

Reducing Vulnerability, Enhancing Resilience:

The Importance of
Adaptation Technologies
for the post-2012
Climate Agreement



CIDSE and Caritas Internationalis recommendations

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Executive Summary

Technology is a crucial element of any strategy to adapt to climate change. In the context of adaptation, technologies are understood to include not only materials, machinery and equipment, but also various forms of knowledge and practice¹. Adaptation technologies include hard and soft technologies, traditional, modern, high and future technologies. They vary from cheap and often locally available, to expensive and requiring international technology transfer². Given the importance of adaptation for poverty reduction, CIDSE and Caritas Internationalis believe strongly that international cooperation should prioritise adaptation technologies that benefit those living in poverty. They are generally those technologies that are already known, that been developed in developing countries and can be transferred and diffused within and across these countries.

CIDSE-Caritas Internationalis principles for pro-poor adaptation technologies

Based on existing knowledge and practice, the following criteria for adaptation technologies have been identified as specifically benefiting those living in poverty:

- Technologies that are appropriate to the environmental, ethical, cultural, social and economical aspects of communities, and that and as far possible adopt locally available resources that can be readily used by local communities;
- Technologies that are already known, inexpensive and accessible, require few resources, are easy to maintain and have a minimum negative impact on the environment;
- Technologies that allow access to information on the potential impacts of climate change and that reduce vulnerability and strengthen people's resilience to extreme weather events, building on Disaster Risk Reduction (DRR) practices (such as early warning systems, improved shelters and seed banks);
- Technologies that empower the most vulnerable communities, such as traditional technologies based on indigenous cultural identities, knowledge and experience;
- Technologies that can be transferred and diffused within and across developing countries;
- Technologies that will not cause or lead to maladaptation in the long-term;
- Technologies that can provide synergy with mitigation, especially those involving land use practices such as agriculture and forestry, which offer adaptation and mitigation benefits while also contributing to food security and strengthened livelihoods.

1 UNFCCC (2006). *Technologies for Adaptation to climate change*, unfccc.int/resource/docs/publications/tech_for_adaptation_06.pdf. P4.

2 Kee, C. K (2007), EGTT contribution to the discussion on realizing the full potential of technologies, unfccc.int/files/meetings/dialogue/application/pdf/chow__egt_chair.pdf. (powerpoint presentation).

3 CIDSE and Caritas Internationalis prefer the term technology 'sharing' to technology 'transfer'. In recognition of the terminology used within the Convention, however, this report refers to technology 'transfer'. We understand technology transfer in this context to include South-South, North-South and South-North cooperation at various levels.

Despite the importance of technology for the process of adaptation to climate change, negotiations at the United Nations Framework Convention on Climate Change (UNFCCC) have failed to properly address the issue of adaptation technologies. This is due to a number of factors, including fragmentation of discussions on adaptation throughout the UNFCCC and prioritisation of mitigation technologies in technology transfer negotiations³. As a result there is a lack of understanding of the range of existing adaptation technologies, as well as the challenges that need to be overcome for the effective implementation of adaptation measures. Given the importance of adaptation for poverty reduction and for protecting the right of people in developing countries to their sustainable development, CIDSE and Caritas Internationalis urge Parties to the negotiations to overcome these challenges, and ensure that the new international agreement on climate change provides adequate and appropriate support for technologies for adaptation.

CIDSE-Caritas Internationalis recommendations for the post-2012 agreement

- 1. Parties should ensure the relevant parallel negotiating tracks take a joined up approach to technology and technological development for effective adaptation to climate change.** In the adaptation negotiating track the role of technology should be recognised, and in the technology negotiating track the use of technology for adaptation should be recognised.
- 2. Parties should recognise that research, development, demonstration, diffusion and transfer of existing adaptation technologies, including knowledge and skills, should be supported by new funding which is additional to existing ODA (Overseas Development Assistance) targets.**
- 3. Parties should work for coordination and policy coherence for the effective implementation of adaptation technologies policies across a proposed UNFCCC architecture:**

At an international level:

- Members of the proposed **Adaptation Executive Board** and **Technology Executive Board** (as proposed in the negotiations by the G77 and China) should be represented on each others respective Boards. Both Boards should jointly produce regular reports to the Conference of Parties (based on reports from the Technology Mechanism and information gathered from other adaptation institutions and processes e.g. the Nairobi Work Programme (NWP)) on their adaptation technologies related activities, including the identification of gaps and needs for the most vulnerable developing countries, and the identification of appropriate responses.
- The Adaptation Executive Board should take into account activities undertaken by institutions involved with adaptation i.e. Regional Centres, NWP etc.

At the developing country national level:

- **Synergies between National Adaptation Plans/Strategies, Poverty Reduction Strategies and Low Carbon Development strategies should be ensured**, in particular for the identification of priority actions to support the development and diffusion of adaptation technologies.

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4. **Parties should agree on an international technology mechanism** for the effective implementation of adaptation technologies and which should prioritise the following:

- **Overcoming barriers which prevent the diffusion of existing and future adaptation technologies**, including in particular Intellectual Property Rights barriers.
- **Overcoming financial barriers which prevent the diffusion and adoption of high adaptation technologies**, such as sophisticated information and communication technology, early warning systems, geographic information systems and new crop varieties.⁴ Adoption of such technologies will require capacity-building, and transfer of know-how on their use and maintenance.
- **Research, development and demonstration of new adaptation technologies**, based on the identification of needs by national planning processes, such as National Adaptation Plans of Action (NAPAs) and Technology Needs Assessments (TNAs).
- **Providing technical expertise and assistance to developing countries** to identify needs and develop strategies in the context of their NAPAs and TNAs.
- **Ensuring progress in the development, diffusion and demonstration of adaptation technologies that require international cooperation** through Adaptation Technology Action Plans (ATAPs) that will identify policies, actions and funding requirements for a specific set of adaptation technologies.

5. **Parties should recognise that regional, national and local cooperation are key for the effective implementation of adaptation technologies, in particular:**

- The **diffusion and adjustment of proven existing technologies** across and within developing countries, to enable the use of technologies in different contexts in response to local vulnerabilities.
- The **enhancement of national and local capacities**, including public sector and civil society institutional capacity, knowledge and know-how for sustainable adaptation to climate change.

6. **Regional, national and local cooperation** should draw on the experience of and strengthen the work of **Regional Centres of Excellence** (as proposed by the G77 and China), the **Nairobi Work Programme**, existing **international DRR frameworks** (such as the Hyogo Framework) and other information-knowledge sharing platforms that are linked to civil society experiences. The activities undertaken by these institutions should be taken into account by the Adaptation Executive Board.

⁴ It should be avoided that adaptation discussions increase the opportunity for agricultural high technologies that may receive attention from the private sector, such as genetically modified organisms (GMOs), but that will not support sustainable small-scale farming activities in developing countries. These approaches to agriculture are generally energy and resource-intensive and based on chemical inputs, which can negatively impact on the environment, and do not consider socio-economic issues, including risks of farmer dependency, or cultural values'.