

Policy Brief

Development policies as a vehicle for addressing climate change

Key messages

Instruments that captures co-benefits between mitigation and sustainable development is a viable strategy for moving negotiations forward.

By focusing on policies and sectors, such instruments holds a potential for systemic change.

Assessment of the policies and measures need to consider the entire socio-technical systems to avoid mismatches.

Such instruments should not only target the production system but also consider some of its support functions.

Mitigation as a side effect

This policy brief presents findings on how development policies, which also contributes to GHG emission limitation could be included in a future mechanism of the Climate Convention. It draws its conclusion from a research project examining conditions for Sustainable Development – Policies and Measures (SD-PAM) as an instrument in climate policy. The project was built around a set of national case studies in Brazil, China and Mozambique, covering a diverse set of sectors – biofuels, bioenergy, agriculture, and transportation.

A co-benefit mechanism

Even though SD-PAM as concept is not likely to be part of a future climate treaty, we find it probable that something similar will materialize as a mechanism under the Climate Convention. The SD-PAM proposal can be seen as a precursor for National Appropriate Mitigation Actions (NAMA). Since SD-PAM so far is one of the most elaborated proposals for designing a mechanism for capturing co-benefits between development and climate, there are some important lessons to be learned.

The proposal outlines a rationale under which climate change mitigation may be achieved through the primary pursuit of other development objectives, such as infrastructure investments, housing projects and energy policies. By targeting policies and measures, rather than projects, such a mechanism could potentially contribute to changing socio-technological systems.

Recognition important for leveraging change

There are various ways in which an SD-PAM style mechanism could provide a leverage mechanism to alter socio-technological systems. Most critically, it constitutes a means to *provide recognition* for national activities that are otherwise not viewed as climate policies. This could in turn generate: 1) new commitments; 2) additional direct *funding*; 3) indirect financing in the form of *tradable permits*; and 4) different forms of *technology transfer*.

Transparency

The level of recognition is ultimately contingent on the degree of transparency in and legitimacy of the policy process. This emphasizes the importance of credible systems for measurement, reporting and verification. Particular challenges are to establish: 1) baseline criteria for GHG reductions; 2) the appropriate time scales for mitigation; 3) a definition of what constitutes additionality; and 4) criteria for assessing sustainability. The situation is poignantly illustrated in the Chinese electric car program, where a reduction of CO₂ emission in the transportation sector may in fact produce an global net increase if the electricity is generated from coal utilities, as well as the Brazilian biodiesel program that failed to generate the social sustainability impacts it was originally justified by.

Much of the traditional literature suggests that changes in socio-economic systems are achieved through interventions in the production system. However, a future SD-PAM mechanism may be even more influential *sustaining related support functions*, such as the creation of markets, the provision of energy, improving of logistics

Case studies

Mozambique:

- Mitigation in Rice Production Sector
- Adaptation in Rice Production Sector

Brazil:

- Ethanol Programme
- Biodiesel Programme

China:

- Biogas Programme
- Electrical Cars Programme

Implementing organizations and institutional frameworks

Organisational factors are critical to the ambition of altering socio-technological system.

- 1) *Actors at various levels of the system need to be engaged.*
The case studies indicated that the policies only worked when it built upon a strong network of public institutions that produced the detailed proposals and later implemented and enforced them.
- 2) A minimum level of *human and institutional capacity* is needed for policies to take effect. In Mozambique, the lack there of constitute probably the greatest impediment to any major advancements in the rice sector.
- 3) *Incentive structures within the administration* itself may also influence the likelihood of major changes in the system. Hence, the biogas and electric car programmes in China illustrate how the connection between strategies, on the one hand, and appointments and budgeting, on the other, could have a major impact on the implementation of policies.

These observations suggest that a future SD-PAM type of mechanism could have an additional function in supporting the very implementation of policies in governing at each level; serving as a conduit for interaction between different actors, providing various forms of capacity building, and creating individual incentives also within the administration. This support of implementing structures may in fact be one of the more important functions of an SD-PAM.

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