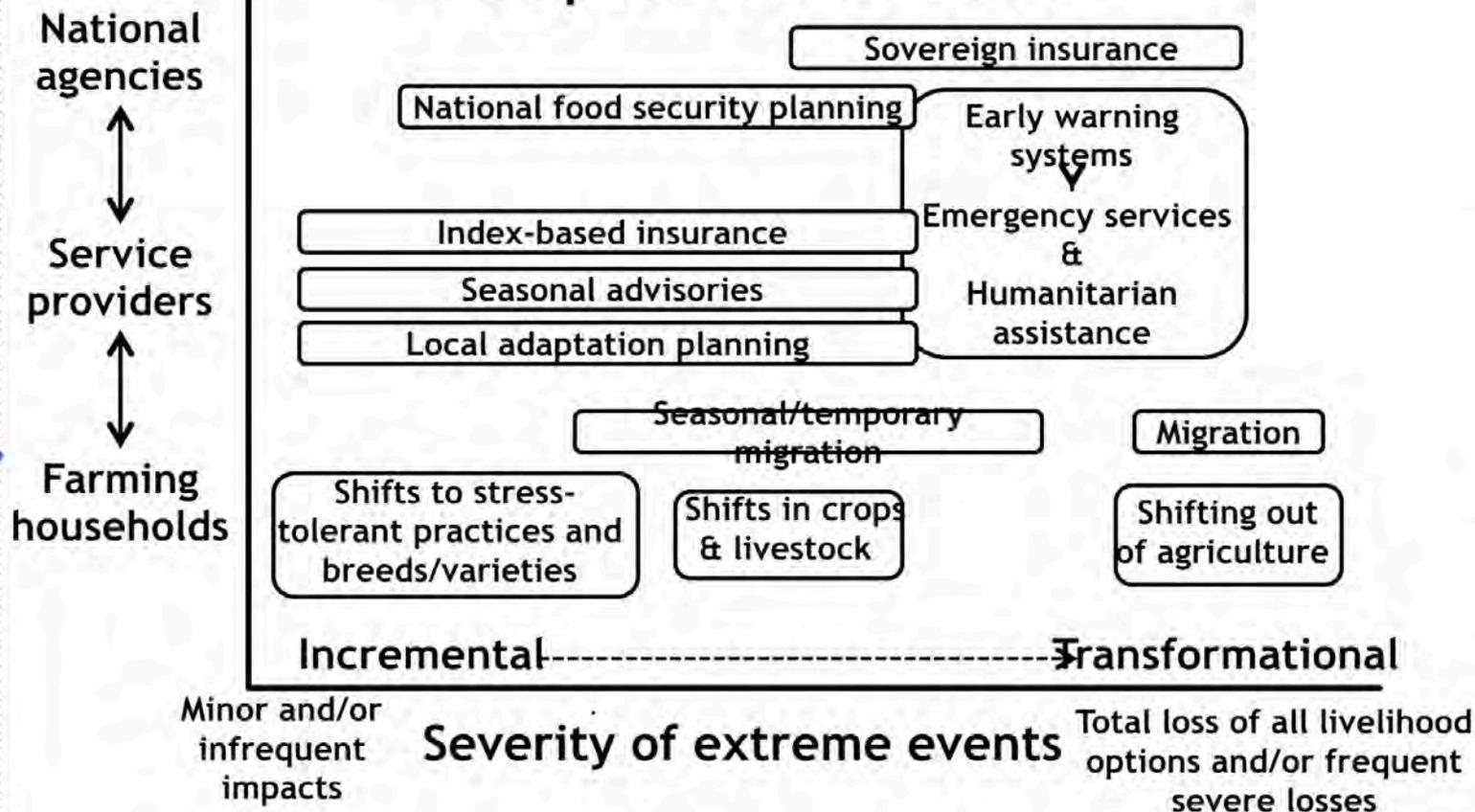
- Social Policy Bank - Support to poor/nearly-poor households through preferential loans
- Supportive infrastructure improving access to services (rural roads, irrigation systems, schools, electricity, healthcare)
- Vocational training and labour restructuring
- Production development initiatives
- Interventions by international development organizations

Vietnam policies to address nexus of climate change and poverty

Climate response policies that have pro-poor elements

- infrastructure - dykes, dams, roads, flood control, flood shelters (90% of climate response spending overall)
- Converting rice land to be more efficient, application of Climate Smart Agriculture (CSA), closed agricultural ecosystem models.
- Adjust seasonal calendar, select production models more suited to new weather patterns
- Promote new productive activities including shrimp-rice model, raising ducks.
- Transform crop structure, introduce organic production
- Introduce water saving methods
- Provide technical guidance on crop planning, planning production areas, selecting climate-adapted plants, training in flexibility in crop calendar
- Planting grasses that retain water for the land, new models of agro-forestry.
- Smart Adaptation Village model (arrangement of production areas to match natural conditions, use local knowledge and improve technology.)
- Resettlement programs - especially for landslide risk areas
- Support for housing to avoid storms/floods
- Restoration/reconstruction initiatives post-disaster (infrastructure repair, environmental restoration)
- Enhancing community awareness of natural risk management
- Protecting and developing forests
- Measures for early warning and forecasting capacity enhancement
- Applying science and technology in agricultural production
- Transformation of production system (crop & livestock structure and production models)
- Conversion of rice varieties and crop calendar
- Agriculture insurance
- Forest land allocation to communities and households
- Community based climate change adaptation and disaster risk reduction (livelihoods model including insurance, microcredit, and more)
- Ecosystem-based adaptation (EBA) - multi-dimensional, multi-scale cooperation, adaptive management, education
- Bio-buffers from by-products of wood and rice processing.
- Sloping land use practices, grassland belts to protect from erosion and landslides
- Closed agricultural model - avoid dependence on external resources/markets, include biotechnology to increase outputs

Adaptation actions



Campbell et al. 2017

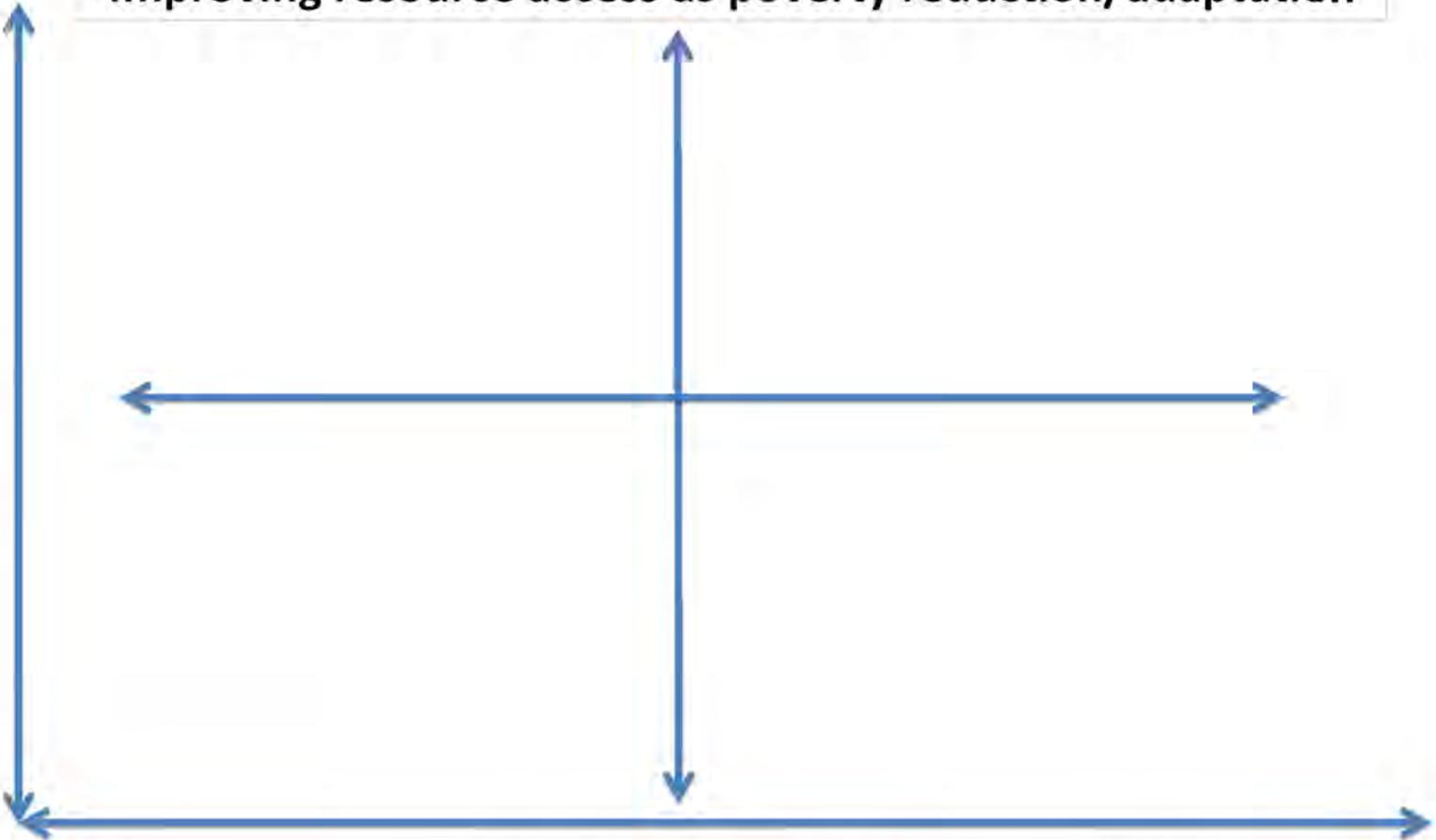


RESEARCH PROGRAM ON
Climate Change,
Agriculture and
Food Security



Improving resource access as poverty reduction/adaptation

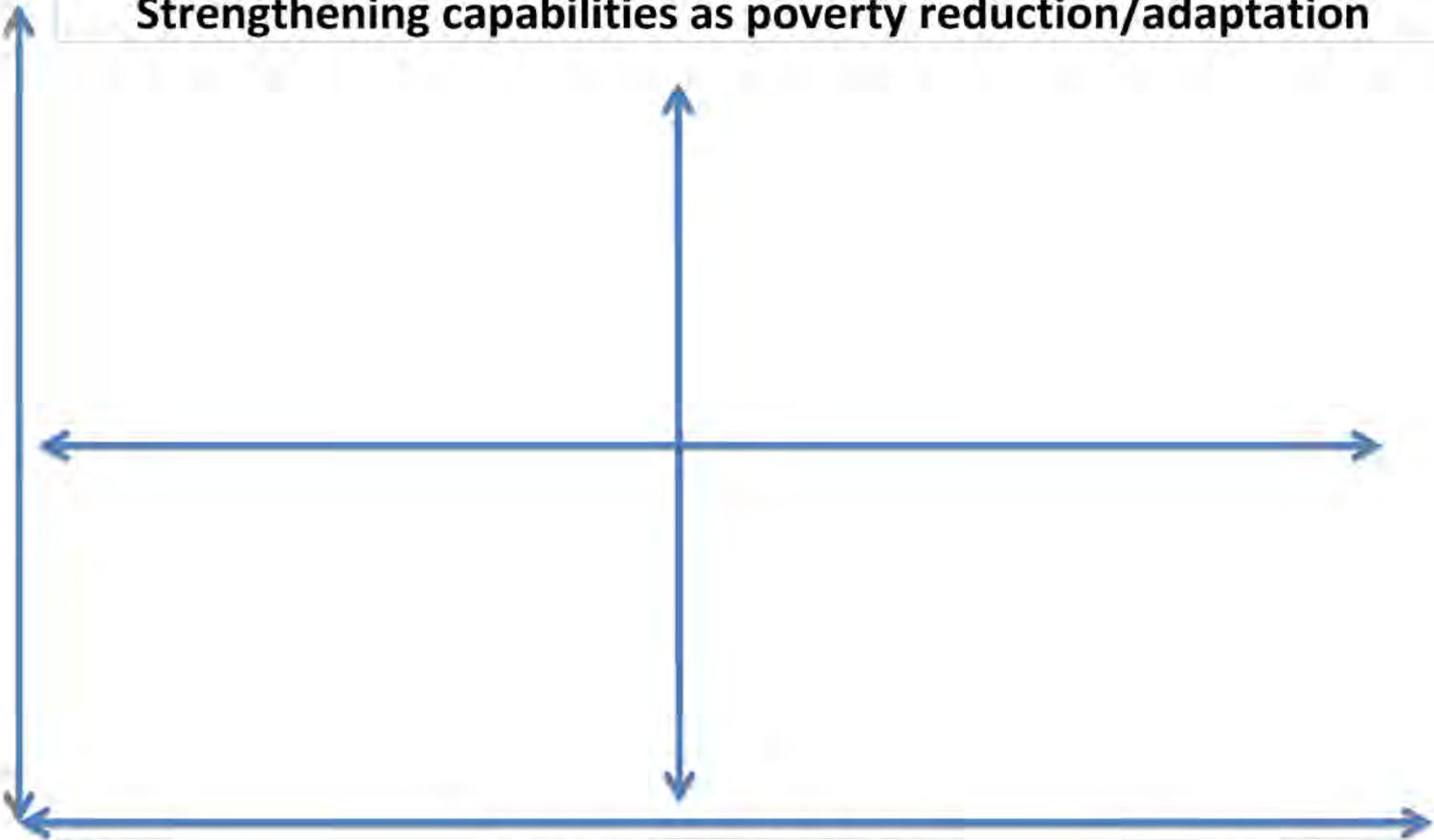
Resource Access



COPING	INCREMENTAL CHANGE/ADAPTATION	TRANSFORMATION
GETTING BY	GETTING BETTER	STRUCTURAL CHANGE
STATUS QUO	IMPROVEMENT	SUSTAINED IMPROVEMENT

Strengthening capabilities as poverty reduction/adaptation

Capabilities



COPING

INCREMENTAL CHANGE/ADAPTATION

TRANSFORMATION

GETTING BY

GETTING BETTER

STRUCTURAL CHANGE

STATUS QUO

IMPROVEMENT

SUSTAINED IMPROVEMENT

Improving food security as poverty reduction/adaptation

Food Security

COPING

INCREMENTAL CHANGE/ADAPTATION

TRANSFORMATION

GETTING BY

GETTING BETTER

STRUCTURAL CHANGE

STATUS QUO

IMPROVEMENT

SUSTAINED IMPROVEMENT

