The Business of Adaptation
Briefing paper

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November 2009

Climate Policy Briefing Series | Briefing 1

AccountAbility

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Summary

Private action is not a substitute for public obligations, but it has a crucial role in complementing the fulfilment of such obligations given the scale of the adaptation challenge to nations, economies and vulnerable communities.

This paper therefore addresses how private action can be effectively mobilised, and leveraged through the appropriate design of international public policies and financing mechanisms, with a subsequent paper focusing on national policy options and practices.

Despite some pioneering examples, the private sector as a whole has so far been slow to react, held back by lack of awareness and due diligence on climate change risks, insufficient resources and expertise (especially amongst smaller enterprises), perverse incentives that promote maladaptation, and the weakness of enabling environments.

Nevertheless, given the tight link between adaptation, development, industrial and economic policy and growth, it is clear that the success of national adaptation plans will depend on whether they enable businesses to adapt, and continue to provide jobs, livelihoods and essential services. Private sector innovation will also be needed to support the adaptation of public services.

Parties to the UNFCCC should enable a stronger contribution for business, through;

1. **Text agreed by the CoP** – Ensure that the role and responsibility of business is explicitly acknowledged and enabled within the text on adaptation.

2. **Financial mechanisms** – Sensitise all financial mechanisms to the opportunity to leverage adaptation by the private sector.

3. **Oversight** – Incorporate principles and competencies into the oversight and governance of these implementation entities to ensure that the private sector role is taken into account.

4. **Low-carbon development plans** – Develop national plans that consider risks and opportunities for business, and that integrate adaptation into economic and industrial policy.

5. **National policies** – Enact national policies that are sensitised to the need for business to respond to adaptation challenges in order to support vulnerable communities and maintain growth and development.

We propose that the UNFCCC initiate a **specific track of work in 2010** focused on the role of business in adaptation, that draws in negotiators, other key government officials, businesses and civil society organisations.

There is also need for the **private sector to be engaged** in the national dialogues supporting the development of low carbon growth plans and NAPAs.

The Business of Adaptation

Does business have a role to play in adaptation?	Businesses have to adapt to protect their own assets, and meet the needs of their customers, and supply chains in a harsher climate.

It is clear that all kinds of businesses, from household and informal sector enterprises to state-owned and multinational companies will need to adapt, as climate change affects their operations, their customers and their supply chains.[1] Large parts of the agriculture sector for example, which includes 2 billion people who depend on small scale-farming, is vulnerable.[2] Similarly, much of the investment in the power sector over the next two decades, estimated at an annual cost of US$1 trillion per year, will need climate-proofing, as will the estimated US$500 billion needed in the water sector to meet the MDG targets.[3]

Agricultural companies will need to develop more drought resistant varieties, and farmers will need to adopt them. Manufacturers will have to ensure access to water, power, materials and distribution networks, and their supply chains will need to react. Infrastructure and property developers will have to take climate change into account. Tourism and health sector businesses will have to respond to changes in patterns of demand.[4] Businesses are also likely to see new opportunities in working with governments to finance and deliver public sector adaptation actions such as building and operating sea-defences and early warning systems.[5]

At the same time, businesses must also be aware of how investment decisions can cause maladaptation; leaving the business and others more exposed to the effects of climate change. Building in flood plains, deforesting mangroves, or depleting local water resources are just some examples. Actions by businesses to reduce their exposure to climate risks, such as shifting location or supply base or turning to biofuels and forestry as mitigation measures, can also have a negative impact on communities dependent on supply chain linkages for jobs or on land for food production.

How important is business to meeting national adaptation priorities?	The success of national adaptation plans will depend on whether they enable individuals and businesses to adapt and to diversify livelihoods. The private sector can also play a role in implementing publicly funded adaptation actions and developing radically more effective technologies.

The role of the private sector in adaptation has been under explored, both by businesses and by governments, but mobilising business will be crucial to effective national adaptation strategies, in four areas:

- **Maximising adaptation and avoid maladaptation**. While there remains great uncertainty about the incremental costs of adaptation, it is clear that the majority of adaptation (or maladaption) will come from everyday decisions in the private sector.[6] Microeconomic analysis reveal that a large proportion of actions that are no-cost or low cost moves, many of which would be economically viable actions for individual businesses to take.[7] The success of national adaptation plans will therefore depend on whether they enable individuals and businesses to adapt, to provide products and services that help others to adapt, and to avoid strategies that store up problems of maladaptation.

- **Diversifying economies.** Many countries have recognised that adaptation does not just mean investing in physical measures such as building higher sea-walls, but improving the livelihoods and resilience of the poor and diversifying industry away from climate sensitive sectors towards more climate-proofed industries and employment opportunities.

- **Implementing public adaptation actions cost effectively**. Adaptation will involve significant public sector investment. However, governments may draw on private sector capacity to overcome operational constraints, enhance performance and accelerate investment in public adaptation measures through public private partnerships and other procurement relationships.

- **Enabling innovation to meet a growing challenge.** Climate change impacts grow non-linearly with temperature change, requiring radically more effective new technologies and business models. The private sector plays a crucial role in developing innovations and promoting their adoption. Business resources and expertise will need to be applied to understanding vulnerabilities and potential impacts, identifying appropriate solutions and mobilising the resources and will to implement them. Under less optimistic climate scenarios, adaptation challenges are likely to be more extreme and extensive, and less likely to be adequately covered by public finance. In such circumstances business engagement both in resourcing and innovation will be all the more important.[8]

How far has the private sector progressed in adaptation?	Despite some pioneering examples, in general the private sector has been slow to react. Nevertheless, the broader experience of the role of the private sector in development, points large and enduring benefits if business expertise and resources could be mobilised to address adaptation challenges.

Some enterprises are getting to grips with climate change risks and beginning to explore opportunities for developing new markets and products to meet the adaptation needs of other businesses and consumers.[9]

Examples in key sectors include:

- **Consumer products** – In India Unilever reformulated laundry detergent to require less rinsing. Unilever estimates that this could save 14 billion litres of water in the region a year.

- **Information systems** – Google is working with an NGO coalition to develop mapping tools for making information such as climate data, vulnerability and ongoing adaptation projects more accessible. IBM is testing a system of sensors for monitoring the stability of flood protection dikes. They are also building a software system to collect and analyse weather, rainfall and water-level data, and use the results to advise local governments and emergency responders about flood threats and evacuation plans.

- **Water** – Seimens is developing technology capable of cutting the cost and energy intensity of converting seawater into drinking water by channelling water through an electric field. Manna Energy is developing solar powered water treatment plants for rural schools in Rwanda. They will be funded through the generation of CDM credits from avoiding firewood use for sterilising water.

- **Energy** – Husk Power Systems and Ankur Scientific Energy Technologies provide small scale energy generation systems, which run on local biomass produced by farmers such as rice husks, freeing people from dependence on liquid fuels or grid electricity, which exhibit volatile prices and can be cut off by extreme weather events.

- **Agriculture** – Low-cost drip irrigation is being taken up by small-scale farmers in Asia and sub-Saharan Africa. Jain Irrigation together with Yes Bank provide financing for drip irrigation while Global Easy Water has developed drip irrigation designed for affordability. Agriculture and food multinationals such as Unilever, Syngenta, DuPont, Monsanto, Nestlé, Groupe Danone, McDonalds and Starbucks have developed sustainable agriculture strategies along their value chains. Small farmers in Niger have adopted simple, low-cost techniques for managing the natural regeneration of trees and to conserve soil and water resulting in a 'regreening' of an ecologically vulnerable area and strengthened livelihoods.

- **Micro-insurance** – Micro-insurance products are being developed in partnership between reinsurance companies such as Swiss Re and Munich Re and microfinance institutions, rural banks and cooperatives. Small farmers in Bolivia have taken up an offer of index-based insurance being piloted by Fundacion PROFIN. The scheme is based on the production of farmers recognised as good practitioners by their peers. When yields on these plots are adversely affected by the weather, all farmers in the scheme receive a pay-out.

- **Building materials** – BASF has developed an elastomer polyurethane system to protect dikes by absorbing the force of the breaking waves and slowing down the water masses.

But despite these pioneering examples, the general reality is that the private sector has been slow to react, particularly in relation to the need for adaptation in developing countries. The majority of corporate sector attention has been focused on mitigation efforts in the industrialised economies through energy efficiency, low carbon technologies, consumer behaviour change, emissions trading schemes, and the development of GHG emission reporting. Local and international assessments of the contribution of business to climate change adaptation to date conclude that while some companies within the private sector are taking actions to be adaptive, these efforts are inadequate to address the scale of the problem.[10]

However, there are signs that business recognition of the adaptation challenge is growing.[11] With increasing attention from insurers and fund managers, companies linked to these global markets are reassessing the materiality of climate change risks and opportunities to their businesses.[12] At the same time these businesses are also beginning to see opportunities for business growth in meeting unmet needs for health care, clean water, and other necessities at the 'base of the pyramid' (i.e. amongst less affluent consumers).[13]

What are the obstacles to effective action by the private sector?

Development of a profitable 'business case' for adaptation is held back by lack of awareness and due diligence on the climate change risks, insufficient resources and expertise especially for smaller enterprises, perverse incentives that promote maladaptation, and the weakness of enabling environments.

Experience to date highlights the key obstacles to effective private sector action on adaptation:

- **Lack of awareness** of the impacts of climate change on water availability, productivity and business operations. In order for the private sector to contribute adequately to the adaptation challenge, it needs to have access to information on climate change impacts and to integrate the issue into governance, due diligence and public disclosure so that climate change risks and opportunities are properly assessed and addressed.

- **Insufficient resources and expertise, especially for smaller enterprises**. Developing countries tend to be dominated by a few large incumbents, substantial informal sectors (including subsistence smallholders, small fishermen and herdsmen and informal micro-enterprises) and a relatively small formal SME sector. It is estimated that more than 70% of the workforce in developing countries operates in the informal economy.[14] However, this sector is particularly vulnerable to destruction of natural ecosystems and faces the greatest obstacles to adaptation, in terms of lack of information, capacity, risk appetite and access to capital.

- **Emphasis on adaptation as a public sector action and on large-scale projects.** The lack of real business engagement in policy debate on adaptation to date, and the reluctance of governments to consider the role of the private sector, means that there is a gap in policy makers' understanding of what opportunities and obstacles businesses face in adaptation. Developing this dialogue and understanding will be crucial to effectively encouraging greater private sector participation in adaptation.[15]

More generally experience of private sector focused approaches to development highlight the importance of key enablers to upscaling business solutions:

- **Leadership and supply chain linkages.** While adaptation challenges will affect all sizes of business, the corporate sector can take a leadership role in understanding and responding to the need for adaptation in its own operations and for its staff, customers and supply chains.

- **Access to finance and soft funding source** whether from public sources, or in the form of 'patient' venture capital or philanthropic resources to enable innovative business models to reach scale and maturity.

- **Enabling business environments** which remove obstacles that inhibit enterprise development.

- **Access to markets** to enable upgrading and economic diversification.

- **Well-governed public-private and multi-sector partnerships** as key vehicles for mobilising public, private and civil society capacity and resources to create innovative solutions.[16]

Is arguing for a greater role by the private sector a distraction from the need for new and additional funding for adaptation?

The goal of supporting the role of business in adaptation is not to absolve international governments of responsibility, but to maximise the effectiveness of their funds. Strong public policies, regulation and financial mechanisms are needed to enable adaptation by the private sector.

While private action cannot be used to fulfil public obligations, it is clear that whatever the calculation of adaptation costs, and the level of funding secured through the UNFCCC, resources will be limited. Therefore it is essential that funds are spent in ways that leverage maximum effective adaptation by the private sector (and avoid perverse incentives that promote maladaptation).

Given the tight linkage between adaptation, industrial development, economic growth and closing of the 'adaptation deficit' of underdevelopment, it is crucial that adaptation plans are a part of the overall economic growth strategies. At the same time they must avoid the danger that intergovernmental financial flows crowd out private investment and employment, resulting in a new kind of 'resource curse' where incoming finances do not promote development but fuel conflict, inequality, and weak governance.[17] Equally they should not be captured by favoured industries into 'corporate welfare' schemes. New and innovative mechanisms are required to ensure the poorest and the informal can play an active role as beneficiaries and champions.

Highlighting the importance of the private sector in adaptation does not support a simple argument that 'the market will provide'. Despite 40 years of efforts to develop the concept and market for micro-insurance for example, success has been limited. The percentage of poor people around the world with any kind of insurance remains very low – an estimated 0.3 percent in Africa, 2.7 percent in Asia, and 7.8 percent in the Americas.[18] Privatised water systems, have been plagued by financial and political difficulties that have resulted in neither better service for low-income communities or business success. Clearly private sector involvement is no panacea. But the difficulty in realising the large and enduring benefits promised by the private sector underlines the need for strong public policies, regulation and financial mechanisms which incentivise and enable adaptation, innovation and economic diversification and prevent maladaptation.

What is needed to enable the private sector to contribute adequately to adaptation?	Parties to the UNFCCC should recognise and support the role of private sector in adaptation within CoP15 text, and in the finance and governance mechanisms that are developed. At the national level the role of the private sector should be reflected in low-carbon, climate resilient development plans and associated policies.

Mobilising a sufficient private sector response to the adaptation challenge is crucial to the success of Long Term Cooperative Action on climate change. Parties to the UNFCCC should therefore:

1. **Explicitly acknowledge the role and responsibility of business within the text** of the agreement for Long Term Cooperative Action under the UNFCCC.

2. **Develop financial mechanisms that are sensitised** to the opportunity to leverage adaptation by the private sector, and avoid maladaptation. This principle should extend not only to adaptation finance but to all climate change financial mechanisms involving the private sector (including in mitigation and land-use and forestry).

3. **Incorporate principles and competencies into the governance** of these funds and national implementation entities to ensure that private sector perspectives and capabilities are taken fully into account.

4. **Develop national governments to develop national low-carbon, climate resilient development plans** that include assessment of the adaptation related risks and opportunities for business, and which integrate adaptation into economic and industrial policy and plans for low carbon growth.[19]

- **Enact national policies** that are sensitised to the potential and need for business to respond to adaptation challenges to support vulnerable communities and longer-term growth and development.

We propose that the UNFCCC initiate a specific track of work in 2010 focused on the role of business in adaptation and its cross-cutting significance for processes being developed for financing, mitigation, forestry and land use, technology and low-carbon development. This should draw in negotiators together with other key government officials (e.g. economics and finance) as well as businesses and civil society organisations.[20]

At the same time there is also need for multi-stakeholder engagement at the national level and regional level, and in particular for the private sector to be engaged in the ongoing development of national low carbon growth plans and NAPAs.[21]

Further work:

AccountAbility is continuing to advance this work with IIED and other partners focusing on UNFCCC linkages, national policy and institutional design, and the business call to action. For further information, see our website **www.accountability21.net/adaptation**

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Further Reading

World Economic Forum (2009) Task Force on Low Carbon Prosperity – Working Group on Adaptation.

AccountAbility and IIED (2009 – forthcoming) National Policies for climate resilient business.

Project Catalyst (2009) Low Carbon Growth Plans: Advancing Good Practice.

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AccountAbility's resource centre on business and adaptation provides a library of adaptation resources, including links to these and other documents referenced in this briefing. www.accountability21.net/adaptation

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16 See for example Monitor (2009) Emerging Markets, Emerging Models, market based solutions to the challenges of global poverty.

17 See for example, Hartford, T and Klein, M (2005) Aid and the Resource Curse, World Bank Note.

18 WRI (2008) op cit.

19 See for example Project Catalyst(2009) Low Carbon Growth Plans: Advancing Good Practice.

20 The World Economic Forum has also called for an intensified international public-private dialogue n the role of business in adaptation WEF (2009) Recommendations of the Business-Expert Taskforce on Low Carbon Prosperity.

21 The UNDP Coordinated Territorial Approach to Climate Change, for example, is developing public-private dialogues and partnerships on climate change adaptation at sub-national level.

Supported by DFID Department for International Development