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The importance of assets in current development debates: Millennium Development Goals, social protection and climate change

Global Urban Research Centre Working Paper No 7

By Caroline Moser and Alfredo Stein

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Executive summary

As we reach the end of the first decade of the 21st century, new development issues prioritise the agenda, at the level of both theory and practice. However, underpinning such new issues is the continuing concern with global poverty, and the search for new initiatives to address the significant challenges that persistent poverty and growing inequality presents. Theoretical debates, for instance, have shifted from measurements of income or consumption poverty to recognition of poverty as 'multidimensional' deprivation that includes a lack of capabilities, assets and entitlements. Complementing this are debates around empowerment and human rights, and an increasing focus on the capital asset portfolios of the poor. At the policy level, three new policy initiatives seek to tackle this complex problem; the United Nations (UN) *Millennium Development Goals* (MDGs) which currently represent the dominating normative guideline for national governments and international donors in their combat against poverty; *social protection*, defined as interventions that aim to prevent, manage and overcome poverty and vulnerabilities; and the adverse impacts posed by *climate change* (CC) and changing weather patterns on the livelihoods of the poor, probably the most recent policy concern.

This paper seeks to explore the extent to which the incorporation of an asset accumulation framework into the three new development issues can assist in overcoming some of the challenges presented by poverty and inequality. It identifies best practice examples of bottom-up poverty reduction initiatives which already incorporate an asset accumulation framework, before identifying a range of potential entry points for incorporating asset accumulation into MDG-related policies, social protection schemes and CC initiatives. By way of a background, the paper starts by summarising the asset accumulation framework and its associated policy components, including the aims and programmes of different asset generation policies. The following three sections then discuss the incorporation of an asset framework into the three new development agendas identified above. In each case the paper first mentions the contextual background, before elaborating in a more comprehensive description on the manner and extent to which an asset-based approach is incorporated. Each section ends with the identification of further opportunities for incorporating assets. The final section of the paper summarises the main findings.

1. Introduction and objectives of the working paper[1]

As we reach the end of the first decade of the 21st century, new development issues prioritise the agenda, at the level of both theory and practice. However, continuing concern with global poverty, and the search for new initiatives to address the significant challenges that persistent poverty and growing inequality presents, underpin these new issues. Theoretical debates, for instance, have shifted from measurements of income or consumption poverty to recognition of poverty as 'multidimensional' deprivation that includes a lack of capabilities, assets and entitlements. Complementing this have been important debates around such issues as empowerment and human rights, and of particular interest to this paper, an increasing focus on the capital asset portfolios of the poor (Moser 2009).

At the policy level, it is now recognised that the complex and context-specific nature of poverty and inequality means that they cannot be tackled through a one-size-fits-all approach. Three new policy initiatives clearly illustrate this trend. For instance, the United Nations (UN) *Millennium Development Goals* (MDGs) which currently represent the dominating normative guideline for national governments and international donors in their combat against poverty (UN Millennium Project 2005), view poverty as a multi-dimensional phenomenon. Similarly, policy makers have begun to recognise that stimulating economic growth does not *per se* pull poor people out of poverty. Therefore, national governments and international donors increasingly introduce alternative poverty reduction policy tools. *Social protection*, defined as interventions that aim to prevent, manage and overcome poverty and vulnerabilities (CPRC 2010), has recently become a widely used policy tool with which to combat poverty. Finally, the adverse impacts posed by *climate change* (CC) and changing weather patterns on the livelihoods of the poor, is a more recent policy concern. As highlighted during the 2009 Copenhagen Climate Change Conference, there is growing recognition of the need to implement climate change adaptation actions aimed at reducing vulnerability, and building resilience mechanism for the poor in developing countries (UNFCCC 2010:6).

At the same time poverty reduction strategies still face significant challenges. Too often, poverty is seen as the individual responsibility of poor people, yet current strategies are mainly top-down in approach, with the voices of the poor often not taken into account. The impacts of global political and economic processes on poverty are not recognised frequently enough. Finally, the importance of local contexts, such as specific weather phenomena in a certain region, or the local dynamics of social exclusion, is rarely incorporated into poverty reduction policies. Even though policy actors recognise the multiple dimensions of poverty, in practice, emphasis is still put on improving their income and achieving human development, with the linkages between the different dimensions of poverty being rarely addressed. Constraints such as these suggest that the MDGs are unlikely to be met by 2015 and that social protection schemes and climate change adaptation strategies often fail to successfully address the specific needs of the poor.

This paper seeks to explore the extent to which the incorporation of an asset accumulation framework into such contemporary development issues as MDG-related policies, social protection, and CC-related strategies could assist in overcoming some of the challenges presented by poverty and inequality. It identifies best practice examples of bottom-up poverty reduction initiatives which already incorporate an asset accumulation framework, before identifying a range of potential entry points for incorporating asset accumulation into MDG-related policies, social protection schemes and CC initiatives. By way of a background, the paper starts by briefly summarising the asset accumulation framework and its associated

[1] This paper combines the results of three background briefing papers commissioned by the Ford Foundation New York on MDGs and assets, (Horn and Stein 2010), social protection and assets (Banks and Moser 2010) and climate change and assets (Moser, Sou and Stein 2010).

policy components, including the aims and programmes of different asset generation policies. The following three sections then discuss the incorporation of an asset framework into the three new development agendas identified above. In each case the paper first mentions the contextual background, before elaborating in a more comprehensive description on the manner and extent to which an asset-based approach is incorporated. Each section ends with the identification of further opportunities for incorporating assets. The final section of the paper summarises the main findings.

2. Conceptual background: the asset accumulation framework

This section introduces briefly introduces the main components of the asset accumulation framework, addressed in terms of the following questions:

i. What is an asset?

An asset is a "stock of financial, human, natural or social resources that can be acquired, developed, improved and transferred across generations. It generates flows or consumptions as well as additional stock" (Ford Foundation 2004). Assets are not simply resources that people use to build livelihoods. As Bebbington (1999) argues, assets give people the capability to be and act. Thus the acquisition of assets is not a passive act but one that creates agency and is linked to the empowerment of individuals and communities (Sen 1997). The concept of asset accumulation draws on theoretical and policy-focused literature on asset-based development approaches (see for instance Sherraden 1991; Carter and Barrett 2006).

The concept of asset or capital endowments includes both tangible and intangible assets. The most widely recognised assets are natural, physical, social, financial and human capital (see box 1). Recently researchers and practitioners have expanded the notion of assets to include a broader range of particular intangible assets such as aspirational, psychological, civic and political assets. Assets can be both individual and collective in nature. This means they can be possessed by individuals, households, communities or entire societies, depending on the asset type.

Box 1: Definition of most important capital assets

Physical capital: the stock of plant, equipment, infrastructure, and other productive resources owned by individuals, the business sector or the country itself

Financial capital: the financial resources available to people, such as savings and supplies of credit.

Human Capital: investments in education, health and the nutrition of individuals. Labour is linked to investments in human capital; health status determines people's capacity to work; and skills and education determine the returns from their labour.

Social capital: an intangible asset, defined as the rules, norms, obligations, reciprocity, and trust embedded in social relations, social structures, and societies' institutional arrangements. It is embedded at the micro-institutional level (communities and households) as well as in rules and regulations governing formalised institutions in the marketplace, the political system, and civil society.

Natural capital: the stock of environmentally provided assets such as soil, atmosphere, forests, minerals, water, and wetlands. In rural communities land is a critical productive asset for the poor; in urban areas land for shelter is also a critical productive asset.

Source: Moser 2009.

ii. What is an asset accumulation framework?

An asset accumulation framework has the following two components:

- An *asset index:* This is an analytical and diagnostic tool for understanding poverty dynamics and mobility. It quantitatively, or qualitatively, measures the accumulation or

erosion of different assets over time and clarifies the interrelationship between different assets. This may, or may not, mirror changes in income or consumption poverty.

- An *asset accumulation policy:* This is an associated operational approach that focuses directly on creating opportunities for poor people to accumulate and sustain complex asset portfolios.

Asset accumulation policy is not a set of top-down interventions. Though it may include interventions that focus on strengthening individual assets, it is essentially a framework that provides an enabling environment with clear rules, norms, regulations and support structures to allow households and communities to identify and take advantage of opportunities to accumulate assets.

iii. What are the components of an asset accumulation policy?

To facilitate asset accumulation it is necessary simultaneously to address components at the following three interrelated levels:

1. Structural level: The fact that structural factors can have direct and indirect impacts on assets at the local level demonstrates that development is not just a technocratic process but a structural one. The process of accumulating assets involves complex political contestation, as well as the negotiation of social power relations as much as technocratic solutions. Asset accumulation does not occur in a vacuum. Opportunities are influenced by *complex causal relationships* between both external and internal structural factors and internal social processes – both of which need to be addressed.

2. Institutional level: International, national, and local; public, private and civil society organisations are critical in providing an "enabling environment" for the accumulation of assets. While the state establishes the normative and legal frameworks that can either block initiatives or provide incentives, private sector entities, including banks and microfinance institutions, support opportunities and facilitate access to promote asset accumulation.

3. Operational level: Assets are not static. In a changing global political, socioeconomic and environmental situation it is important to recognise constant revalorisation, transformation, and renegotiation. In addition, the accumulation of one asset often results in the accumulation of others, while insecurity in one can also affect other assets. This means that at the operational level, an asset accumulation policy framework recognises prioritisation, sequencing, trade-offs, and negotiation potential, and combines a range of context-specific strategy options.

iv. What are the stages or 'generations' of asset strategy implementation?

Finally, it is important to distinguish different stages or 'generations' of asset accumulation strategies (see table 1). The first-generation asset accumulation strategy is by far the most widespread, and aims to access assets and focus on the provision of 'basic needs' including water, roads, electricity, housing plots, better health care and education and microfinance. Essential for getting out of poverty is this primary emphasis on human, physical and financial capital.

Table 1: Aims and programmes of different asset generation strategies

	First generation	Second generation	Third generation
Policy aims	Accessing an asset portfolio	Consolidating assets & preventing erosion	Maximising linkages between interdependent assets
Type of pro-gramme	Provision of land, housing, basic services and infrastructure, and microfinance	Citizen rights and security, good governance & account-ability, including inter-generational transfer of assets	Securing long-term financial & institutional sustainability of agencies, economic growth, permanent employment & income

Source: Based on Moser (2009)

Once assets are provided it is assumed that individual well-being improves and 'development' occurs. However, the conditions for accessing assets do not necessarily bring the expected

development outcomes. Second-generation asset accumulation strategies, therefore, are intended to ensure their further consolidation and prevent erosion – including the intergenerational transfer of assets. Such strategies go beyond the provision of basic services to embrace a range of concerns relating to citizen rights and security, governance and the accountability of institutions. Third-generation asset accumulation strategies, still very nascent, need to explore interventions that can maximise the linkages between different types of inter-dependent asset, thereby ensuring 'added value' and long-term sustainability.

The following sections discuss the manner and extent to which an asset accumulation framework are, or can be, incorporated into the new development agendas of the MDGs, social protection and the climate change.

3. The Millennium Development Goals (MDGs) and assets

3.1 Contextual background: mainstreaming human development through the MDGs

The MDGs were predominantly influenced by two sets of concepts guiding international development theory and practice in the 1990s, namely human development and results-based management (Hulme 2009). However, the way these ideas influenced the evolution of the MDGs has been mediated by various political and civil society based interests.

Acknowledging the failure of neoliberal structural adjustment policies and a general 'crisis of development' in the 1980s, the UN adopted a human development approach in the 1990s. Shaped particularly by the work of Streeten *et al* (1981), Nussbaum & Sen (1993) and Sen (1999), this approach highlighted the fact that human beings represent the end and the means of every development initiative, and that poverty should be understood not as lack of income but as a multidimensional phenomenon of human deprivation. In order to lift people out of poverty, it was necessary to improve their educational, health and nutritional capabilities and economic opportunities. The UNDP Human Development Reports (HDRs), as well as successive UN summits in the 1990s, explicitly addressed human development issues that represented the fundamental underlying contents of the MDGs (Hulme 2010, Hulme & Scott 2010).[2]

Another important influence on the development of the MDGs was the Organisation for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC). To increase the aid flows of donor countries, in 1996 the DAC launched a report on *Shaping the 21st Century: The Contribution of Development Co-operation.* This presented a list of international development goals (IDGs) that reflected the particular interests of OECD member states aid agencies. The IDGs were strongly influenced by a results-based management approach that aims to improve processes of policy implementation with an explicit focus on outcome-based measurement. IDGs policies were designed to be guided by certain goals, targets and indicators that had to be SMART (Specific, Measurable, Agreed, Realistic, and Time-limited) (Hulme 2010).

Following the launch of the IDGs, worldwide mobilisation on reducing global poverty increased significantly, and in 1998 the UN laid out its plan for a 'Millennium Assembly of the United Nations'. The then UN Secretary General saw the change of the millennium as a unique opportunity to address politically sensitive issues such as poverty, with international organisations, donor governments, governments of developing countries, and civil society

[2] Appendix 1 summarises issues discussed in the 1990s UN summits and their links to the MDGs. For instance, the outcomes reached at the 1995 UN summit on Social Development in Copenhagen, i.e. global consensus on reducing extreme poverty and generating employment, were crucial for the formulation of MDG1.

organisations all working to shape the contents of a Millennium Assembly. Priority issues were then incorporated into a final Millennium Declaration (Hulme 2009, Hulme & Scott 2010).[3]

These efforts led to the creation of the MDGs which were first outlined by the UN Secretary General report *We the Peoples: The Role of the United Nations in the 21st Century* (Annan 2000), and were then discussed by the 189 UN member states at the UN Millennium Summit on the 8 September 2000 and approved as Millennium Declaration in 2001. They consist of a set of eight goals, 21 targets (originally 18) and 60 indicators (originally 48), designed by the UN Secretary General in 2000 and updated by the 'Inter-Agency and Expert Group on the MDG Indicators' in 2005. Except for target 7d, all MDG targets should be fulfilled by the year 2015 (see UN 2008).

3.2 The incorporation of assets within the design of the MDGs

Although the MDG targets are based on a multi-dimensional conceptualisation of poverty and address different vulnerabilities and forms of human deprivation, 'assets' are not explicitly mentioned, nor incorporated in their design. However, identification of the linkages between MDGs targets and assets, as illustrated in table 2, shows that 19 out of 21 MDG targets can be associated with one specific asset (targets 8b and 8c cannot be linked to assets as they are formulated to meet the needs of particular countries). Overall, about 57 per cent of the MDG targets (12 out of 21) refer to strengthening human capital such as education, health or nutrition; 14 per cent to financial capital such as income; 9 per cent to natural capital; and 9 per cent to physical capital. None, however, explicitly refers to the need to strengthen social capital.

Table 2: Summary of MDGs targets and their implicit links to assets

MDG	Target	Link to assets
MDG 1: Eradicate extreme poverty & hunger	1a) Reduce proportion of people living on less than one dollar a day	Financial capital (income)
	1b) Achieve full and productive employment and decent work	Human capital (labour)
	1c) Halve proportion of people who suffer from hunger	Human capital (nutrition)
MDG 2: Achieve universal primary education	2a) Ensure that boys and girls alike will complete primary schooling	Human capital (education)
MDG3: Promote gender equality & empower women	3a) Eliminate gender disparity in all levels of education	Human capital (education)
MDG4: Reduce child mortality	4a) Reduce under-five mortality rate	Human capital (health)
MDG5: Improve maternal health	5a) Reduce maternal mortality ratio by three quarters	Human capital (health)
	5b) Achieve universal access to reproductive health	Human capital (health)
MDG6: Combat HIV/aids, malaria and other	6a) Halt and reverse the spread of HIV/AIDS	Human capital (health)
	6b) Universal access to treatment for HIV/AIDS	Human capital (health)
	6c) Halt and reverse incidence of malaria and other	Human capital (health)

[3] For instance, a coalition of 40 governments in co-operation with civil society organisations and members of the Catholic Church formed the Jubilee 2000 movement which campaigned for Third World debt relief.

MDG	Target	Link to assets
diseases	diseases	
MDG7: Ensure environmental sustainability	7a) Integrate principles of sustainable development into country policies and programmes and reverse loss of environmental resources	Natural capital (environment)
	7b) Reduce biodiversity loss	Natural capital (environment)
	7c) Sustainable access to safe drinking water & basic sanitation	Physical capital (infrastructure)
	7d) Improvement in the lives of slum dwellers	Physical capital (infrastructure)
MDG8: Develop a Global Partnership for Development	8a) Develop an open, rule-based, predictable, non-discriminatory trading and financial system	Financial capital (macro-economic climate)
	8b) Address the special needs of least developed countries	n/a
	8c) Address the special needs of landlocked developing countries and small island developing states	n/a
	8d) Deal with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	Financial capital (savings)
	8e) Provide access to affordable essential drugs in developing countries	Human capital (health)
	8f) Make available benefits of new technologies, especially information and communications	Human capital (innovation)

Source: Based on UN (2008)

3.3 The incorporation of assets in the implementation of the MDGs

The MDGs do not represent a policy but rather a normative framework of goals, targets, and indicators which should be addressed through different policy mechanisms (Gore 2010, Jahan 2010). While UN institutions, in particular the UNDP, monitor the overall MDG achievement in different member countries, their implementation is primarily coordinated by national governments.

Ten years after launching the 'Millennium Declaration', in practice the MDGs have not yet been achieved (Vandemoortele 2010). The majority of donor governments such as the United States of America, Germany, the United Kingdom or Japan have not increased their Official Development Assistance (ODA) to 0.7 per cent of their overall GDP (MDG 8). Hence, aid flows which could facilitate the efforts of developing countries to reduce poverty remain limited (UNDP 2010b). While emerging middle-income countries like Brazil, China and India are getting closer to a cross-target MDGs achievement, progress remains limited in the majority of least developed countries, especially in Sub-Saharan Africa (Fukuda-Parr 2010, UNDP 2010b). What has been done by national governments to achieve the MDGs? How are assets incorporated in MDG-related policies and programmatic interventions?

i. National governments and MDGs implementation

The majority of national governments have incorporated the MDGs within their overall policy agenda. For example, almost all country-level Poverty Reduction Strategy Papers (PRSP) explicitly refer to achieving the MDGs (Fukuda-Parr 2010). Yet, closer examination of national policy strategies, programmes, and interventions reveals that different countries emphasise some MDGs over others (Gore 2010, Jahan 2010). A desk review of different PRSPs and UNDP country reports showed that the majority of national governments primarily focus on targeting single sector issues such as improving water and sanitation; nutrition; education and healthcare services (see appendix 2). Most of these governments aim to achieve the MDGs through first generation asset accumulation strategies that focus on the provision of social and economic infrastructure (see table 3).

Table 3: Asset accumulation strategies of different countries for the achievement of the MDGs

Country	Accessing an asset portfolio	Consolidating assets and preventing erosion	Maximising linkages between inter-dependent assets
Senegal	Water/ sanitation programmes (human capital)	-	-
Benin	School programmes (human capital)	-	-
Tanzania	Rural road programmes (financial and physical capital)	New agriculture technologies and capacity building policy (human capital)	-
Bolivia	Rural roads, schools, & healthcare programmes (physical, financial and human capital)	Improving quality of education, and maximising agricultural productivity (human capital)	-
South Africa	Water, sanitation and housing programmes (human and physical capital)	Urban rights (i.e. land titles), housing and infrastructure improvements, and pension funds (environment, human and financial capital)	-
Brazil	Social protection (i.e. Bolsa Familia), housing and water & sanitation programmes (human and physical capital)	Urban rights (i.e. land titles), and urban development (Cities for All Strategy) (physical and human capital)	Establishing a Ministry of Cities, rethinking linkages between transport, employment, urban rights & civic participation (addresses all types of capital)

Source: Based on PRSPs and UNDP MDG country reports (see also annex 4)

For example, Benin primarily focused on providing first-generation asset-accumulation strategies based on access to human capital through increased investments in primary school infrastructure projects (see table 3). By increasing the number of schools, the country significantly increased primary school enrolment rates and therefore in 2009 achieved MDG 2. Bearing in mind that in 1980 only 68 per cent of children were enrolled in schools this represented a significant success.

Moser (2009) argues that providing access to assets does not *per se* strengthen and consolidate the asset-base of the poor in the longer term. Indeed, Benin's increase in primary school enrolment did not necessarily lead to an overall improvement in the quality of education levels. Other examples, however, show different outcomes; the

Bolivian government, for instance, has enhanced the quality of its human capital investment in education by improving the capacity of its teaching system, and in Tanzania, the government addressed food security by increasing capital productivity through the introduction of new technologies and human capital strengthening in agriculture (see table 3).

Although increased numbers of children completing primary education and well-trained teachers are important to secure a high quality education, on their own these are not necessarily enough to change poverty dynamics. In certain contexts, particular local structural and institutional constraints can harm the (educated) poor's opportunities to further accumulate assets (Moser 2009). For instance, due to the lack of formal employment opportunities, many young people in developing countries fall into unemployment after completing their school education and continue to be trapped in poverty (Saith 2006, UNDP 2010b).

In many societies institutionalised discriminatory and exclusionary practices trap certain groups of people, i.e. based upon their race, ethnic origin, place of residence or gender, into poverty (Kabeer 2000, Hickey & du Toit 2006). Even though every individual might have completed primary education, institutionalised exclusionary practices can potentially hinder some societal groups from further accumulating assets, e.g. through denial of citizenship rights or denial of access to labour, and hence pull them back into poverty. To address this problem, South Africa has promoted policies to consolidate the assets of the urban poor. This has included strengthening their rights through massive land tenure and titling processes, and the increased participation of local municipalities, private stakeholders, civil society organisations and slum-dweller federations in the design and delivery of infrastructure and housing (Satterthwaite 2006) (see table 3).

However, few national governments in developing countries promote third-generation asset accumulation strategies to maximise the linkages between inter-dependent types of asset. One exception is the integrated urban development policy implemented by the Ministry of the Cities in Brazil (Ministry of Cities Brazil 2004). In this case, national and local governments, and civil society stakeholders defined an agenda to tackle complex MDGs targets such as improving the lives of urban slum dwellers, women empowerment, environmental sustainability, and employment generation. In so doing, they sought to address the structural, institutional, and organisational constraints that impede their achievement, including those related to good governance, accountability, financial sustainability, and the generation of competitive cities built on principles of solidarity and partnerships (see table 3 and box 3).

In summary, the majority of national government policies still focus on first-generation asset accumulation strategies. While more governments are becoming aware of the need to establish strategies aimed to consolidate and prevent asset erosion, few are implementing long-term strategies that will reinforce and maximise the linkages between different inter-dependent assets in a sustainable manner.

ii. The incorporation of global constraints into MDGs related policy

To achieve the MDGs by 2015, it is also important to address both local and global structural constraints (for example climate change, economic crisis, or conflict) which adversely affect the asset-base of the poor (Fischer 2010, McGregor & Sumner 2010, Saith 2006, Satterthwaite 2003, UNDP 2010a). Table 4 illustrates the various impacts of climate change on assets and the resulting constraints on MDGs' achievements.

Table 4: The adverse impact of climate change on the MDGs

MDG	Climate Change impact on assets	Impact on MDG success
MDG 1: Eradicate extreme poverty & hunger	Extreme weather can lead to increase in the frequency and intensity of floods or droughts - adversely affect human capital	Target 1b unlikely to be met
MDG 2: Achieve universal primary education/ MDG3: Promote gender equality and empower women	Destruction of physical capital like schools through extreme weather events, or impossibility for pupils to attend schools - adversely affect human capital	Target 2a unlikely to be met
MDG4: Reduce child mortality/ MDG5: Improve maternal health/ MDG6: Combat HIV/ aids, malaria and other diseases	Extreme weather events caused by climate change may increase water-borne diseases, limit access to potable water/ food - adversely affect human capital	Target 4a, 5a, 6a, 6c unlikely to be met
MDG7: Ensure environmental sustainability	Climate change has direct impact on natural resources and ecosystems - adversely affect natural capital	Target 7b, 7c unlikely to be met

Source: Moser et al 2010, Sumner & Tiwari 2009, UNDP 2010a

While the impact of local structural constraints, such as institutionally manifested patterns of exclusion are rarely recognised within MDGs related policy discourses (Satterthwaite 2003), national governments and international donors are increasingly aware of the adverse impact of global structural constraints like climate change, the economic crisis and international migration flows on the overall possibility of achieving the MDGs (UNDP 2010b).

For instance, within the outcome document of the September 2010 'UN Summit on Achieving the Millennium Development Goals' all member countries agreed on addressing climate change in MDGs related policy as follows: "…. climate change poses serious risks and challenges to all countries. We commit to address climate change in accordance with the principles and provisions of the United Nations Framework Convention on Climate Change, including the principle of common but differentiated responsibilities and respective capabilities" (UN 2010: 6). While agreements on addressing climate change are made, practical MDGs related policy initiatives that incorporate this issue remain scarce (Saith 2006, UN 2010b). That being said, there already exist certain programme initiatives, for instance the Cambodia Climate Change Alliance (box 2), which aim to find innovative solutions to incorporate the issue of climate change into MDGs related national policies.

Box 2: The Cambodia Climate Change Alliance (CCCA)
Climate change adversely affects the livelihoods of rural Cambodians (representing 80 per cent of the population). In recent years, floods, erratic patterns of rainfall and droughts severely reduced the agricultural outputs of rural farmers. This led to increased problems of food security and therefore hampered the achievement of MDG 1. In order to cope with climate change related phenomena, the national government in cooperation with international development partners such as Sida and UNDP, formed the CCCA which aims to help local communities in developing resilience mechanisms against recurring natural hazards like flooding, as well as incorporating mitigation and adaptation issues in the national government agenda.

Source: http://www.un.org.kh/undp/what-we-do/projects/cambodia-climate-change-alliance

3.4 Opportunities for incorporating assets into the MDGs

Incorporating an asset accumulation framework into MDG related policies, programmes and interventions is fruitful in two ways. First, this can be used to assess potential strengths and weaknesses of current MDG related policies. As shown above, most national policy initiatives implicitly aim to provide the poor with access to certain assets while also expecting that other assets will be accessed as a result of these interventions. This is why the majority of governments opt to address single MDGs, like MDG 2 or MDG 1c, and indeed do so quite successfully. However, most policy and programmatic interventions fail to recognise the linkages between different assets or to take into account structural and institutional constraints which adversely affect the poor's asset-base and hence hamper the overall MDG achievement (Saith 2006, UNDP 2010a). Second, the incorporation of an asset accumulation framework into MDG related policy strategies represents an opportunity to overcome constraints such as these, as well as to identify how cross-target MDGs can be achieved.

i. Maximising the linkages between inter-dependent assets

Single MDG targets do not stand in isolation from other MDG targets. Rather, all MDG targets stand in an inter-dependent relationship (Fukuda-Parr 2010, Saith 2006), e.g. in order to facilitate people's chances to access the formal labour market (MDG 1b) people need to be healthy (MDG 4, 5, 6) and sufficiently educated (MDG 2, 3). Thus global poverty can only be solved when its multiple dimensions are addressed simultaneously (UNDP 2010b).

An asset accumulation framework highlights the fact that it is not enough to incrementally generate access to, and secure the consolidation of, single assets. Instead, it emphasises the need to maximise the linkages between different inter-dependent assets (third-generation asset accumulation) not only to avoid an erosion of the overall asset-base of the poor in the long term, but to make the consolidation process sustainable over time (Moser 2009).

Practical examples reveal that policy strategies which follow this approach are particularly successful in reaching cross-target MDG achievements. For instance, to help extreme poor people to escape less-than-one-dollar-a-day poverty (MDG 1a), a programme implemented by Bangladesh's NGO BRAC provides access to multiple assets and simultaneously generates an enabling structural and institutional environment which protects the poor from asset erosion and, meanwhile, provides them with opportunities to further accumulate other assets (see box 3).

Box 3: Strengthening the Asset-Base of the Ultra Poor in Bangladesh

BRAC, an NGO specialising in micro-finance, developed an innovative project, 'Targeting the Ultra Poor' (TUP), which incrementally provides extreme poor people with assets they require to move out of income poverty while generating an enabling structural, institutional, and operational environment to assist the poor identify opportunities to further accumulate other assets. Along with an explicit focus on targeting the observable outcomes of extreme income poverty with participants provided with monthly stipends (improving financial capital) and direct food and medicine transfers (improving human capital), TUP aims to enhance the capabilities of its participants through income generation training, health campaigns and literacy training (improving human capital). In addition, through the creation of village assistance committees comprising BRAC members, municipality officials and programme participants, TUP connects local political stakeholders with the extreme poor. TUP strengthens community ties and trust (improving social capital) by creating a supportive and responsive political environment that enables the poor to further accumulate other assets. Thus, although TUP tackles MDG 1 it pays attention to achieving other MDGs, while introducing mechanisms intended to reduce the probability of backlashes in MDG achievements.

Source: Hulme & Moore 2007

ii. The importance of local context: generating an enabling local environment

While the MDGs represent a global poverty reduction agenda, poverty is primarily experienced at the local level (Satterthwaite 2003). Therefore, an MDGs-related policy or programmatic intervention is only successful when it takes into account the particular context and the specifics of poverty in concrete localities (McGregor & Sumner 2010). In viewing poverty as a subjective, relational and context specific concept, in which the poor are seen as central agents with control of their own asset-base, an asset adaptation framework can assist in involving the poor in MDGs-related policies and programmes. As an example from PRODEL, Nicaragua, illustrates, this is essential if they are to express more precisely their priority needs in terms of poverty reduction strategies as well as ensuring that policy makers are more responsive and accountable to local priorities (see box 4).

Box 4: Reinforcing assets at the local level: the case of PRODEL in Nicaragua

Since the 1990s the Nicaraguan Local Development Foundation (PRODEL) has institutionalised participatory action planning practices into local development programmes. These have been designed to access and transform the urban poor's collective and individual household, physical and productive, with participation from community based organisations (social capital), as well as support from international agencies, banks, national government, local governments and microfinance institutions. This planning process has resulted in the development of a series of financially sustainable instruments, and changed the working methods of local governments and financial institutions towards the urban poor. PRODEL has implemented more than 700 small infrastructure and basic services projects (water, sewerage, streets, community centres, elementary schools, risk-mitigation works against natural disasters, etc.) in 11 secondary cities, mobilising more than US$ 18 million in local contributions. With 35,000 houses upgraded through small, recurrent loans worth US$ 45 million, and the economic activities of 22,000 small entrepreneurs improved through 100,000 micro credits worth US$44 million, PRODEL has attained sustainable cross-target MDGs achievements at the local level.

Source: Stein (2010)

Finally, Brazil's 'Cities for All' strategy provides another example of a country with both territorial dimensions and social complexities seeking to sustain MDGs achievements in the long term (see box 5).

Box 5: Achieving the MDGs through integrated urban development policies – the case of Brazil

Conventional urban slum upgrading policies (MDG 7d) that focus on the provision of new houses rather than improving existing ones (Satterthwaite 2003) often fail to identify the demands and the needs of urban slum dwellers (Stein & Vance 2008). A policy designed to improve the lives of urban slum dwellers (MDG 7d) needs to incorporate the urban poor themselves into the planning process. The "Cities for All" strategy, introduced by the Brazilian National Ministry of Cities, relies on a holistic city development approach which identifies the importance of responding to the needs and demands of the urban poor. Due to the scarcity of financial and technical resources, the strategy requires national and municipal public, private and civil society based stakeholders to cooperate in improving slum dwellers' living conditions. To respond to their specific needs, it includes slum dwellers in every stage of the planning process. To be more cost efficient and sustainable, it acknowledges and builds on already realised investments of the urban poor themselves. Housing improvements for low-income households (physical capital), securing land tenure and improving urban land rights (physical and environmental capital), improving basic services and urban infrastructure (human and physical capital), generating a healthy living environment (human capital), building community trust (social capital), encouraging community participation, and generating pro-poor and responsive municipal institutions are the main objectives of the strategy. The strategy aims to achieve MDG 7d by simultaneously tackling other MDGs. It also aims to generate a structural, institutional (by strengthen municipal institutions), and operational (ensuring long term programme financial and technical sustainability) environment which enables the poor to sustain their asset-base and to further accumulate assets. The "Cities for All" strategy has been implemented in São Paulo, Rio de Janeiro and Porto Alegre.

Source: Ministry of Cities Brazil (2004), Budds & Teixeira (2005).

4. Social protection and assets

4.1 Contextual background: social protection – from coping with shocks to mitigating risk

The origins of the current social protection agenda lie in the 2000/2001 *World Development Report: Attacking Poverty* (World Bank 2001). This outlined a three-fold strategy for poverty reduction through the promotion of opportunity, the facilitation of empowerment and the enhancement of security. In turn a three-pronged risk management framework was outlined to 'enhance security' which identified a range of formal and informal mechanisms through which households and communities could reduce risk, mitigate risk, and cope with shocks (World Bank 2001). In this risk management framework social protection was identified as one of a number of *ex post* interventions to help the poor to *cope with shocks*. Its original scope, therefore, was limited to *ex post* assistance that guaranteed relief from deprivation through programmes such as social assistance, workfare, subsidies, social funds and cash transfers (box 6).

Box 6: Broadening definitions of social protection:

Social protection (2000): "Generally defined as public measures to provide income security for individuals" (Holzmann and Jorgensen 2000).

Social protection (2010): "A broad concept describing all interventions from public, private and voluntary organisations and social networks, to support communities, households and individuals in their efforts to prevent, manage and overcome vulnerability" (CPRC 2010).

The World Development Report (WDR) 2000/2001 recognised that households and communities have a number of informal mechanisms through which they reduce and mitigate the different forms of risk that they face (World Bank 2001: 136). At the same time it clarified the fact that informal household or group-based mechanisms available to the poor for *coping* with risks could be detrimental to household well-being. Thus social protection measures aimed to prevent households facing a shock, from withdrawing children from school, selling assets, taking high-interest loans, reducing consumption, or resorting to other harmful practices.

Not only were assets overlooked in the 2000/1 WDR strategy for enhancing social security described above, but ironically their importance was clearly highlighted in the first strategy, namely 'promoting opportunities', as a mechanism both for reducing vulnerability *and* escaping poverty.

> "Human, physical, and natural assets also lie at the core of whether an individual, household, or group lives in poverty – or escapes it… assets are also central to coping with shocks and reducing the vulnerability that is a constant feature of poverty" (World Bank 2001: 77).

Over the past decade the social protection agenda has broadened considerably, along with the recognition that *ex post* social protection programmes were an inadequate response to both the long term risks of chronic poverty and growing levels of inequality – associated with rapid growth without adequate state provision of infrastructure or appropriate redistributive policies (Kabeer and Cook 2010). Consequently, the objectives of social protection have shifted beyond the original short-term goals of the provision of relief to the poor during shocks, to two different *ex ante* objectives both designed to promote longer-term, more sustainable poverty reduction. Increasingly they now focus on *ex ante* prevention measures to mitigate risk as well as promotion measures intended to reduce risk (see table 5).

Table 5: Types of social protection programme and associated objectives

Type of social protection	Objective	When	Programme example
Provision	Relief to cope with shocks	*Ex post*	• Emergency safety nets • Humanitarian aid (cash or food)
Prevention	Mitigate risk	*Ex ante*	• Long-term transfers (cash or in-kind) • Employment guarantee schemes
Promotion	Reduce risk by enhancing incomes and capabilities	*Ex ante*	• Conditional cash transfers. • Asset transfer programmes

The second type of social protection, therefore, is prevention measures to mitigate risk. These are designed to encourage households to invest in human capital and higher-risk, higher-return activities, thus also giving the poor a more secure position from which to seize opportunities and demand their rights (Cook 2007). The third type of social protection is the broad range of promotion measures that are intended to reduce risk by providing access to basic services, productive employment and human capital. The intention is both to facilitate

human development as well as to break intergenerational transmissions of poverty (Barrientos and Hulme 2008).

While it is useful to differentiate these three different objectives of social protection it is also necessary to note that over time there has been a convergence between prevention and promotion. Consequently in much of the literature social protection is currently identified as both mitigating risk and coping with shocks (World Bank 2001). An additional distinction relates to the fact that while developed countries prioritise social insurance (which through contributory payments provide protection against contingencies arising from changes such as maternity, old age, unemployment, and illness), developing countries are more likely to implement a range of social assistance programmes such as conditional cash transfers or public works.

4.2 Assets and social protection in existing programmes

As summarised in table 6, to date social protection programmes have an implicit rather than explicit incorporation of assets into the design or implementation of the range of associated interventions. In other words, they do not refer directly to assets, but they do focus on accumulating or protecting different types of capital. Of equal importance is the fact that the implicit focus itself primarily has been on human and financial capital, with far less prioritisation of productive or social capital.

Three of the most prominent programmes identified in table 6 are a range of transfer programmes including conditional or unconditional cash and in-kind transfers, employment (work) guarantee schemes and asset transfer programmes, each of which is described in further detail below.

Table 6: The implicit incorporation on assets in existing social protection programmes

Type of social protection	**Programme examples**	**Assets are *implicitly* addressed through :**
Provision	• Emergency safety nets • Humanitarian aid (cash or food)	• **Financial capital**: through cash or in-kind transfer • **Human capital**: through improved nutrition
Prevention	• Long-term transfers (cash or in-kind) • Employment guarantee schemes	• **Financial capital:** through cash or in-kind transfer • **Human capital:** through improved nutrition • **Human capital:** through work experience • **Physical or natural capital:** through community assets in public works
Promotion	• Conditional cash transfers • Asset transfer programmes	• **Financial capital:** through cash or in-kind transfer • **Productive capital:** such as livestock • **Human capital:** through improved nutrition and use of health facilities • **Human capital:** improved access to education and training

i. In-kind, cash and conditional cash transfers

Unconditional cash or in-kind transfers that are provided over a long time period primarily play a preventive role. The provision of a regular income ensures household consumption-smoothing and helps to overcome economic risks such as those associated with old age or disability. It is also often assumed that they play a promotion role, on the premise that a

guaranteed income facilitates consumption smoothing which in turn provides the security for household risk-taking that may be accompanied by higher-returns in income or assets.

Pensions have long been the most prominent form of social insurance in developing countries; while 22 have been identified as providing some form of social pension, such as old age or disability pensions, only four offer child and family allowances (Barrientos, Nino-Zarazua and Maitrot 2010). Globally not only do a small number of countries have such programmes, but also in those that do very few reach poor non-waged workers (see Moser and Antezana 2001 for the case of Bolivia).

A more recent innovation has been the introduction of conditional cash transfer programmes (CCTs) that offer cash or in-kind transfers alongside terms of conditionality that are intended to promote investments in children's human capital through health, nutrition and education. This form of 'income-plus' social assistance is intended to combine both prevention and promotion of social protection objectives. CCTs have experienced fast growth in popularity and are being adopted at a prodigious rate (World Bank 2009). Virtually every country in Latin America has at least one CCT, and there are large-scale programmes in at least 30 developing countries, with pilot programmes in a number of others (World Bank 2009, Barrientos, Nino-Zarazua and Maitrot 2010).

In their search to break the intergenerational transmission of poverty, CCTs transfer income in cash or in-kind on the basis of observable criteria such as children's age, attendance in school and/or participation in health and nutrition programmes. While the monthly cash transfer has the objective of prevention, the terms of conditionality are intended to ensure the programmes' promotion objectives. As mentioned above, regular income support mitigates risk by preventing the long-term damage that occurs when households are forced to underfeed children or withdraw them from school when faced with shocks.

The long-term focus on human asset accumulation and a reliance on targeting households with children, means that CCTs are designed to tackle structural poverty, rather than simply to act as a response to transient poverty. As such, evaluations of CCTs have focused on improvements in human development indicators, and have not identified whether and how CCTs can assist households cope with, or mitigate, different sources of risk. Indeed, the World Bank (2009) identifies that CCTs are not best-suited as instruments for managing risk.

The Mexican *Oportunidades* programme (see box 7) provides an excellent example of the way in which the conditionalities that underpin ongoing receipt of income support reveal assets as implicitly important in programme design. Investment in human capital is recognised as crucial to breaking long-term poverty cycles, through investments in education, health and nutrition. However, these benefits are not always maximised in the medium or long-term. For example, although CCTs have resulted in increased *usage* of health and education services in the medium-term, they have had only a modest impact on health and education *outcomes*. To address this constraint requires interventions designed with a more comprehensive quality service provision, as well as the incorporation of other household factors that may influence outcomes – such as adequate information or the inability of households to meet other input costs (such as books, uniform or school lunch) (World Bank 2009).

In the longer-term, CCTs are designed on the premise that human capital accumulation will enhance greater future opportunity. Where this is not accompanied by structural economic change that opens up economic opportunities to skilled and/or educated workers, however, the accumulation of human capital is not necessarily sufficient to meet long-term goals. From an asset-based approach, this highlights the importance of different generations of asset accumulation strategies. As well as *accessing* assets, households must also be able to

consolidate assets and to *maximise the linkages* between different types of asset, for the benefits of asset accumulation to be realised.

Box 7: Mexico's Oportunidades Programme

Mexico launched a radical new social protection programme to combat poverty in 1997. Originally called Progresa, the next government renamed it Oportunidades. At the outset it was a targeted programme that reached 300,000 families across Mexico; today one in four Mexicans is a beneficiary of the programme. To break the intergenerational transmission of poverty, the programme transfers a monthly cash stipend contingent on investments by the poor in the nutrition, health and education of their children. Given its strong evaluation results and the programme's effective scaling up, Oportunidades is often used as a model for social protection, offering lessons into how successful initiatives can be designed, adapted, scale-up and replicated.

Its background is instructive; the programme emerged from a Mexican history of food subsidies. A multiplicity of programmes had resulted in uneven distribution and high administration costs. In addition, because programmes did not offer a comprehensive package, their impact was limited. While some programmes offered food subsidies, others offered nutritional and health interventions. Consequently these ran independently of each other. Increasing recognition of the beneficial linkages between food consumption, nutrition, health and education resulted in recognition that an integrated approach would be more effective. As Santiago Levy, one of the programme's designers, commented "programmes that provide for the needs of the poor in an isolated or partial fashion may not attain the central objective of developing poor families' capabilities" (Levy 2006:12). Similarly, it was recognised that narrowly targeted programmes could not tackle national poverty in a systematic way. Consequently, the programme was designed to replace targeted but piecemeal programmes, and to reach *all* poor households. The programme's additional strength was that it ended the 'stop-go' problem that had plagued previous programmes, in which those launched by one government were dismantled by the next. Political and ministerial commitment allowed for the continuity necessary for long-term human capital accumulation in poor households.

Oportunidadas, however, is only one component of Mexico's poverty alleviation strategy that has adopted a three-fold approach to include programmes to enhance human capital; to increase income-earning opportunities through temporary employment, credit and rural development programmes; and to improve physical infrastructure in poor regions. Such a strategy recognises Oportunidadas's success cannot be guaranteed in isolation from Mexico's overall growth and development performance. While facilitating the growth of a healthier and more educated population, fulfilment of these new skills and capabilities is dependent on Mexico's economic growth, and the number and type of employment opportunities that are generated.

Source: Levy 2006

ii. Employment (Work) Guarantee Programmes

For labour to be realised as a productive asset requires employment security (Moser 2009). This has long been recognised, demonstrated by the fact that public works programmes continue to experience popularity among social protection options (McCord 2008). Currently seven developing countries have been identified as implementing at least one form of public works programme (Barrientos, Nino-Zarazua and Maitrot 2010), providing employment security to poor households in insecure regions, or during seasons in which employment is scarce. As counter-cyclical interventions, they facilitate a government response to economic or seasonal work shortages through employment creation. Public works can provide *provisional* and *preventive* strategies depending on whether they operate as short-term, one-off programmes, or as sustained employment opportunities to deal with long-term poverty and unemployment. They help households to cope by providing a minimum income during periods of employment scarcity. The social protection transfer in public works programmes is a 'wage' in return for labour. The setting of wages below the minimum wage allows programmes to be self-targeting and ensures only the most needy take advantage of them.

Assets are again recognised *implicitly* in programme design and implementation. It is assumed that public works programmes have a positive impact on the accumulation of assets through three channels: the wage payment; improved labour market attachment (as a result of training and experience); and benefits accruing from the physical and/or natural assets that are created or strengthened (McCord 2008). Short-term public works, however, do not necessarily provide a basis for asset accumulation, acting primarily for provision rather than promotion. The efficacy of short-term public works is limited to coping in situations of transient rather than structural unemployment and poverty. If programmes guarantee that employment is available not only during but also after a crisis, however, they can be important in mitigating risk. Given the diverse asset portfolios that households manage for income-generation, one risk of public works is that participation in programmes to guarantee short-term cash incomes may require the sacrifice of other forms of income-generation, particularly if public works programmes coincide with periods of high agricultural activity (McCord 2008). This forces households to choose between shorter- and longer-term income and consumption that may yield negative consequences in terms of production.

Box 8: India's National Rural Employment Guarantee Act

Public works to provide relief from hunger during famine have been implemented in India for many years. Nevertheless, the National Rural Employment Guarantee Act (NREGA) to address issues of livelihood security in rural areas, passed by the Government of India in 2005, differs from previous public works programmes because as an *Act*, it is the first legal instrument to make employment both a statutory obligation of the state and a citizen right. All rural households in designated districts are entitled to 100 days of employment each financial year at a guaranteed minimum wage.

The Act's aims are extensive; these include the increase of employment, purchasing power, female participation and equality in the workforce; strengthening rural infrastructure; regeneration of natural resources; and the reduction of migration as a coping strategy to distress and deprivation. The fact that households have reported reduced hunger and improved incomes during periods of employment scarcity shows that NREGA can address some of the economic vulnerability faced by poor households. Programme objectives address assets implicitly and explicitly. Human capital is strengthened through training and work experience, while the creation of physical and natural assets relate to wider development and poverty reduction objectives.

The creation or strengthening of community assets depends on projects being designed to meet local needs. The selection and execution of works in NREGA is carried out by localised committees called *Gram Panchayats*, and is designed as participatory and reflecting local needs. However evaluations indicate that it tends to follow 'top-down' processes rather than community discussion and/or identification, with projects based on pre-existing designs rather than being adapted to local circumstances. In some cases NREGA has had unanticipated inequality outcomes: programme selection and design which fail to take account of community social capital in some cases resulted in financial benefits accruing to the wealthy rather than to the poor. In land and water-related works, for example, benefits accrue to landowners rather than the landless. An asset-based analysis could improve NREGA's potential to meet wider poverty reduction objectives through the assessment of different physical and/or natural capital requirements as well as a greater understanding as to how the community's social assets would impact upon the distribution of programme benefits across poor and non-poor households.

Sources: Reddy et al, 2010; Bhattachayra et al 2010

Well-designed public works can reduce both household and community vulnerability. This occurs when the creation or strengthening of community-level physical or natural capital assets reduces the risk of, or increases resilience to, future crises. Assets can also enhance productivity if they mitigate environmental risk or promote land productivity. However, since the overall objective of public work programmes is employment creation, the benefits of building community social and other capital assets often are not maximised as illustrated in box 8. If project evaluations included assessments of the capital assets created, this might encourage programmes to move beyond considerations of labour use to the consolidation of

assets consistent with community needs and priorities. It is only through this broader agenda that public works programmes can serve a dual purpose of relief *and* development (Subbarao and Smith in McCord, 2008).

iii. Asset-transfer programmes

While CCTs, other cash or in-kind transfers and public works are the main components of the current social protection agenda, 'asset-transfer' programmes have become increasingly classified as a form of social protection rather than simply programmes for poverty reduction. Such programmes have an explicit focus on assets, with the initial transfer of a productive asset seen as a prerequisite to further asset accumulation. Complementary services that accompany the transfer – including a stipend, training, and a component for increasing social awareness – are viewed as necessary to protect the asset and provide the foundations for integration into wider community processes as well as to escape poverty. These programmes, therefore, take a wider approach to social protection, recognising that social protection must address both the economic risks associated with poverty, but also the *structural* issues of poverty and vulnerability that face poor and extremely poor households. This symbolises a shift towards the transformative agenda of social protection, which provides a potential entry point for integrating an asset-based approach into the social protection agenda.

In Bangladesh, BRAC's 'Targeting the Ultra-Poor' and the DFID-funded 'Chars Livelihood Programme' are two such programmes. Through the provision of livestock and integrated packages of assistance these have proved successful in assisting the poorest households to accumulate assets, to diversify their income, become socially integrated into their communities, and to reach a level at which they can join mainstream social protection programmes and/or microfinance services.

Ex ante social protection programmes, such as those discussed here, have experienced successes in reducing vulnerability and helping households to access financial and human capital, and addressing some of the underlying causes of poverty. Nevertheless they have a number of limitations. First, they have focused on one or two key assets rather than a complete portfolio. For instance, while protecting workers against cyclical unemployment offers the potential for accessing or consolidating productive and natural capital, public works programmes cannot provide a long-term solution to employment scarcity, nor help households out of a deeper, structural poverty. While CCTs focus on investments in education, health and nutrition that determine a person's ability to work and maximises returns to labour, for benefits to be realised requires an enabling environment in which economic opportunities for skilled workers are available, and jobs are distributed through merit rather than social networks.

In addition, the top-down design and implementation of social protection programmes has remained even as its agenda has extended. This fails not only to recognise that where social protection does not exist (or is not universal), local households and communities utilise their own informal mechanisms to overcome risk and vulnerability, but also to build on existing informal mechanisms.[4] As Morduch and Sharma argue, 'Only by building up from an understanding of actions already taken by households and communities can public safety-nets maximise their effectiveness as well as minimise the risk of displacing existing mechanisms'(2002: 569).

While current social protection objectives focus on the prevention of a further downfall into poverty, and in some cases emphasise the promotion of measures to ensure the ability of households to escape poverty in the longer term, it is now directly acknowledged that they

[4] Moser with Antezana, (2001: 13), for instance, lists the range of risk reduction and mitigation strategies of poor households in Bolivia, along with those for coping with crisis.

nevertheless neglect 'social' risks[5] that arise from the exclusion of poor households or communities to assets, services and opportunities (Sabates-Wheeler and Devereux 2008).

4.3 Opportunities for incorporating assets into social protection: the emerging transformative agenda

The conceptual underpinnings for a transformative social protection agenda come from policy-focused research centres such as the Institute of Development Studies, Sussex, and the Overseas Development Institute, London. They have most recently been reflected in UNRISD's 2010 report on Social Development[6]. Supporting an agenda that addresses concerns of social equity and exclusion, Devereux and Sabates-Wheeler take a wider definition of social protection to include,

> "All public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups." (Devereux and Sabates-Wheeler 2004:9)

Transformative social protection moves the objectives beyond those of provision, prevention and promotion, which have so far shaped the agenda, to focus on improving the terms through which poor households are integrated into social and economic processes, including the wider delivery of social services and terms of access to the labour market. In so doing they propose focusing less on accessing assets and move more towards assisting poor households to consolidate their assets and maximise the linkages between them[7] (see table 7).

A transformative social protection agenda could address some of the 'missed opportunities', or limitations relating to exclusion and structural inequalities identified above. It also provides an opportunity to incorporate an asset accumulation framework. This recognises the need for a bottom-up diagnosis of existing asset portfolios, networks and social capital that households utilise to manage and reduce risk, as well as the grounding of policy initiatives within structural, institutional and operational contexts. To date, integration of its programmes into economic, political and social processes has rarely been an explicit objective of social protection, yet is crucial to create the policy conditions for a virtuous cycle of pro-poor growth, and to increase the poor's access to employment opportunities, service provision and governance systems that are accountable and responsive to the poor (Cook 2007; Sabates-Wheeler and Devereux 2008; UNRISD 2010).

An asset accumulation framework provides the tools with which to identify the wider institutional arrangements associated with an enabling environment in which poor households can maximise the returns to their assets and, ultimately, escape poverty. It also ensures that social protection interventions take a bottom-up perspective and build upon the wealth of pre-existing informal mechanisms utilised by poor households. Furthermore, it offers the potential for identifying the policies or programmes necessary for these asset portfolios to be consolidated and maximised.

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[5] Social risks (including gender inequality, unequal distribution of resources and power and limited citizenship) are "back on the policy agenda to enhance social protection effectiveness" (Holmes and Jones 2009: 1).

[6] UNRISD has recently taken this further but transferred the concept to social *policy* rather than the narrower agenda of social protection, highlighting the need for 'transformative social policy' to transform social relations, to regulate existing, or to produce new social institutions and norms (UNRISD 2006; 2010).

[7] In fact, a decade ago the WDR 2000/1 recognised the synergy between different assets, highlighting that, "There are powerful complementarities across assets – the benefits of one asset can depend crucially on access to another" (World Bank 2001: 77).

Table 7: Incorporating asset accumulation strategies into a transformative agenda for social protection.

Component of asset portfolio	Current social protection agenda	Moving towards a transformative social protection agenda	
	Accessing assets	**Consolidating Assets**	**Maximising the linkages**
Financial capital	• Emergency safety nets • Humanitarian aid • CCTs • Employment guarantee schemes • Asset transfer programmes	Greater access to savings for future investment and to protect household from financial shocks	With direct reference to CCTs[8]: • Promoting connections with public, private and civil society development initiatives to establish monetary incentive systems • Support the productive use of poor people's savings and accumulated transfers • Grants-based investments in technical/ financial training, internships
Human capital	• Food subsidies or in-kind transfers • Employment guarantee schemes • CCTs • Asset transfer programmes	Access to finance to start small business, apprenticeships, assistance with job search	
Productive capital	• Employment guarantee schemes	Pro-poor land policy in urban areas or housing improvement loans	
Natural capital	• Employment guarantee schemes	Weather insurance for agriculture in rural areas	
Social capital	• Currently overlooked	Funding community development through community-based organisations, increased participation in programme designs	

Programmes for improving land security through the engagement and mobilisation of previously marginalised social groups are one example of a transformative social protection agenda. At the same time as helping poor households to consolidate assets, such initiatives also seek to make local governance more responsive and accountable to the poor. These programmes highlight the important linkages between assets, including that secure tenure is often necessary to increase civic capital (see Ginieniewicz 2010), to access entitlements such as services and employment, and to encourage households to consolidate existing investments in housing (Gazdar et al 2010; Mahadevia 2010). Box 9 illustrates this through the case of the Secure Housing Programme in Thailand.

Recent changes to Brazil's *Bolsa Familia* programme also illustrate the recent incorporation of a transformative social protection agenda. Like *Oportunidades*, described above, *Bolsa Familia* is a conditional cash transfer that provides income support to poor households subject to meeting investments in human development for their children. In 2006, there were over 11 million beneficiary households (ILO 2009). With the introduction of recent initiatives to the programme, however, *Bolsa Familia* has extended its objectives to include a broader, transformative programme. These include initiatives that aim to overcome entrance barriers to the labour market and improve beneficiaries' labour skills. This linkage between social protection and employment recognises that improving human capital is insufficient in the context of an inaccessible labour market, and that a comprehensive social protection

[8] This provides a specific example, drawing on Moury 2010

programme must also allow poor households to consolidate such assets by realising their potential in finding employment.

Box 9: The *Baan Mankong* Programme ('Secure Housing Programme'), Thailand
In 2003, the Thai Government launched the *Baan Mankong* programme through the Community Organisations Development Institute (CODI), a government agency with its own legal entity. The programme aims to improve housing, living standards and tenure security for 300,000 households across 200 of Thailand's cities within five years. Government funds are channelled in the form of infrastructure subsidies and housing loans to community-based organisations to allow them to improve housing, services and infrastructure. *Baan Mankong* was set up to support processes designed and managed by low-income households and their community organisations. In doing so, it imposes as few conditions as possible to give urban poor communities room to design their own programme for improvement. *Baan Mankong* is helping to strengthen collective social processes, which improve security and well-being in many ways other than simply physical assets.

Sources: Boonyabancha 2005; communityplanning.net

As such, while social protection is one *form* of social policy, it increasingly defines an agenda for wider social policy in developing countries (Barrientos and Hulme 2008). A transformative social protection agenda moves further towards addressing social, in addition to economic, risks. The transition to a transformational agenda, however, is likely to face more constraints. Pro-poor policy-making is inherently driven by politics, and efforts to advocate policies that require structural changes, such as improved land security for the urban poor, are likely to face resistance.

5. Climate change and assets

5.1 Contextual background: climate change – from mitigation to adaptation

Although a matter of recent controversy (The Guardian 2010), there is growing evidence that the climate is changing, observed directly through increasing global average air and ocean temperatures, changes in the frequency and severity of storms, as well as in precipitation patterns (IPCC 2007). Long term trends for more than three decades show variations in the frequency of storms with heavy precipitation over most land areas: in eastern parts of North and South America, northern Europe, and northern and central Asia. During this period, parts of the African Sahel, the Mediterranean, Southern Africa, and Southern Asia have become drier and droughts have become longer and more intense, affecting larger areas especially in the tropics and subtropics.

Though climate patterns naturally fluctuate over time (Burroughs 2007), scientists attribute greenhouse gas (GHG) emissions to be the main cause of climate change (CC). The rise of global atmospheric CO_2 levels, with a rapid rise from around 1950 onwards has been accompanied by a rapid increase in the global surface temperature over the last 100 years (IPCC 2007). To face the challenges posed by CC, especially in reducing and avoiding GHG emissions, two international initiatives were set: the Kyoto Protocol and the Intergovernmental Panel on Climate Change (IPCC) (see box 10).

As CC has now become a major global concern there is also growing recognition that cities in low and middle-income countries contain a large proportion of those most at risk from its effects (Moser and Stein 2010). Not only do these countries contain about three quarters of the world population, but also have most of the urban population at greatest risk from increased intensity and/or frequency of storms, flooding, landslides, heat waves, constraints on fresh water and vector-borne diseases, as well as an increased concentration of people in low-lying coastal zones at risk from sea-level rises (McGranahan et al 2007). This is particularly true for hundreds of millions living in slums and informal settlements in cities and

towns in Asia, Africa and Latin America (Wamsler 2007). To date, the majority of climate change adaptation strategies in developing countries have focused on the impacts of CC on agricultural and natural resources, favouring therefore 'rural livelihood-focused activities', while ignoring, or paying insufficient attention to what is happening in urban areas' (Tanner et al 2009). Thus, the lack of understanding of how CC is affecting urban areas, as well as the weak institutional structures and financial resources dedicated to urban climate change adaptation are a constraint to effectively building cities' resilience to severe weather (Moser et al 2010).

Box 10: International initiatives on Climate Change

Kyoto Protocol: Adopted in 1997 and entered into force in 2005, the treaty binds industrialised countries to reduce greenhouse gas emissions over a five-year period 2008-2012. Countries have to meet their targets primarily through national measures, however, it offers global market-based mechanisms to help parties meet their emission targets in a cost-effective way including emissions trading ('the carbon market') and clean development mechanisms.

IPCC: Established in 1998 as a scientific body tasked with evaluating the risk of CC caused by human activity, it aims to assess scientific information relevant to human-induced CC, the impacts of human-induced CC, and options for mitigation and adaptation. The IPCC publishes special reports on topics relevant to the implementation of the United Nations Framework Convention on CC (UNFCCC) and it bases its assessment mainly on peer reviewed and published scientific literature. IPCC is only open to member states of the World Meteorological Organisation (WMO) and the United Nations Environment Programme (UNEP).

Sources: United Nations (1998) and IPCC (2010)

Over the past decade a diversity of complex, interrelated and often overlapping approaches have sought to address the impacts of climate change as a consequence of increased acknowledgement of the need to enable human and natural systems to adjust to actual or expected climate *stimuli* and their effects which are now irreversible (McCarthy et al 2001). Within this field it is useful to clarify the distinctions between mitigation and adaptation approaches (see table 8)[9], and between disaster risk reduction/management (DRR/DRM) and climate change adaptation (see appendix 3).

Mitigation was the first approach to CC to receive widespread attention, with countries within the UNFCCC actively discussing and negotiating ways to deal with the problem.[10] To address the root cause, the reduction in greenhouse gas (GHG) emissions from human activity was identified as the priority task. But the means to achieve this were considered contentious, requiring radical changes in the way many societies are organised, especially in relation to fossil fuel use, industry operations, urban development and land use (Klein et al 2007).

Equally important have been approaches to reduce the impact of climate change, and associated with this an often contentious debate occurring about the nature and time-frame of the threat (Thomalla et al 2006). While the disaster risk reduction/management (DRR/DRM) approach suggests climate change is an increase in the magnitude and frequency of short-term extreme events or disasters, similar to an earthquake or tsunami, the more recent climate change adaptation (CCA) approach maintains the phenomenon is more one of slow trends in the increasing variability and intensity of weather (and associated precipitation and

[9] Ideally, adaptation and mitigation should be considered jointly, as some adaptation measures can contribute to reducing greenhouse gas emissions, while conversely mitigation measures can be planned to help reduce, and not inadvertently exacerbate, disaster risks.

[10] In the context of disasters, 'mitigation' is defined as 'any structural measures (such as engineering techniques and hazard-resistant construction) or non-structural measures (such as improved policies, legislation, public awareness, training and education, public commitment and operating practices) undertaken to limit the adverse impacts of natural hazards, environmental degradation and technological hazards' (Wamsler 2007).

temperature regimes). Associated with this, are contrasting responses that focus on top-down disaster relief during or after extreme weather events (Sperling and Szekely 2005), as against incremental responses to the slow impacts of long-term trends in increasing severity of weather, both of which are sometimes invidious and imperceptible (Hellmuth et al 2007; Moser et al 2010).

Table 8: Key differences between mitigation and adaptation

Issue	Dominant focus of mitigation	Dominant focus of adaptation
Cause/effect	Primarily addresses causes	Primarily addresses consequences
Spatial scale	Main objective: avoiding global changes	Main objective: local damage avoidance
Time-scale	Long-term benefits from avoided CC	Often main driver short-term benefit due to reducing vulnerability to CC
Beneficiaries	Mainly benefits others	Mainly benefits those who implement it
Incentives	Usually incentives needed	Often incentives not needed
Urgency	Lower political urgency/legitimacy	Higher political urgency/legitimacy
Monitoring	Relatively easy	More difficult

Source: Adapted from Swart and Raes 2007.

Despite increasing convergence between these two approaches to adaptation, they differ in terms of historical period when developed, key objectives and current emphases (see annex 3) and have operated largely in isolation from each other (Tearfund 2008:3). DRR, subsequently transformed into Disaster Risk Management (DRM), with its origins in humanitarian emergency relief, has a 30-year track record in addressing disasters. As a consequence of the Hyogo Framework for Action[11], DRM underwent a paradigm shift to include the pre-disaster stages of hazards (FAO 2008), with its overall focus expanding to encompass emergency response, prevention, mitigation and preparedness of neighbourhoods for natural disasters (Wamsler 2007). Closely linked was Climate Risk Management, which sought to bridge the management of risk to climate change.[12]

More recent approaches with environmental climate science as their centre of concern have focused specifically on both vulnerability and adaptation, as suggested by approaches such as Climate Change Adaptation (CCA) and Climate Change Vulnerability Resilience. Spearheaded by the fact that mitigation responses have been slow and inadequate (Reid and Huq 2007), CCA with its scope narrower than DRM, deals only with climate-related or 'hydro-meteorological' hazards. However, such approaches have a far longer time dimension than DRM, and one that factors in the impacts of climate change on biodiversity, changes in ecosystem service and the spread of climate-sensitive diseases (Tearfund 2008). In addition, they prioritise the building up of long-term resilience, rather than planning for dramatic climate shocks (van Aalst et al 2006).

In the CCA approach, a further useful distinction has been made between *ex ante* (anticipatory) and *ex post* (reactive) adaptation, as well as between planned and autonomous adaptation. Most initial climate change adaptation has been *ex ante* and top down, lending itself to large-scale, technological solutions (Tanner and Mitchell 2008). However, criticism of this approach as tending to ignore the social determinants of vulnerability (Prowse and Scott 2008), has resulted in a range of more inductive community-based approaches to adaptation, that build on existing risk-coping strategies of individuals and communities (Reid and Huq 2007).

[11] The Hyogo Framework for Action (HFA) 2005-2012 was agreed by 168 governments in Kobe, Japan in 2005, to facilitate a comprehensive system-wide, risk-reducing approach to climate change adaptation.

[12] See for instance, ORCHID (Opportunities and Risks of Climate Change and Disasters), identified as a 'managerial response to mainstreaming climate risk management' (Tanner and Conway 2006).

While community-based approaches to poverty reduction have been widely implemented in the past decades as a consequence of the work of community-based organisations (CBOs), NGOs and participatory approaches to development (Chambers 1992), recently this approach has also turned its focus to climate change adaptation. Principles include the fact that outside agencies must gain the trust of local communities, and that future adaptation initiatives as a form of action-research must be embedded in local communities' existing knowledge and must be based on local community members' participation (Prowse and Scott 2008).

5.2 From asset accumulation to asset adaptation

Moser et al (2010) highlight the importance to shift from an asset accumulation to an asset adaptation framework in order to better understand the opportunities the urban poor have to build long term resilience to the impact of CC.[13] An asset adaptation framework has two core objectives:

- At the analytical level to understand the sources of **asset vulnerability** of poor households, businesses and community organisations in terms of the mechanisms through which variability associated with climate change impacts leads to the erosion of assets.
- At the operational level to classify the types of **asset adaptation strategies** and sources of reliance that enable households and communities to protect themselves, or to recover, from the negative effects of severe weather associated with climate change.

Linked to these objectives, the framework comprises two associated components:

***i. An asset vulnerability analytical framework*:**

This identifies the links between different vulnerabilities and the poor's capital assets. These relate both to external shocks and stresses, as well as to internal capacities to resist or withstand them. While vulnerability has long been recognised as an important constraint for asset accumulation, climate change also requires a consideration of the uncertainty of future risk and associated with this an insecurity concerning the bundle of assets that will enable adaptation and greater resilience, or lead to increased vulnerability. In the case of climate change it can be identified in terms of two specific dimensions: first, an external dimension that comprises the potential damage caused by shocks (such as sudden climatic events like hurricanes), trends (such as environmental degradation over time) or stresses to which people are subject; and second, an internal dimension that encompasses their capacity and associated means to withstand, or adjust, to damaging losses.

The social dimensions of vulnerability to climate change predominantly focus on the internal dimension — namely how assets, institutions, and people's relationships are affected by such external threats. Climate change vulnerability, therefore, is closely linked to assets. The more and diverse assets people have, the less vulnerable they are, and the greater the erosion of people's assets, the greater their insecurity (see Moser 1998). Poor populations are particularly vulnerable to climate change not only in terms of individual assets such as human and social capital, but also in terms of household, small business and community assets such as financial and productive assets. The capacity of individuals, households and communities to deal with such impacts in turn determines their resilience to weather stress.

ii. An asset adaptation operational framework:

This explores and classifies the asset adaptation strategies as households, small businesses and communities exploit opportunities to develop resilience, cope and resist, or to recover from, the negative effects of climate extremes. Three closely interrelated phases of asset-based adaptation comprise:

[13] This is the result of recent conceptual and empirical research on climate change and assets undertaken by GURC with fieldwork in Mombasa, Kenya and Estelí, Nicaragua (see Moser and Satterthwaite 2008; Moser and Stein 2010; Moser et al 2010).

- Asset adaptation to build long-term resilience
- Asset damage limitation and protection during severe weather events
- Asset rebuilding after extreme weather and disasters

Complementing this is an appraisal of the current climate change institutional policy domain at both national and local level. Together both sources of information provide the basis for local-level policy-makers and other local stakeholders (civil and community organisations) to propose concrete climate change adaptation policies and to provide specific strategies and programmatic interventions that can be adopted and implemented by local authorities and institutions with positive impacts on poor households and their local communities.

Thus, climate change asset adaptation strategies are based on a number of basic principles which include the following:

- Adaptation does not take place in a vacuum and is constantly shaped by government policy, political institutions, and non-governmental actors. Laws, norms and regulatory and legal frameworks either block or enable access, or indeed positively facilitate asset adaptation, in a variety of ways (Moser and Satterthwaite, 2008);
- Assets are highly interrelated and facilitating the adaptation of one may affect others and vice versa — the erosion of one may impact others;
- Household asset portfolios are not stable and may change — either over time or abruptly — in response to external shocks or internal changes e.g. death, marriage, etc. It focuses, on the one hand, on local government adaptation policy, and on the other on community, small business and household responses, their ability to negotiate and be active in decision-making. Clearly the asset-portfolios of individuals, households and communities are a key determinant of their adaptive capacity not only to reduce risk and to cope with and adapt to increased risk levels, but also to influence, make demands on, and work with, local governments.

5.3 Assets and current climate change adaptation programmes

The description of CC adaptation and asset adaption provides a useful background to examine the extent to which current approaches to CC adaptation incorporate assets. Here it is useful to distinguish between measures to address CC vulnerability as against those focusing on CC adaptation strategies.

i. Climate change vulnerability assessments

To date CC adaptation interventions have focused primarily on vulnerability assessments undertaken at different spatial and social levels. Moser et al (2010) summarise a range of recent urban vulnerability assessments undertaken by International NGOs (INGOs), Urban Networks and regional-level World Bank programmes. The majority have not focused on asset vulnerability in their diagnostic components but rather on areas, social groups or types of hazard. All have the objective of influencing local policy planning – either directly by creating local action plans, or indirectly through sharing their results with local authorities. They also include a knowledge-sharing goal, a number of them being structured as regional city networks.

Despite similarities in objectives their methodologies differ; some seek to identify vulnerability ‘hot spots’, using climate data scenarios and downscaling methods to the city level (World Bank, ICLEI); others seek to estimate damage costs of potential hazards (World Bank/ADB/JICA initiative on coastal cities); while still others combine scientific vulnerability mapping with policy and institutional mapping at the city level to assess the capacity of local authorities to deal with projected hazards. Some assessment methodologies are research-oriented aiming to share results with local partners (Action Aid, ICLEI, World Bank/ADB/JICA) while others are intended for the development of local action plans (ACCRN, World Bank East Asia and North African regions).

With the exception of the Asia Cities CC Resilience Network and Action Aid International, such assessments provide little guidance to urban and rural authorities about including household and community perspectives on the effects of climate. Consequently such assessments have focused disproportionately on physical and institutional vulnerability at local government level, rather than social vulnerability. This has resulted in a focus on top-down technocratic, command-and-control measures such as engineering structures, technology-based warning systems, hazard-based land-use planning and hazard-based risk awareness campaigns (Hewitt 1995, de Waal 1997). Finally, most vulnerability assessments either implicitly or explicitly focus on climate disaster projections such as flooding. Their methodology is not equipped to assess the incremental shifts in weather which take place over lengthy periods of up to 30 years e.g. higher intensity of rainfall causing seasonal flooding or gradually rising temperatures.

In contrast to these assessments, a small number of development institutions include assets in their CC vulnerability assessments. Examples of these include the INGO CARE with its Climate Vulnerability and Capacity Analysis (CVCA) (see box 11), the Asian Disaster Preparedness Center (ADPC), the International Union for the Conservation of Nature (IUCN) and the Global Urban Research Centre's (GURC) Participatory Climate Change Adaptation Appraisal (PCCAA).

Box 11: CARE: Identification of asset-based vulnerability at the community level
CARE applied their Climate Vulnerability and Capacity Analysis (CVCA) methodology to analyse the asset-based vulnerability and capacity to adapt to climate change in Bansi Village in Bawku District in Northern Ghana.

A group of ten adult women formed a focus group and were used to assess the asset-based vulnerability to climate change at the community level. A matrix was drawn on a large piece of paper and participants were asked to list the most important assets within the community. The women then identified the five greatest hazards to their livelihoods; they identified natural and man-made hazards. The discussion was not limited to climate change, but CARE facilitators prompted the group when they did not identify environmental hazards during the initial stages. Participants then ranked the impact of each identified hazard on their assets using a ranking system of 1-5.

This simple research tool revealed that the women identified animals, food resources, well fed children, children going to school with clothes/shoes etc, and income generation as the most important assets within the community. Furthermore, by looking at vulnerability through an asset lens CARE was able to establish that drought, flooding and erratic rain were perceived as the greatest environmental hazards to their assets. The matrix was also able to gather information on which assets experienced the impacts of environmental hazards most severely. In this particular case, flooding was identified as the most damaging to animals, food resources and children attending school.

Source: CARE (2009).

All share several methodological characteristics which add value to understanding CC-related vulnerability. These include the following:

- Households and communities are the unit of analysis. Since CC impacts are experienced most severely at this level, and often are highly context specific, this is particularly insightful.
- Data is gathered on how climate disasters directly, or indirectly, lead to the erosion of household and community assets, including the poor's perception of this process.
- Bottom-up participatory appraisal techniques allow local focus groups to provide local people's voices. This helps to ensure that information is obtained from individuals with local knowledge.

- The CVCA and PCCAA gather household perceptions on current policies, programmes and institutions that directly or indirectly help or constrain their adaptive capacity. This includes not only the local government level, but also community level institutions, such as community leaders and churches.

The PCCAA extends the assessment of asset vulnerability in a number of ways.[14] First, the asset adaptation framework identifies CC-related vulnerability at household, community, but also the local business level. Second, it uses a range of participatory tools to explore people's perceptions of incremental and invidious changes in severe weather patterns – rather than focusing entirely on extreme weather disasters[15]. Third, it allowed for focus groups to identify different types of vulnerability in an open-ended manner. Data analysis then identified less obvious as well as well-known types of vulnerability. These included:

- *physical vulnerability* relating to the inadequate, or lack of provision of three types of physical infrastructure, sewerage, drainage and garbage collection, with the interrelationship presenting particular health-related hazards
- *legal vulnerability* linked to the lack of land tenure rights with implications for settlement location, lack of settlement planning and post-extreme weather infrastructure support
- *social vulnerability* of those groups most at risk to increasing intensity of severe weather.

Finally, this study shows how causal flow diagrams drawn by focus groups can identify local perceptions of not only the effects of severe weather events on assets, but also proposals for potential solutions. Figure 1, for example, illustrates perceptions of a group of the relationship between severe weather events and human capital in the form of health.

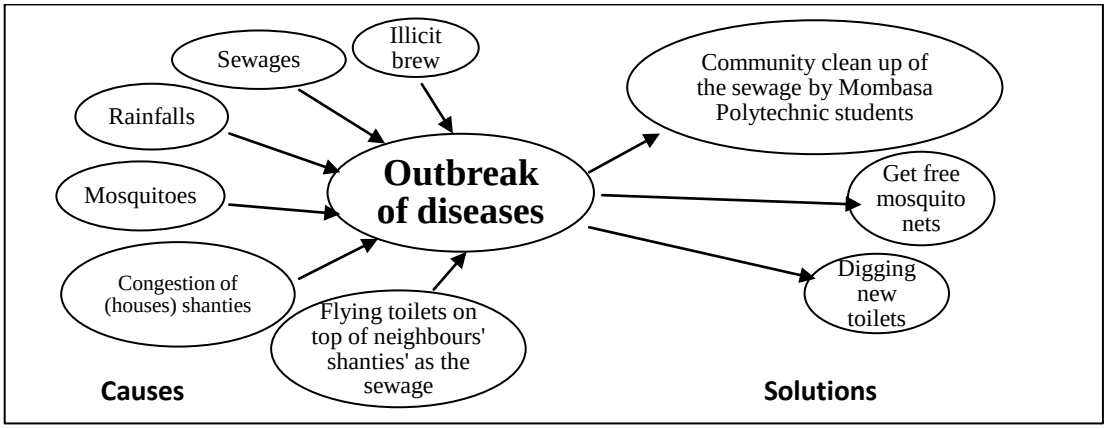

Figure 1: Perceptions of the causes of the outbreak of diseases and potential solutions in Tudor, Mombasa

Source: Moser et al (2010)

ii. Existing climate change adaptation strategies

With few exceptions, a review of the literature shows that the majority of current operational adaptation strategies to climate change do not incorporate an asset adaptation approach. Indeed, some donor-supported climate change projects clearly linked to climate change do not

[14] The PCCAA was tested in a study commissioned by the World Bank and undertaken by GURC with institutional counterparts in Kenya and Nicaragua. See Moser and Stein (2010) for a detailed description of the research methodology, and Moser et al (2010) for the main results of the study.

[15] In the study (see Moser et al 2010), to ensure consistent terminology for a climatic event which would register with the international community as a disaster, these were referred to as *extreme weather* (in line with the common description of 'extreme weather event' for cyclones/hurricanes with associated fatalities). In contrast, the negative impacts of an extensive range of climate trends/events which would not register as a disaster with the international community were referred to as *severe weather*. This included storms and flooding (at a local level), drought and heat stress.

sufficiently acknowledge the importance of adaptation strategies *per se*. This is well illustrated in the case of bilateral agencies such as JICA and GTZ (see box 12).

Box 12: Climate change adaptation by bilateral development agencies: the cases of JICA and GTZ

The issue of adaptation to climate change is relatively new for donors. A desk study of the Japan International Cooperation Agency (JICA) and the German Association for Technical Cooperation (GTZ), two influential bilateral donor agencies, which focus strongly on addressing climate change related issues, revealed that both agencies do not explicitly incorporate adaptation within their climate change policies. At the same time, both agencies support programmes which contribute to adaptation. For instance, JICA's participatory water resources management programme in Iran and its poverty reduction programme through the development of rain-fed lowland rice production in Ghana are both designed to contribute directly to sustainable development. Although not described as such, they are reducing social vulnerabilities and building adaptive capacities to climate change at the local level. Similarly, GTZ through prevention against flooding (e.g. in Thailand) and promotion of a sustainable use of natural resources (e.g. in Laos, Niger, the Dominican Republic and Haiti) programmes have introduced adaptation mechanisms.

Source: Arioka 2010.

Other climate change adaptation strategies do recognise adaptation but prioritise urban governance to build long term resilience – and again fail to incorporate a focus on asset adaptation (see box 13). In contrast, Kim (2010) in a recent review of the role of microfinance in climate change adaptation strategies identified the potential role that micro insurance can play in preventing asset erosion. At the outset, the majority of approaches concentrated on 'life and health micro insurance' (Churchill 2007; GTZ 2007) and, more recently they have shifted their focus to climate change (Hammil et al 2008). Yet, disaster rather than slow incremental change is the priority. Even the micro insurance products developed by the Self Employed Women Association (SEWA) in Gujarat, India are strongly linked to the impacts that disasters associated with extreme weather events have over the vulnerabilities of the urban poor (Kim 2010).

Box 13: Climate resilient urban governance assessment framework

A recent study of 10 south and southeast Asian cities (Bangkok, Chennai, Chittagong, Cochin, Dalian, Da Nang, Hangzhou, Ho Chi Minh, Ningbo and Surat) showed that the existence, or lack, of good governance practices were key factors in ensuring strategies aimed to build long term resilience to climate change. These practices included:

- *Decentralisation and autonomy*: to avoid cyclical political stalemates and to generate the conditions in which central, state and city ruling parties could work together or address conflicts and delays in the implementation of climate change adaptation strategies;
- *Accountability and transparency*: the more open local governments are to their citizens in terms of financial management and information, the more articulated 'climate sensitive' sectors such as waste, water and disaster management can become;
- *Responsiveness and flexibility:* cities with more flexible agencies and management systems can respond more suitably to emergencies and climate change related disasters, and mainstreaming climate risk assessments among different population groups helps raise awareness on climate change;
- *Participation and inclusion:* integration of the poor in decision making and policy processes is crucial in building long term resilience and it requires balancing citizen-led processes with timely and efficient implementation;
- *Experience and support*: cities with previous experience of developing integrated, people-centred early warning systems are well placed to make progress toward climate change resilience. External donor agencies and the availability of project financing for climate change resilience programmes can also help to engage city authorities.

Source: Tanner, Mitchell, Polac and Guenther (2009)

5.4 Opportunities for incorporating assets into climate change related interventions

Although the climate change asset adaptation (CCAA) framework as yet has had little influence over adaptation policies and programmes, it can be an important strategy to open new opportunities for the urban poor. The PCCAA in Nicaragua and Kenya, for instance, highlighted the following opportunities:

- First, it showed what poor households, small businesses and communities are already doing to cope with such CC impacts experienced as increasingly variable and capricious weather patterns including invidious and almost invisible changes;
- Second, it identified which formal and informal institutions inside and outside the community are developing pro-poor urban CC adaptation actions, particularly relating to long term resilience (see box 14).

Box 14: Identifying asset adaptation strategies in Estelí (Nicaragua) and Mombasa (Kenya):
The study aimed to better understand what poor households, small businesses and communities are doing to cope with CC impacts, as well as identifying how policy and institutional systems can build on local realities to develop pro-poor urban climate change adaptation actions. Despite the absence of detailed 'downscaled' models of future CC impacts, the PCCAA was able to gather several major findings concerning asset-based adaptation strategies being implemented within these communities which can be used to inform CC policy:

- The most significant asset of the urban poor (as listed by themselves) was housing;
- There was a variety of responses to increasingly severe weather patterns at household, small business and community level;
- Three types of asset-based adaptation strategies were identified: strategies to build long-term resilience, asset damage limitation and protection during severe weather events, and asset rebuilding after such weather;
- Households with more secure tenure status were more likely to invest in asset-based climate change adaptation strategies.

Source: Moser et al 2010.

- Finally, it identified and differentiated between asset adaptation strategies being initiated at the household, community and small businesses level and those taking place before, during and after a severe weather event at different units of analysis (see appendix 4).

A climate change asset adaptation framework (if both PCCAA and the Rapid Risk Institutional Appraisal RRIA[16] are used) is also highly effective for informing policies and programmatic interventions:

- First, it identifies which of the 'traditional' physical infrastructure concerns, such as housing, water, sanitation, roads and drainage (the majority of which are part of the responsibilities of local governments), are most affected by climate change.
- Second, it allows donors, governments and NGOs to better understand the crucial roles that households, small businesses, and communities are already playing in their adaptation processes, independent of government interventions or NGO support.

The outcome is a shift from a problem-oriented to a solution-oriented approach based on the adaptive capacity and the asset portfolio that households, small business and communities command and control. This is crucial as it ensures that the social consequences of CC are both recognised and receive institutional support (Moser and Satterthwaite, 2008). Table 9

[16] The RRIA was used in Mombasa and Estelí and provided a 'top down' review of the policy domain, in terms of the institutions tasked to deal with CC, the relevant national, regional, and municipal level policies, regulations and mandates relating to CC, as well as associated programmes – and budgetary allocations. The PCCAA and the RRIA also used a process of validation on the level of commitment by different social actors.

illustrates how a climate change asset adaptation framework can be used to inform policy makers, local governments and microfinance institutions about the different mechanisms that households, small business and communities are already using, and more importantly, the type of programmes and actions that could be adopted to help build long term resilience.

Table 9: Potential application of a climate change asset adaptation framework

Level	Individual households	Small businesses	Communities
What are they doing	Small measures to protect roofs, walls, floors, furniture and household goods, plots of land and basic infrastructure. Family networks in-kind and cash transfers and labour assistance during different climatic scenarios	Adapting stocks and goods they store and sell, and physical structures Independent masons modifying traditional construction methods and techniques, and used when building takes place	Protecting levies, pathways, cleaning ravines and preparedness in case of major flooding Transfer of information on what external institutions are doing
What local governments and public institutions can do	Improve secure land tenure, and basic infrastructure works that individual households cannot afford	Provide access to information on supportive governmental institutions in case of emergencies, and diversification of markets Contacts with central government to ensure policies that protect small businesses	Improve tenure, and basic infrastructure and services Action planning with communities based on their asset portfolio
What MFIs and NGOs can do	Credit lines and technical support for housing improvements taking into account different CC and severe weather scenarios: i.e. (winds, intense rains, possible flooding, heat etc). Micro insurance	Micro credits and micro insurance taking into consideration small invidious changes and not only disasters by extreme weather events	Loans to community groups with solidarity guarantees to improve their infrastructure and basic services

Source: Adapted from Moser et al (2010), Tanner et al 2010 and Kim (2010)

6. Concluding comment

This working paper has identified that current MDGs related policies, social protection schemes, and CC related interventions often fail to achieve sustainable long term poverty reduction. The main reasons for failure can be summarised as follows:

- The majority of MDGs, social protection, and CC related interventions rely on top-down blue-print strategies which miss being responsive to the specific local institutional and structural context in which policies are actually implemented. Furthermore, the poor themselves, who can best identify their problems and needs, continue to be widely excluded from policy formulation and implementation processes.
- The majority of MDGs, social protection, and CC related interventions acknowledge the multiple dimensions of poverty and deprivation. Yet, as assessed through an asset index, not all dimensions of poverty are taken into account. For instance, MDG

related policies as well as social protection schemes often fail to incorporate social capital. At the same time, the majority of assessed policy interventions view the different dimensions of poverty in isolation and therefore miss opportunities to maximise the linkages between inter-dependent assets.

- CC adaptation strategies often rely on a problem-oriented approach rather than one that is solution-oriented, and therefore tend to fail to design effective CC resilience mechanisms that could help protecting the poor.

At the same time this working paper has argued that the incorporation of an asset accumulation framework into MDGs, social protection, and CC related interventions can help overcome the outlined problems, illustrating this through best practice case studies. Entry points for incorporating an asset accumulation framework into the different policy agendas can be summarised as follows (see also table 10):

- ***MDGs:*** An asset accumulation framework can help translating MDGs related policies from single issue targeting strategies into transformative local strategies that take into account the specific needs of the poor, not only by listening to their voices, but also, more importantly, by understanding which structural, institutional and operational measures could maximise the linkages of the inter-dependent assets that the poor command and control.
- ***Social Protection:*** Recent shifts from a focus on protection towards a transformative social protection agenda provide a strong entry point for the incorporation of an asset-accumulation approach. Such an approach strengthens the social protection agenda on two fronts. First, as a bottom-up framework, it identifies and builds upon the existing informal mechanisms used by poor households and communities to manage and mitigate risk. In doing so, it emphasises the need for holistic asset portfolios, and the interdependence of assets. Second, in recognising that accessing assets is insufficient for poverty reduction, an asset-accumulation approach also identifies second and third generation strategies necessary to consolidate assets and maximise the linkages between them.
- ***Climate Change:*** To better understand the opportunities that the urban poor have to build long term resilience to the impacts of climate change, it is necessary to shift from an asset accumulation to an asset adaptation framework. Here an asset vulnerability framework can help in understanding the sources of asset vulnerability of poor households, small business and communities. The asset adaptation operational framework in turn helps classifying asset adaptation strategies that poor households, small business and communities are developing, as well as the formal and informal institutional sources of reliance that enable them to protect themselves, or to recover from, the negative effects of slow invidious changes of weather associated with climate change. The outcome of this climate change asset adaptation framework is a shift from a problem-oriented to a solution-oriented approach, based on the adaptive capacity and the asset portfolio that households, small business and communities command and control.

Table 10: Shifting Policy Agendas through incorporating an Asset Accumulation Framework

	MDGs	**Social protection**	**Climate change**
From	Tackling static single indicators	Protection	Asset accumulation
To	Inter-dependent processes	Transformative agenda	Asset adaptation

In summary, an MDG, social protection and CC policy agenda that includes asset accumulation would create an enabling environment in which the poor can accumulate and consolidate their assets over time, and in doing so, escape poverty.

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Appendices

Appendix 1: UN summits prior to the MDG summit of 2000

Year	Summit	Main human development issues	Links to future MDGs
1990	World Conference on Education for All	- education	MDG2
	World Conference on Children	- Specific goals on infant, under five, and maternal mortality - emphasis on education - emphasis on improving nutrition/water/sanitation	MDG1, MDG2, MDG4, MDG5
1992	Conference on Environment and Development	- Raise awareness on environmental issues and climate change	MDG7
	International Conference on Food and Nutrition	- Eradicate hunger	MDG1
1993	World Conference on Human Rights	- Commitment to human rights	Human rights underpin all MDGs
1994	International Conference on Population and Development	- population control - women empowerment - reproductive health	MDG1, MDG3, MDG5
1995	World Summit on Social Development	- emphasis on poverty reduction from a multidimensional perspective - generating employment - social integration - fairer international markets	MDG1 (EMPHASIS), MDG2, MDG3, MDG4, MDG5, MDG6, MDG8
	World Conference on Women	- women's rights - women empowerment	MDG3
	Conference on Human Settlements	- improvements in physical infrastructure	MDG1, MDG7
1996	World Food Summit	- hunger	MDG1

Sources: Hulme 2009, Hulme 2010

Appendix 2: MDGs implementation by national governments

Country	MDG emphasis	Dominant MDGs related policy stragegies
Afghanistan	MDG 1, 2, 4, 5, 6; implementation overall weak	Infrastructure investments, increase security force, foster economic growth, increase educational enrolment
Bangladesh	MDG 1, 2, 4, 6, 7, 8; problems implementation gender-related issues	Education for all, improvement of rural infrastructure, micro-credit, employment generation
Benin	MDG 2	Improve school infrastructure
Bolivia	MDG 1, 2, 4, 5, 6	Promotion rural development, infrastructure projects, income redistribution schemes, capacity building teachers, improve educational quality
Brazil	1-8	Social Spending (i.e. Bolsa Familia), 'Cities for All' strategy, economic growth, decentralisation reforms
Cambodia	MDG 4, 6; problems in achieving most MDGs in practice	Parliamentary quotas for women, health investments (especially for children), land mine clearing, action plan against climate change
Cape Verde	MDG 2, 3	Literacy campaigns to empower women, infrastructure projects, capacity building teachers
China	1-8, problem in achieving MDG 2, 4, 5, 6 in rural areas	Structural reform economy for economic growth, education for all, investment in technology
Ethiopia	1-8; weak policy links especially on gender/ hunger issues	Economic growth, infrastructure projects, food distribution, agriculture investments
India	MDG 1, 2, 7	MDG monitoring at national level, slum upgrading, 'Education for all', infrastructure improvements, micro credit
Iraq	1-8; no successes in practical implementation	Employments Programmes, capacity building, etc.
Kenya	MDG 1, 2, 4, 5, 6, 7, 8	Democratic reforms
Malaysia	MDG 1, 2, 4, 5, 6; problem MDG 7 – high deforestation	Public investment in education , health, focus agricultural development
Myanmar	MDG 1, 2, 6	Improve health care services/ education
Nigeria	MDG 1-8, no clear successes in practice	?
Peru	MDG 1-8; problem to address indigenous peoples/ environmental issues	Improve clean cooking, Decentralisation, Anti-poverty Roundtables, Food distribution programmes, improving poor people's access to financial services
Senegal	MDG 1, 7	Improving Access to Water/ Sanitation
Somalia	No emphasis	?
South Africa	MDG 1-8, problems to address MDG 7	Social Spending (Pension Funds), Slum Improvement, Free Water, etc.
Syria	MDG 2, 5; severe problem MDG 7	Education for All, Improvements Health/ School Infrastructure
Tanzania	MDG 1-8, insufficient policy on MDG 3, 4, 5, 6	Agriculture improvement, infrastructure projects, education for all
Thailand	MDG 1-8; miss to address ethnic groups in North Thailand	Social service provision (health, education), stimulation private sector
Uganda	MDG 1	Good governance, income generation for the poor, infrastructure projects
Zimbabwe	MDG 1, 3, 6; hardly any visible successes	?

Source: Based on country PRSPs and UNDP country reports

Appendix 3: Summary of key differences between climate change adaptation and disaster risk reduction

Differences		Signs of Convergence
DRR	**CC Adaptation**	
Relevant to all hazard types	Relevant to all climate-related hazards	n/a
Origin and culture in humanitarian assistance following a disaster event	Origin and culture in scientific theory	CC adaptation specialists now being recruited from engineering, water and sanitation, agriculture, health and DRR sectors
Most concerned with the present – i.e. addressing existing risks	Most concerned with the future – i.e. addressing uncertainty/new risks	DRR increasingly forward-looking Existing climate variability is an entry point for CC adaptation
Historical perspective	Future perspective	As above
Traditional/indigenous knowledge at community level is basis for resilience	Traditional/indigenous knowledge at community level may be insufficient for resilience against types and scales of risk yet to be experienced	Examples where integration of scientific knowledge and traditional knowledge for DRR provides learning opportunities
Structural measures designed for safety levels modelled on current and historical evidence	Structural measures designed for safety levels modelled on current and historical evidence and predicted changes	DRR increasingly forward-looking
Traditional focus on vulnerability reduction	Traditional focus on physical exposure	n/a
Community-based process stemming from experience	Community-based process stemming from policy agenda	n/a
Practical application at local level	Theoretical application at local level	CC adaptation gaining experience through practical local application
Full range of established and developing tools	Limited range of tools under development	None, except increasing recognition that more adaptation tools are needed
Incremental development	New and emerging agenda	n/a
Political and widespread recognition often quite weak	Political and widespread recognition increasingly strong	None, except that climate-related disaster events are now more likely to be analysed and debated with reference to CC
Funding streams ad hoc and insufficient	Funding streams sizeable and increasing	DRR community engaging in CC adaptation funding mechanisms

Source: Tearfund 2008, 10.

Appendix 4: Asset adaptation strategies, by unit of analysis, during flooding in four communities of Mombasa

Unit of analysis	Strategies adopted		
	Before	**During**	**After**
Household/ Individual	• Repair roof • Build strong foundations • Dig trenches around the houses • Clear drainage	• Seal leaking areas • Vacate flooding houses • Open up water passage routes	• Block water passage routes • Repair houses
Small business	• Place sandbags to prevent water entering premises • Move business assets to safer areas	• Motorbike mechanics check fuel tanks are correctly sealed	• Fishmongers cease to sell fish and divested in other forms of business • Motorbike mechanics repair bikes once floods ended
Community	• Build strong walls in the different buildings at schools	• Take school children to safer places as a form of rescue • Dig small water passages, fill sacks with sand and arrange them to break water flow • Fill sand and stones on the paths	• Renovation of school buildings and assets affected • Filling sand bags and putting them in paths • Dig drainage tunnels • Spread sand and stones to the affected areas • Seek assistance from NGOs

Source: Adapted from Moser et al (2010).

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