Mitigating climate change: what impact on the poor?

The impact of climate change is of vital importance. But, for the world’s poor, policies to mitigate climate change may, in the short term, have as much impact as climate change itself. Climate change poses a risk to poor and marginalized communities not only through its physical impact, but also through policy responses to its real or perceived threats. This is not to discount the physical impacts. Environmental change is here, and the decisions we make now will influence our ability to adapt now and in the future. But, in the short term, the urgent pressure to implement mitigation policies could have unintended consequences on the poor. Encouragingly, there are indications that the impacts of mitigation measures are receiving high-level policy attention. Buried within the ‘Bali Roadmap’ is a small sub-clause referring to the need to consider the ‘economic and social consequences of response measures’ (Bali Action Plan Decision, 2007).

This Opinion assesses four mitigation strategies and their possible impacts on the poor: environmental labelling; green growth strategies; biofuel production and food prices; and forest protection. We focus on sub-Saharan Africa (SSA). First, because the region lags behind on progress towards MDG1 (poverty reduction), and second, because SSA has contributed least to greenhouse gas emissions, but may suffer most from the impacts of climate change.

Environmental labelling
Trade is vital for poverty reduction in SSA. However, responses to climate change have implications for two fast-growing industries – non-traditional agricultural products and tourism. Concerns about ‘food miles’ are leading to labelling schemes and a leading UK supermarket recently introduced an ‘Air-Freighted’ label, which may discourage the purchase of fruit and vegetables from countries such as Ethiopia and Kenya. Over one million people in rural Africa rely on fresh fruit and vegetables exports to the UK, and it is estimated that not buying fresh produce air-freighted from Africa would reduce UK emissions by less than 0.1% (Ellis and Warner, 2007). Similar concerns about our ‘carbon footprint’ could lead to the ‘labelling’ of tourism, discouraging holidays in The Gambia, Namibia and South Africa. Recent ODI research shows that the poor can accrue between 15 and 35% of the total expenditure from tourism, which would vanish if tourists stay away (Mitchell et al., 2007).

Green growth strategies
International pressure to control carbon emissions is growing, with countries being encouraged to find ‘greener growth paths’ – ways to grow while controlling increases in carbon emissions. Such strategies could be beneficial for the poor if they support low-polluting, labour-intensive production, but less so if they reduce production and employment. While such strategies are likely to affect African countries less than China and India, there may be a need for policies such as carbon taxes, environmental standards, regulation and labelling. We need to ensure that these do not undermine economic growth, but stimulate it through improved energy efficiency and productivity.

Biofuel production and food prices
Demand for biofuels is rocketing and is likely to increase the cost of factors of production: land, rural labour, and inputs such as fertilizer. However, the main risk for the poor is rising food prices. How great is the risk? Recent OECD/FAO projections suggest that between 2005/2006 and 2016/2017 the price of maize will rise by 40%, wheat by 20% and rice by 14% (Wiggins and Levy, forthcoming). The prices of other foods may also rise as they are either potential feedstock for biofuels, or close substitutes in consumption. Price rises will, in the first instance, harm the poor who buy food (probably most of the world’s poor). So, what are the costs for poor households? While there are no clear answers,
Table 1: Poverty impact of policy responses to climate change

<table>
<thead>
<tr>
<th>Policy response to climate change</th>
<th>Could be good for the poor if ...</th>
<th>Could be bad for the poor if ...</th>
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<tbody>
<tr>
<td><strong>Green growth strategies</strong></td>
<td>... they support a shift to low-polluting, labour-intensive production methods ... they improve energy efficiency and stimulate growth</td>
<td>... they reduce production/employment</td>
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<tr>
<td><strong>Environmental labelling policies</strong></td>
<td>... they improve efficiency and expand markets for the poor</td>
<td>... they create non-tariff barriers to exports ... they reduce market demand for air-freighted produce from sub-Saharan Africa</td>
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<td><strong>Biofuel production policies</strong></td>
<td>... the poor grow feedstock ... processing investments go to low-income countries ... processors employ local labour</td>
<td>... they increase staple food prices ... processing investments go to middle-income countries ... the North does not extend duty-free access ... smallholders are not offered technical assistance</td>
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<td><strong>Forest carbon policies</strong></td>
<td>... co-benefits are clearly defined ... there is upfront funding for smaller producers to engage with the market</td>
<td>... they only focus on the value of carbon ... they are inflexible to the sustainable use of forests</td>
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we can make simple estimates. If we assume that the very poor spend 80% of their budget on staple food, and that the retail price increases on average by, say, 25%, then the increase in the cost of living could amount to nearly 20% of income – a considerable loss – equal to ten years of income gains if incomes were rising at 2% per annum.

**Forest protection**

Climate change is leading to initiatives to preserve carbon held in tropical forests. Highest on the agenda, and a key theme in Bali, is the proposal to include payments from developed to developing countries for Reduced Emissions from Deforestation and Degradation (REDD) within carbon trading mechanisms. This could generate annual revenue flows of $2.2–13.5 billion (Ebeling, 2008), rivalling ODA flows in the forest sector. REDD promoters argue that it could offer ‘co-benefits’ for the poor, but a question is how financial flows can be engineered to directly benefit the poor. Experience with forest carbon markets indicates that they result in few benefits for the poor and can in some cases have negative impacts (Luttrell et al, 2007) (Peskett et al, 2007).

**Conclusion**

The physical impacts of climate change, such as growing natural hazards and dwindling crop yields and arable land, threaten the lives and livelihoods of millions of the poor. But, in the short term, policies to mitigate climate change could be as important as climate change itself and should be chosen with care to reduce potential harm. Table 1 shows how mitigation policies can be good or bad for poor people. Where harm is inevitable, there may well be a strong case for compensation.

Our discussion raises three important questions, two of which concern linking adaptation and mitigation. First, we must assess physical impact and the impact of policy responses in the short term. Second, we need to build policies that benefit the poor while developing long-term strategies for adaptation. And third, in considering the negative economic and social consequences of response measures, we must prioritise the interests of the poor, not those of oil-rich economies.

Those who have contributed least to greenhouse gas emissions, and may suffer most from the impact, should not have to pay the high price of tackling climate change.

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**References**