

Poverty reduction, climate change mitigation and adaptation : the need for intermediate public policies for technology appropriation

5th International Summer School



Summary : Workable approaches bringing together both goals of climate change mitigation and adaptation and poverty alleviation are needed. Challenges are numerous and developing countries vulnerability to climate change is high. The poster recalls different frameworks and highlights the role of intermediate institutions. It presents the three case studies that will be investigated.

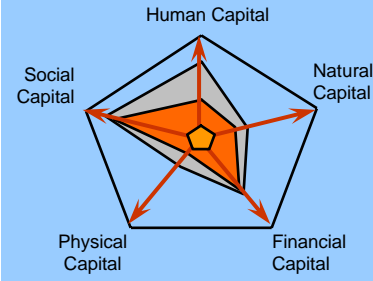
Context

Emerging agenda aiming at linking climate change and the Millennium Development Goals (MDGs) and promote alternative development paths (IPCC, 2007).

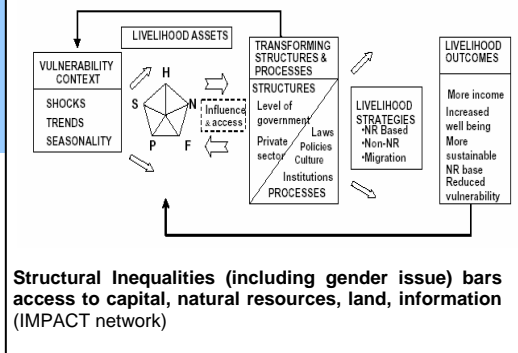
Tentative frameworks to integrate climate change adaptation and mitigation into national sustainable development and poverty reduction strategies do not address the S&T contribution nor the renewed debate on technologies that really work for the poor (Leach and Scoones, 2006).

1 – Capabilities to foster resilience of social-ecological system

Resilience of peoples' livelihoods depends on their capabilities to adapt to internal and external shocks and stresses. Tangible assets (natural, productive, physical, and livestock and other forms of stock), intangible assets (social capital and non-market institutions allowing access or control of assets or resources), and capabilities (human and cultural capital, and life cycle characteristics) shape livelihood strategies (Conway and Chambers, 1992).

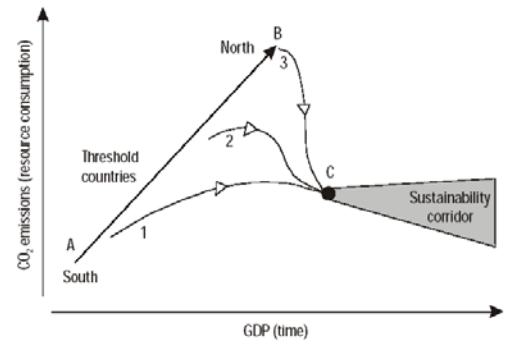


Tackling inequalities to promote sustainable livelihoods



3 – Leapfrogging and SD PAMs

Climate change constraint would appeal for development paths to be less intensive in greenhouse gases. Existing approaches to leapfrogging are still in their infancy.



Sustainability corridor Source INFRAS AG/TERI (1997)

SD-PAMs and Innovation

SD-PAMs (Sustainable Development policies and measures) (Winkler *et al.*, 2002) is one of the most promising forms of participation of DCs in long term climate stabilisation effort. Adapted systems of Innovation would help DCs become autonomous agents in the generation of technologies (Juma, 2001, 2005).

2 – Intermediate Technology and receptivity

Intermediate technologies

Appropriate technology can be defined as « a technology which is suited to the environment in which it is used », environment being here considered in a broad sense (cultural, social, economic, physical, etc.)

Bringing the issue of appropriate technology in the arena of technology cooperation is still at stake (Atkinson, 2004).

People centred innovation

To ensure that technologies deliver the expected development benefits for poor people, they must be developed in a participatory manner. Projects and intermediate public policies would then have to foster green empowerment, local leadership, self sufficiency.

Different authors outline approaches how to make local people 'agents' for SD, elaborating policies, actions for SD, and mentioning economic instruments.

Towards a framework of ownership - a basis for technology receptivity

Environmentally Sound Technologies for adaptation

Technologies for adaptation need to build on traditional and informal collective knowledge (tailored made, with local realities)

4 – Cases of harnessing institutional synergies

Mitigative and adaptive capacities may sometimes be two sides of the coin (Yohe, 2001). Empirical observations would help in the assessment of the conditions of technology receptivity of climate friendly technologies.

- Kuyasa low cost housing upgrade (South Africa)

Improving affordability of energy services

There are few but emblematic examples of CDM projects conducive to poverty/inequality alleviation. The Kuyasa project (Spalding-Flecher *et al.*, 2003) is one of them. It builds on the SouthSouthNorth methodology.

SSN Indicators

Component	Indicator	How to use the tool
Energy	Energy efficiency (kWh/m ² /year)	Energy efficiency is a key indicator of energy service quality. It is measured by the ratio of energy consumed to energy delivered.
Social / regional / global environment	Energy poverty (kWh/m ² /year)	Energy poverty is a key indicator of energy service quality. It is measured by the ratio of energy consumed to energy delivered.
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Community Based Adaptation

Is a new methodology of SSN2 tested in South Africa, Tanzania, Mozambique, Bangladesh, Indonesia...

- Rooibos Tea farming (South Africa)

adaptation to a drying climate

- Leh (Ladakh, India)

Agricultural development and solar passive buildings