

Helpdesk Research Report: Climate Change and Social Protection

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Query: How are social protection mechanisms being used to assist vulnerable communities adapt to the impacts of climate change (with particular attention to women and children)?

Enquirer: Europe and Central Asia Department, DFID

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1. Overview and Definitions

There is a great deal of literature that discusses the vulnerability of poor communities and women to climate change, and their coping strategies. There is less that directly links specific social protection mechanisms that address these vulnerabilities and assist with climate change adaptation. However, the more general literature on social protection measures that target poverty, food insecurity, livelihood vulnerability and other such situations should also be considered relevant and applicable to policies on climate change. As such, this literature has also been included in this report.

The primary coping strategies and protection measures identified from this Helpdesk research are:

- Compensation mitigation measures, such as microinsurance and weather-risk crop insurance. In some cases, safety net approaches (e.g. public works, school feeding programmes) are linked to insurance payouts.
- Ex-ante adaptation measures, such as crop diversification (e.g. technical assistance, starter packs, seed fairs), irrigation systems, flood safe storage facilities, relocation, livelihood diversification and protection (e.g. legislated employment guarantees).
- Ex-post adaptation measures, such as cash transfers (e.g. unconditional cash payments, social pensions, child support grants), asset restocking/ sale of assets (e.g. 'meat aid' programmes, where the weakest animals are sold for cash), nutritional/feeding programmes.

Some of the literature asserts that cash payments are preferable to food aid as the recipients can choose to use the cash for other purposes as well – including health care and investments in ex-ante adaptation measures. More generally, providing social protection instruments that allow people to make their own decisions about how to adapt is a common theme. Other commentators advocate for a combination of cash payments and food transfers. In addition, some argue that payments should be made to women as their use of resources is usually more beneficial for the well-being of children. There is almost universal agreement, however, on the importance of involving women, who are affected to a greater extent by the impacts of climate change, in policy-making and interventions.

The measures identified to protect those vulnerable to climate change are far-reaching, and range from productivity-enhancing measures to direct welfare payments. One of the experts contacted highlighted that this range seems to extend beyond traditional notions of social protection instruments. Some adaptation measures (e.g. fertiliser subsidies, incentives for farmers to switch occupations, assistance with relocation away from flood zones) are, arguably, economic and development policy decisions instead. As a result, the question which arises is whether such measures should fall within the ambit of social protection as opposed to other domains. Recent research by the Institute for Development Studies advocates that social protection interventions should take on a long-term 'social protection adaptation' approach, which would include such measures as livelihood diversification.

The following are some useful definitions for concepts commonly discussed in climate change literature:

- **Livelihoods strategy:** Household decisions to accumulate and allocate their assets. Risk management is part and parcel of household livelihood strategies.
- **Risk compensation / risk mitigation:** Ex-ante actions taken before realisation of risk to provide compensation in the case of a risk-generated loss (e.g., formal insurance).
- **Vulnerability:** An individual or household is vulnerable to risk(s) associated with climate change if these risk(s) will result in a loss of well-being that pushes the individual or household below a benchmark or threshold level of well-being. Vulnerability is a function of the risks, exposure and sensitivity to risks and adaptive capacity.
- **Adaptation:** Social risk management for reduction of risks and human vulnerability associated with climate change.

Source: Heltberg, R., Jorgensen, S. L., and Siegel, P. B., 2008, Climate Change, Human Vulnerability, and Social Risk Management, The Social Development Department, World Bank, pp. 4-5: see 'Key Documents' section.

2. Key Documents

Climate Change Adaptation

- Lambrou, Y. and Piana, G., 2006, 'Gender: The Missing Component of the Response to Climate Change', Food and Agriculture Organisation of the United Nations, Rome:
http://www.fao.org/sd/dim_pe1/docs/pe1_051001d1_en.pdf

This report discusses gender sensitive approaches to climate change mitigation and adaptation. It finds that women are generally more vulnerable to impacts of climate change. For example, women are more dependent on agriculture and fuelwood for their livelihood; they have to travel long distances to gather water when nearby water sources run dry or are contaminated by floods; and they have to spend more time caring for family members, with increased illness from malaria and dengue. The report stresses that strategies for responding to the challenges launched by climate change should be modelled on women's livelihoods and gendered division of labour. It also finds that women have a high degree of adaptive capacity and have developed many coping strategies, which must be explored and developed further. It recommends that women must be involved in the efforts of anticipating adverse impacts deriving from climate change and in developing methods of adaptation.

- Oxfam International, 2007, 'Adapting to Climate Change: What's Needed in Poor Countries, and Who Should Pay', Briefing Paper, Oxfam International:
http://www.oxfam.org/en/policy/briefingpapers/bp104_climate_change_0705

This paper looks at the impact of climate change on vulnerable communities in poor countries. It notes that women are particularly vulnerable because their livelihoods and chores depend more on the natural environment; and they generally have less education and training, making it

difficult to find other sources of income. The paper emphasises that while vulnerable communities are finding ways to adapt, there is a limit to what they can do without wider support: “Many people lack viable opportunities to diversify their livelihoods, or have no money to pay for the technologies they need, such as irrigation systems or insecticide-treated bed nets. Most have very little access to reliable climate information that would help them to plan better, or no means of learning how other communities in a similar situation have adapted. Research among subsistence farmers in Zimbabwe found that nearly half of those interviewed said that they would want to adjust their farming according to long-term forecasts, but their lack of cash and credit would prevent them from doing so” (p. 14). The paper advocates for scaling up NGO community-based initiatives, and provides examples of their mitigation and adaptation efforts (see p. 19). These include:

- Coastal exposure: in Vietnam, the Red Cross has worked with its local branches and communities to plant 22,000 hectares of mangroves, providing 100km of protection for sea and river dykes;
- Flood risk: in India, Oxfam’s local partners piloted a scheme to raise the foundations of 600 flood-prone mud houses. In Bangladesh, CARE (funded by CIDA) worked with 16 local NGOs to support communities in adopting more flood-resilient livelihood strategies, stockpiling food in flood-proof storage, harvesting rainwater, and creating floating vegetable gardens in waterlogged areas;
- Water shortage: in Peru, where farmers face increasingly heavy rain, but dry winters, Practical Action’s local partners have supported rural communities to understand the risks they face, diversify their livelihoods, and cultivate native crops.

The report provides several recommendations for successful mitigation and adaptation (see pp. 14-15). These include:

- taking community-centred approaches;
- providing reliable information on the likely impacts of climate change, and on early warning and forecasts;
- promoting appropriate technology such as resilient crop varieties, irrigation schemes, and renewable energy sources, so that they are available and affordable for low-income communities;
- reducing vulnerability in people’s livelihoods, such as through social protection schemes which provide guaranteed employment in rural communities vulnerable to climate stress.

- Mitchell, T., Tanner, T., and Lussier, K., 2007, ‘We Know What We Need: South Asian Women Speak Out About Climate Change Adaption’, ActionAid and Institute of Development Studies, London and Brighton:
http://www.ids.ac.uk/UserFiles/File/poverty_team/ActionAid_IDS_Report_We_know_wh_at_we_need_South_Asian_women_speak_out_on_climate_change_adaptation.pdf

This report is based on field research examining the impact of weather-related hazards on women’s livelihoods in the Ganga river basin in Bangladesh, India and Nepal. Reductions in food production and the availability of water increase workloads for women, who are responsible for the majority of household food production and for the supply of water. In addition, as water- and heat-related diseases increase because of climate change, women will bear the extra burden of increased care giving and growing threats to their own health. The report finds that despite limited resources, information and support, women in these poor areas have developed numerous coping strategies. For example, when water levels rise, they move their families and livestock to locations higher up where they erect temporary shelters; and cultivate crops that can be harvested before the flood season. These women have a clear understanding of what they need to secure and sustain their livelihoods more effectively: “Their priorities include a safe place to live and store their harvest and livestock during the monsoon season; better access to services such as [doctors, pharmacists, and] agricultural extension; training and information about adaptation strategies and livelihood alternatives; and access to resources to implement effective strategies and overcome constraints” (p. 4). However, many of these strategies, such as alternative irrigation facilities and cultivating hybrid seeds, are costly

and many of the women are unable to afford them. The report stresses that poor women must be provided with assistance, and fully involved in policies and interventions concerning climate change adaptation.

Social Protection

- Devereux, S., 2006, 'Social Protection Mechanisms in Southern Africa', Institute of Development Studies, Brighton:
<http://www.gsdrc.org/go/display&type=Document&id=1954>

This paper looks at social protection measures that have been implemented, with donor and civil society support, in Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe, to address such issues as food security, disaster management, HIV/AIDS and welfare for vulnerable groups. The paper outlines four types of social protection:

- “protective” interventions offering relief from deprivation;
- “preventive” measures targeted at averting future impoverishment;
- “promotive” policies aimed at enhancing the capabilities of the poor; and
- “transformative” approaches addressing social inequity.

While social transfers can protect the poor from the threats outlined above in the short term, the paper argues that systemic solutions to food, labour and credit market failures are required for sustainable protection. These include the promotion of food crop trading, employment creation, input markets and financial intermediation schemes. The paper advocates for governments in these countries to investigate encouraging smallholders' access to agricultural inputs through subsidies, credit and co-operative schemes, and to pilot new measures to ensure food price stabilisation through free trade and seasonal safety nets.

- Ehrenpreis, D., (ed.), 2006, 'Social Protection: The Role of Cash Transfers', Poverty in Focus, United Nations Development, International Poverty Centre, Brazil:
<http://www.gsdrc.org/go/display&type=Document&id=1970>

This issue of Poverty Focus explores innovative social protection programmes. It notes that while social protection is often equated with short-term responses to shocks and crises and transitory poverty, it should also cover chronic or extreme poverty. Social protection should reduce vulnerability through livelihood promotion and asset redistribution. It provides an overview of a range of social protection projects and programmes being implemented globally. It discusses, for example, the pilot Kalomo District **Cash Transfer programme** in Zambia, which involves regular cash transfers to vulnerable households to improve food security. Beneficiaries are identified through community decision-making and preliminary evaluations are largely positive. It also looks at **employment legislation** in India, which guarantees 100 days employment per year for one member of a poor household. This is estimated to bring two-thirds of India's population below the poverty line, above it.

- Devereux, S. et al, 2005, 'Making Cash Count: Lessons from Cash Transfer Schemes in East and Southern Africa for Supporting the Most Vulnerable Children and Households', Helpage International, Save the Children UK and Institute of Development Studies, London and Brighton: <http://www.helpage.org/Resources/Researchreports>

This paper looks at **unconditional cash transfers** used in East and Southern Africa, with a particular focus on reaching the most vulnerable children (MVC). It finds that cash transfers are put to diverse uses: food, groceries, household items, services, assets, income-generation, social costs and savings. Much of this spending benefits children, and there is little evidence that it is 'misused'. The paper reviews different programme approaches and provides recommendations on how to maximise the impact of transfers on children. These include:

- Cash transfer schemes do not have to be targeted at children in order to benefit them. Vulnerable children can be reached by targeting the poorest households. Linking cash transfers with the delivery of basic services is problematic, as these services are often inaccessible or low quality.
- Key approaches for reaching the MVC are universal social pensions, transfers to the poorest households, and child support grants.

- Cash transfers should be part of comprehensive social protection programmes that support the incomes of the poor, build their assets and improve the quality of services.
- Mechler, R., Linnerooth-Bayer, J., and Peppiatt, D., 2006, 'Disaster Insurance for the Poor? A Review of Microinsurance for Natural Disaster Risks in Developing Countries', International Federation of Red Cross and Red Crescent Societies, ProVention and IIASA: http://www.proventionconsortium.org/themes/default/pdfs/Microinsurance_study_July06.pdf

This study reviews **microinsurance schemes** that provide cover for natural disaster risks in developing countries. Microinsurance can help the poor by providing low-income households, farmers, and businesses with access to post-disaster liquidity, thus securing their livelihoods and providing for reconstruction. It can also promote investments in productive assets and higher-risk/ higher-yield crops, since insured households and farms are deemed more creditworthy. Further, insurance can encourage investment in disaster prevention if insurers offer lower premiums to reward risk-reducing behaviour. These benefits need to be weighed against the costs and limitations. Because of the high costs of insuring covariant disaster risks, without donor support individuals can pay substantially more than their expected losses over the long term. Improperly designed insurance contracts (that do not reward risk-reducing behaviour) can also lead to "moral hazard", whereby individuals take fewer precautionary measures because they are insured. Moreover, in immature and unregulated markets, there is a high risk of insurer insolvency and defaults on claims in the case of large or repeated catastrophes (see pp. 6-7). Low-income households and businesses also need to weigh these benefits and costs of insurance in comparison with other investments, like schooling or prevention of risks. The study provides an overview of different schemes, providing examples from South Asia, Malawi and St. Lucia. It then offers recommendations on how to make premiums more affordable to low income households and businesses. These include:

- "Transaction costs can be lowered, for example, by offering simple products to client groups; relying on community pressure for timely payments; enlisting the services of nonprofit organizations that do not charge high commissions; and streamlining administrative costs.
- The national government and/or international donor community can provide capital reserves or reinsurance.
- The national government and/or international donor community can directly subsidize disaster claim settlements or premiums for the poor.
- Alternatively, external support can come in the form of technical/organisational assistance.
- The premiums paid by the poor can be reduced through cross-subsidies in the insurance system (from their other lines of business and wealthier clients), as successfully demonstrated by the Indian pro-poor regulatory requirement for formal insurers to take on an increasing quota of low-income clients" (pp. 25-26).
- Sabates-Wheeler, R., Haddad, L., and Chopra, D., 2005, 'Risk and Vulnerability: Case Studies of Practical Country-Level Instruments and Approaches used by Various Agencies', Institute of Development Studies, Brighton: <http://www.oecd.org/dataoecd/33/59/36570697.pdf>

This paper reviews a range of instruments that address various aspects of risk and vulnerability: **social pension insurance; social health insurance; microfinance/insurance; public works programmes; conditional cash transfers; cash transfers and school feeding**. It highlights how each instrument addresses different types of poverty (active versus chronic poor); different types of risk (subsistence versus production); and different elements of social protection (protection, prevention, promotion and transformation). Diverse case studies are provided for each of the instruments.

Climate Change and Social Protection

- Devereux, S. 2006, 'Cash Transfers and Social Protection,' Paper prepared for the regional workshop on "Cash transfer activities in southern Africa", co-hosted by the Southern African Regional Poverty Network (SARPN), Regional Hunger and Vulnerability Programme (RHVP) and Oxfam GB, 9-10 October, Johannesburg:
<http://www.sarpn.org.za/documents/d0002199/index.php>

This paper discusses ways to address the vulnerability of the majority of the population in southern Africa to hunger, caused by erratic rainfall and consequent variations in food production. It argues that cash transfers are preferable to food aid in addressing chronic food insecurity: "**Cash transfers** delivered as a response to agricultural risk can be effective if provided as a form of insurance [...] There is some evidence that people who are confident of receiving social assistance or social insurance will invest in higher-return inputs (e.g. fertiliser, seeds and labour) and activities and enjoy higher returns over time [...] This potential link from social protection to economic growth is one of the main arguments often made in favour of cash transfers rather than food aid" (p. 4). The paper also notes that it is preferable, where possible, to target women for cash transfers as evidence demonstrates that resources given to women – such as social pensions, or child support grants – are more beneficial to the well-being of children.

- Heltberg, R., Jorgensen, S. L., and Siegel, P. B., 2008, Climate Change, Human Vulnerability, and Social Risk Management, The Social Development Department, World Bank:
http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/SDCCWorkingPaper_SRM.pdf

This paper looks at adaptation interventions that increase the capacity of society to manage climate risks with the aim of reducing the vulnerability of households and maintaining or increasing opportunities for development. It adopts a social risk management (SRM) framework, which links climate-related risks, adaptation and vulnerability to identify such interventions. Section 4, 'SRM, Social Policy, and Social Protection for Adaption', discusses how social policy interventions (**health, education, community-driven development, migration arrangements**, and in particular social protection interventions such as **safety nets and insurance**) can contribute to adaptation and protect poor and vulnerable households from extreme impacts of climate change. In order to facilitate risk management related to climate change at the household and local level, the paper advocates the following social policy interventions:

- "Public health, food security, and nutrition;
- Clean water and sanitation;
- Access to skills, education and knowledge;
- Policies to help households stabilise consumption through deeper labor, assets, credit, and insurance markets; improved access by the poor to those markets; and better social safety nets and social insurance;
- Improved disaster preparedness and management, including better safety nets to prevent irreversible human damage and enable speedier recovery;
- Social and political conditions for collective action—help the poor develop voice and political capital to demand access to risk management instruments;
- Managing displacement and violent conflicts through, inter alia, strengthening the asset base of rural livelihoods; arrangements for orderly migration; and institutions for conflict resolution (p. 3)".

The section discusses various social protection measures in greater detail:

- "**Cash and in-kind transfers** based on objective and measurable trigger events are already used to help affected households cope with disaster related losses, especially after major disasters. Despite inconsistencies in the way they have been applied and their lack of built-in ex-ante guarantee, these instruments have met with success and helped affected communities cope and recover;
- Donors could establish **ex-ante funding for strategies to cope with climate risks** through contingency disaster financing. Moreover, social funds and community driven development approaches can be useful vehicles for local risk management: both ex-

ante through community projects to reduce exposure to risks and climate-proof local assets, and ex-post through support for coping and recovery from disasters;

- There are interesting innovations for **weather risk management that combine insurance and safety net approaches**. Mexico has a program in place for natural disaster management that includes weather indices as “triggers” for payouts to farmers and to mobilise safety net programs such as public works and feeding programs. [...] Other countries are also exploring this option. What is interesting about these safety net programs is that the triggers are transparent and known by poor and vulnerable households, and they do not need to be directly insured. The poor therefore do not pay premiums. Instead, governments either purchase insurance from national or international insurers and re-insurers, or maintain disaster funds in savings accounts” (pp.36-37).
- Davies, M. et al., 2008, ‘Climate Change Adaptation, Disaster Risk Reduction and Social Protection: Complementary Roles in Agriculture and Rural Growth?’, Institute of Development Studies, Brighton: see attachment ‘Davies’.

This study, commissioned by DFID, examines the opportunities for linking social protection, adaptation and disaster risk reduction (DRR) in the context of agriculture and rural growth. In the agriculture context, this means looking beyond simply protecting the most vulnerable to the impact of shocks and stresses, and towards prevention and promotion to address structural constraints around poverty. The study recommends the use of an ‘adaptive social protection’ framework that would adopt a long-term approach and allow for better linkages between social protection, adaptation and DRR. Section 4 of this study outlines the various social protection measures that could assist with climate change mitigation and adaptation. Social protection here includes: “all initiatives that transfer income or assets to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalized” (p.7). These measures include:

- **Weather-indexed crop insurance**: insures farmers against losses in crop yields resulting from weather-related stresses. Key challenges include high premiums which could preclude poor groups; costly weather stations; possible insolvency of the insurance provider; and failure to address gender differentiated impacts.
- **Asset restocking** (including direct livestock provision): sale of productive assets is a common coping strategy among the rural poor.
- **Starter pack and seed fairs**: starter packs are programmes that distribute standardised free inputs, such as fertiliser and seeds, designed to increase food production. Seed vouchers and fairs allow farmers to select seeds of their choice, allowing instead for crop diversity.
- **Cash transfers**: predictable cash transfers that help to reduce vulnerability of the chronic poor by spreading risk over time; and can contribute to asset accumulation and poverty reduction.

The study discusses various case studies and provides a summary of key lessons. These can be found in Table 3 (pp. 18-19). Further details on these case studies and on the dimensions of social protection, disaster risk reduction and climate change adaptation are provided in the appendices.

Note: While you are most probably already aware of this work, the main contact is Tim Waites, Renewable Natural Resources and Agriculture Team (RNRAT) team. In addition to this paper, see as well the following resources:

- IDS, 2007, ‘Connecting Social Protection and Climate Change Adaptation’, IDS in Focus, issue no., 02.3, Institute for Development Studies, Brighton:
http://www.ids.ac.uk/UserFiles/File/publications/in_focus/InFocus_02.3SocialProtect_FLNAL3web.pdf
- Davies et al., 2007, ‘Can Cash Combat Climate Change? Adaptation and Social Protection’, Presentation delivered at the 2007 DFID livelihood/environment retreat, July, see attachment, ‘Davies2’.

Case Studies

- Menon, R., 2007, 'Famine in Malawi: Causes and Consequences', Human Development Report Office, Occasional Paper, UNDP, New York: http://hdr.undp.org/en/reports/global/hdr2007-2008/papers/menon_roshni_2007a_malawi.pdf

This paper examines the causes of the famine in Malawi 2002 and further food insecurity in 2005; and evaluates social protections measures subsequently put in place. Section 6 (pp. 8-10) discusses these measures, primarily the National Safety Nets Programme (NSNP) projects. These projects can be categorised as:

- (1.) productivity enhancing safety nets (free inputs distribution – e.g. **starter packs, fertilizer subsidies, public works programmes**), or as
- (2.) direct welfare transfers (**food or cash transfers to poor and vulnerable people, targeted nutrition programmes, school feeding schemes**).

Regarding productivity enhancing safety nets, the paper points to the initial success of the starter pack programme, which increased maize production and kept maize prices affordable. Moreover, it contributed to a long-term development plan. However, after two years, the programme was altered and became less effective: "instead of providing seeds and fertilizer best suited to local conditions and economic circumstances ('best bets'), it began to provide the cheapest and most readily available. This change was meant to assist very poor people produce at least some extra food, but it diminished the potential of the program as a development tool to reduce chronic food insecurity" (p. 9). Regarding direct welfare transfers, assessment found that while impoverished drought-affected households were poorly targeted, orphans and female-headed households were well targeted. Targeted nutrition programmes were found to be ineffective when compared to other social protection mechanisms, but are still part of the government's social safety net scheme. Cash transfers were also considered problematic as they pushed food prices up. The paper suggests that "in order to protect household entitlements to food, a 'food plus cash' approach might be most suitable, as it would allow vulnerable sectors of the population to meet their subsistence requirements—both in terms of nutritional and non-nutritional needs—regardless of instances of market failure" (p. 10).

- Magrath, J., 2006, 'Africa – Up in Smoke 2: The Second Report on Africa and Global Warming from the Working Group on Climate Change and Development', New Economics Foundation and International Institute for Environment and Development, London: <http://www.actionaid.org/assets/pdf%5CAfrica%20Up%20In%20Smoke%202.pdf>

This report discusses the vulnerability of Africa to climate change, focusing on the poor who live in marginal environments and in areas with low agricultural productivity in Africa, and who depend directly on the ecosystem to support their way of life. The International Panel on Climate Change explains that there are six elements which make Africa particularly vulnerable to climate change. These are:

- "Water resources, especially in international shared basins where there is a potential for conflict and a need for regional co-ordination in water management.
- Food security at risk from declines in agricultural production.
- Natural resources productivity and biodiversity at risk.
- Vector- and water-borne diseases, especially in areas with inadequate health infrastructure.
- Coastal zones vulnerable to sea-level rise, particularly roads, bridges, buildings, and other infrastructure that is exposed to flooding.
- Exacerbation of desertification by changes in rainfall and intensified land use" (p. 6).

The report presents Niger, which was hit hard by drought in 2004-2005, as a case study. Aid agencies, like Oxfam, adopted new responses there – providing more direct transfers of cash vouchers to enable people to buy local food available on the markets, instead of foreign food aid. The report also presents three case studies from Kenya. In Turkana, aid agencies, like Oxfam and Practical Action also introduced a new initiative, called 'meat aid safety net' or 'off-take'. Here, "people sell their weakest animals – usually goats that would die in the drought – to

the agency for a fair, fixed price. The animals are slaughtered and the sellers receive both the meat and the hide, which they can sell on. These schemes have been very successful. People receive a good price for what would otherwise be an almost worthless animal, money they can use to buy food, to pay off debts or to restock. The money stays in the local economy. Women often use the money to buy school uniforms, which means their children can then go to school, not only enabling them to resume their education, but providing them with school meals. People's main diet is meat, so the system ensures people receive their preferred food, rather than maize and beans that require lengthy cooking using a lot of fuel wood. Finally, destocking reduces grazing pressure on the dry land" (p. 10). Other interventions include cash for work, direct cash transfers and seed distributions. Long-term strategies in Africa have included crop diversification; the introduction of mechanisms to capture rainfall and boost agriculture; and conservation farming designed to increase yields even during periods of low rainfall.

- Harvey, P. and Savage, K., 2006, 'No Small Change: Oxfam GB Malawi and Zambia Emergency Cash Transfer Projects: A Synthesis of Key Learning: http://www.odi.org.uk/hpg/papers/Cash_synthesis_malawizambia.pdf

This brief paper presents Oxfam's relief response to predictions of an impending food crisis in southern Africa in 2005 – 2006. As an alternative to emergency food aid, the agency undertook **cash transfer schemes** in both Malawi and Zambia. The evaluation found that, in both countries, the vast majority of each cash transfer was spent on food, mainly maize. People also made other small but at times crucial non-food expenditures, including spending on health and educational resources and agricultural subsidies. Evidence on whether beneficiaries share the cash in a similar way as communities in receipt of food aid was mixed: while cash itself was not shared, purchased foodstuffs were widely shared. In addition, food prices in Malawi rose much more than anticipated, making items less affordable. Key lessons from the evaluation include:

- Both cash transfers and food aid require effective targeting and delivery;
- Markets and prices need to be better monitored in order to understand the impact of cash transfers and to determine whether they are appropriate mechanisms;

Cash transfers can help to alleviate poverty in the longer term and smooth the impact of periodic shocks.

- ActionAid International, 2006, 'Unjust Waters: Climate Change, Flooding and the Protection of Poor Urban Communities: Experiences from Six African Cities', ActionAid International: [http://www.actionaid.org/assets/pdf/UnjustWaters5HI%20\(2\).pdf](http://www.actionaid.org/assets/pdf/UnjustWaters5HI%20(2).pdf)

This report discusses the problem of chronic flooding in urban communities, from global warming, which can be as disastrous for poor urbanites as droughts are for farmers. Urban floods spread disease, interrupt schooling and destroy houses, assets and income. Women and children are severely affected. Some families contacted by ActionAid reported seeing some children drown, with many more children affected by flood-caused ill health and interruptions to their education. This in turn poses extra burdens on women, who take care of the ill. The report outlines proposed solutions to address flooding. These include:

- Investing in proper and safe infrastructure, such as bridges, drainage and dykes along the river bank;
- Ensuring that poor people participate in all decision-making processes;
- Taking all possible measures to ensure that poor people's rights to adequate and disaster-safe housing are realised and their tenure is secured; and
- Making sure that critical services such as health, water and sanitation are able to provide adequate services during floods.
- Ensuring that there is proper planning and provision of services that can sustain people's livelihood

- Vincent, K., 2006, 'Facilitating or Constraining Adaptation to Climate Change? Examining how the Institutional Framework Affects Household Decision-Making in a Rural Dryland Village of South Africa', Paper prepared for Institutional Dimensions of Global Environmental Change Synthesis Conference, 6-9 December: http://fiesta.bren.ucsb.edu/~idgce/full_abstract.php?abstractnumber=76

This paper looks at climate change adaptation in Maangani, a village in South Africa, focusing on the effect of the changing institutional framework on household level decision-making. It discusses local community schemes, such as rotating savings and credit associations (ROSCAs). These informal banking arrangements, which rotate a lump sum on the basis of monthly contributions, help to smooth income. As such, they reduce vulnerability, which may be the result of climate-related risks. The paper then examines national grant programmes, focusing on **non-contributory pensions** and the **child support grant (CSG)**. Both reduce vulnerability to climate change by improving income levels and providing a safety net against the variability of climate-dependent livelihoods. While the CSG is intended to benefit the child and pensions to benefit the elderly, there is evidence that they play a major role in general poverty alleviation in multigenerational households. The paper cautions, however, that in the long term, these grants probably hinder the development of adaptive capacity because they encourage reliance on these different sources of income. In addition, they may erode local community schemes.

- Scott, L., 2008, 'Climate Variability and Climate Change: Implications for Chronic Poverty', Working Paper, no. 108, Chronic Poverty Research Centre, Manchester: <http://www.chronicpoverty.org/pdfs/108Scott.pdf>

This paper focusses on India and adopts a 'bottom-up' approach to climate change adaptation, drawing on existing coping mechanisms by the chronically poor. It stresses, however, that addressing future climate changes will likely go beyond the current capacities of the poor to adapt. As such, climate change adaptation responses should receive special consideration in the development agenda. The paper discusses in detail the following strategies:

- Livelihood response - diversification through migration: this is not solely a coping strategy but can play an important role in poverty reduction. The paper stresses that should migration be facilitated, it must be accompanied by an improvement in the rights and living conditions of migrants;
- Institutional responses - **employment guarantee schemes**: the National Rural Employment Guarantee Act, passed in 2005, gives people residing in a particular district the right to at least 100 days employment per year; and
- Agricultural response – developing new **crop varieties**: there are possibilities of developing new varieties of rice that can withstand drought and submergence.

Further, the National Agricultural Innovation Project, launched in 2006 with the assistance of the World Bank, "aims to encourage the sustainable transformation of the Indian agricultural sector to one of greater market orientation; to reduce poverty and improve income. It has a particular emphasis on dryland areas where the possibilities for the large-scale expansion of irrigation infrastructure are very limited. Here productivity can only be increased through advances and innovations in technology, coupled with institutional and policy support" (p. 26).

3. Additional Resources

- Dr. Marisa Goulden (University of East Anglia) provided a conference paper and powerpoint presentation that she and her colleagues recently presented at a Tyndall Centre conference: Goulden et. al, 2008, 'Local adaptations to climate extremes in rural Africa: opportunities and barriers' The paper provides a useful table of various adaptations undertaken in South Africa, Tanzania and Uganda. See attachments 'Goulden' and 'Goulden2'
- The GSDRC recently completed a Helpdesk research report on climate change and social exclusion: What are the key issues and implications raised by climate change for excluded and vulnerable groups, with particular reference to disabled people, older people, children and young people?' There are various additional relevant materials cited in this report. See attachment, 'Helpdesk Jan2008'

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Websites visited

CICERO, Climatic Research Unit (UEA), Eldis, Global Environmental Change and Human Security International Project Office, Google, Google Scholar, GSDRC, Ingenta journals, Intergovernmental Panel on Climate Change, Institute for Development Studies, International Alert, International Institute for Environment and Development (IIED), International Institute for Sustainable Development (IISD), International Research Institute for Climate Prediction - Columbia University, Overseas Development Institute, OECD, OXFAM, Stockholm Environment Institute, Tyndall Centre for Climate Change Research, World Bank

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