

Poverty and sustainable livelihoods

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1. Introduction

Global poverty alleviation through sustainable natural resource management are key themes dominating development discourse and rhetoric to have emerged from concerted multilateral international policy efforts over the last decade. In particular, the Earth Summit in Rio (1992) highlighted the deleterious environmental implications of adventitious economic development and called for national governments to integrate environmental considerations into Development Plans notably Agenda 21. The UN Convention to Combat Desertification (CCD), which followed, recognised both the ways in which poverty can lead to the degradation of drylands and in which anti-desertification measures can alleviate poverty (UN 1995). The Copenhagen Programme for Action in 1995 called for development co-operation and set the target of a reduction, by at least one-half, in the numbers living in poverty in developing countries by the year 2015 (DAC 1996).

In November 1997, the UK Department for International Development (DFID), representing the newly elected Labour Government, published its White Paper on International Development entitled *Eliminating World Poverty: A Challenge for the 21st Century* (HMSO 1997) which for the first time incorporated many of the ideals and targets established by the international community. This paper signalled a new focus for UK development policy which was to be targeted at the elimination of poverty and economic growth through the creation of sustainable livelihoods which benefit the poor. Conservation and sustainable management of the natural environment, which provides

the means of subsistence for many of the world's poor, is a 'cornerstone' of this new policy which recognises that the "*lasting eradication of poverty requires environmentally sustainable solutions*" (p.18). With the White Paper, policy emphasis has shifted away from direct intervention towards, capacity building, partnerships and projects that assist the poor to manage their resource base and derive livelihoods that are sustainable. Emphasis is to be placed on grass-roots approaches to understanding local solutions for local problems working in partnership with NGOs and policy-makers.

Underlying this development approach are certain core principles. There must be local 'ownership' of, and commitment to, programmes of external assistance for development and, to meet this end, a strengthening of national capacity to develop and implement policy interventions to eradicate poverty while at the same time encouraging 'socially and environmentally responsible behaviour'. There must be full participation of the communities concerned, particularly women and indigenous groups who are over-represented among the poor. Emphasis should be placed on what DFID have termed 'win-win' opportunities, that is, those policies which reduce poverty, promote economic growth and conserve the environment (through improved NR management) for example, in the promotion of sustainable agriculture. Finally, pro-poor, pro-environment policies and programmes must be based on poverty and environmental assessments.

As part of this new focus on international development, research has been commissioned by DFID to identify policy frameworks, constraints and grass-roots practises that alleviate poverty while promoting the conservation of the natural resource base. It is within this context, and the wider policy framework of the CCD, that the current project, *Cross-border analysis of policy impacts on community and household NR use, decision-making and poverty alleviation in southern African drylands*, is framed. The consideration of poverty and NR management in different policy, economic, cultural and physical environments, however, raises important

epistemological and methodological questions. In particular, concepts of 'poverty' and 'sustainability' are widely, and often ambiguously, employed by policy-makers, academics and grass-roots communities with little real consensus. This discussion paper addresses these problematic concepts and introduces potential frameworks for understanding poverty and sustainable NR management which are the focus of international and national policy initiatives and are central to the DFID project.

2. Defining Poverty

While poverty elimination or 'the new poverty agenda' (Lipton and Maxwell 1992) is now the key focus of international development initiatives, the term 'poverty' as a concept remains poorly defined and is subject to multiple and sometimes conflicting meanings in policy discourse. As Baulch (1996:2) argues; *"It is important to recognize that poverty is a portmanteau term which has distinct meanings to different people. The words 'destitution', 'ill-being', 'powerlessness' and 'vulnerability' are so frequently used in conjunction with 'poverty' that the conceptual differences between them have become blurred. This basic problem of meaning pervades the debates both on the measurement of poverty and on poverty-reduction policies"*.

Indeed, the DFID White Paper, *Eliminating World Poverty: A Challenge for the 21st Century* (HMSO 1997) does not clearly define 'poverty' instead setting targets for a variety of social, economic and environmental indicators (see Section 2) which, if met, should contribute to a 50 percent reduction in the numbers living in 'extreme' (again not defined) 'poverty' by the year 2015. Rosalind Eyben, Chief Social Development Advisor to DFID (1998) has argued that poverty is "multi-dimensional". *"Inadequate consumption is a core dimension but many other features can be important. These include lack of assets and vulnerability to insecurity and shocks, ill-health, illiteracy, lack of access to basic services and physical isolation..."*.

Basic economic definitions of poverty are based on income, (for example, the World Bank defines the poor as those living on less than one US dollar equivalent a day), and

consumption - “*the inability to acquire a certain bundle of goods lies at the core of most concepts of poverty*” (Baulch and McCulloch 1988:3). Following Lipton (1983), extreme poverty, in which the poor are unable to meet basic nutritional needs, may be distinguished from higher levels of consumption where saving is possible. This income/consumption approach is obviously difficult to employ where poor communities are subsisting or not integrated within a cash economy and has been criticised for failing to include common property resources (Jodha 1996) and state support. More recent multi-dimensional understandings of poverty, such as that alluded to by DFID, have incorporated less-tangible, but no-less important, concepts such as dignity and autonomy into definitions. Poverty-reduction policies should allow the poor to choose (through consultation) and to follow self-fulfilling rather than demeaning lifestyles.

Broader definitions of poverty have also tried to incorporate *vulnerability* which occurs as a result of external risks, shocks, and defencelessness - the latter often due to inherent discrimination on the basis of class, age, gender, ethnicity, disability (Streeton 1995). Although poverty and vulnerability are terms that are often used synonymously, not all members of vulnerable groups are necessarily poor. Poverty assessments incorporating vulnerability generally include assets (both social and NR) which create a buffer between production, exchange and consumption during times of crisis. Poor people, and some groups in particular, generally have fewer assets and are therefore more vulnerable than the affluent to economic and environmental crises (Swift 1989, Blaikie et al 1994).

The incorporation of vulnerability into poverty assessments has also raised awareness to the ways in which *poverty is feminised* (Jackson 1995, Kabeer 1995) which has been linked to a rise in female household headship (Buvninic 1993, Buvninic and Gupta 1994). Lockwood (1995:2) identifies the underlying causes of female poverty as '*deep-rooted inequalities in control over assets, pervasive gender discrimination in labour markets, and lack of voice in the power struggles controlling resource allocation*'

which to date remain largely unaddressed. The DFID White paper (see Panel 12) acknowledges the gender-neutral approach adopted in previous policy interventions and attempts to redress the balance by supporting policies that empower poor women and by calling for recognition of the role played by women in, for example, food production, NR management, and in household livelihoods and calls for a more equitable distribution of resources in favour of poor women. *'Effective poverty-reduction requires policies which recognise women's multiple roles and we encourage and support macro-economic policies and development strategies that respond to the needs and efforts of women in poverty. We recognise the importance of women's informal and unpaid social as well as economic work, when improving their livelihoods'* (DFID 1997:45).

Most definitions of poverty also fail to acknowledge the difference between chronic (or permanent) and temporary poverty yet *"the 'poverty problem' is one involving a large turnover of vulnerable people rather than a hard-core of the chronically poor"* (Baulch and McCulloch 1988:2). Baulch and McCulloch argue that poverty may be characterised as a temporary phenomenon - people move in and out of poverty (e.g. through loss of employment, illness, drought etc.). Knowledge of those factors that influence peoples movement in and out of poverty are crucial to poverty-reduction policies as are the length of time spent in and out of 'poverty. If there are numerous short spells then policies should focus on safety-nets, credit and insurance schemes etc. Extended spells of poverty should be alleviated by policies that improve the assets and entitlements of the rural poor (e.g. education, land-reform). Focus should be on *'Poverty Transitions'*. If policy is focused on the current poor there is likely to be 'leakage' as *the correlates of poverty status and transitions are not the same*, policy interventions to help current poor may not necessarily lead to a reduced incidence of poverty. *As many of the correlates of current poverty may be consequences of poverty - the symptoms rather than the causes are being addressed highlighting the need for a temporal dimension.*

3. Measuring Poverty : The role of indicators and targets

Most definitions of poverty now acknowledge that it is a multi-dimensional phenomenon which can impact on countries, regions, communities and households to differing extents. As such, policy-makers and international development organisations have, over the years, sought to develop and refine a number of indicators which are used to measure levels of poverty. Policy targets are then set on the basis of these indicators to evaluate both the relative success/failure of poverty reduction initiatives and the rate of return on development aid.

Table 1. Classification framework for objective poverty indicators

Indicators (by type)	Key Features
<i>Means</i> (income or basic needs)	<ul style="list-style-type: none"> Income measures e.g. per capita GDP and poverty lines Basic needs indicators are social indicators e.g. access to food, access to NR and measure human welfare. Interventions seek to expand the resources (i.e. means) available to the poor.
<i>Ends or Impact</i> (social outcomes)	<ul style="list-style-type: none"> Focus on the impacts of poverty e.g. environmental degradation, measures of mortality and morbidity Focus on the extent to which basic needs have been met Interventions seek to examine the shortfalls in basic needs
<i>Mixed Indices</i>	<ul style="list-style-type: none"> Used for purposes of international comparison where there is a need to sensitize measurements to account for particular characteristics of poverty in any one place.
<i>Poverty-Related or Proxies</i>	<ul style="list-style-type: none"> Surrogate measures which are adopted in the case of high costs or where there are data difficulties
<i>Process or Opportunities</i> (enabling environment, empowerment, and natural resource endowments)	<ul style="list-style-type: none"> Least conventional, represents new thinking on the causes of poverty. Emphasis on indicators that reflect structural inequities, processes and inherent advantages (or lack thereof). More people-centred.

(Adapted from UNDP Poverty Technical Support Document, Module 1, 13/9/95)

These indicators were, until recently, almost entirely objective in nature, amenable to quantification and modelling. Table 1 outlines the key groups of objective poverty indicators (which occur as both single and composite indicators), by type, and summarises their key features. The most commonly employed are the *means* and the *ends groups*; the 'least conventional' but most relevant to the objectives of the PANRUSA project are *process* indicators which seek to measure empowerment, NR endowments and the enabling environment. Sen (1981) identified two core dimensions of poverty in his seminal work on 'poverty and famines' which he termed *aggregation* and *identification*. While process indicators help us *identify* who the poor are and movements in and out of poverty, means and ends indicators provide us with *aggregate* levels of overall poverty. There is scope therefore to integrate both approaches.

Following the 1995 Social Summit in Copenhagen, the OECD Development Assistance Committee set international goals for future social progress and the eradication of poverty (OECD Development Assistance Committee 1996:9-11) on which the 1997 DFID White paper targets were based. The three stated goals were to improve economic well-being, encourage social development and promote environmental sustainability and regeneration;

- *Economic well-being:*

'The proportion of people living in extreme poverty in developing countries should be reduced by at least one-half by 2015.'

- *Social Development:*

'There should be universal primary enrolment in all countries by 2015.'

'Progress towards gender equality and the empowerment of women should be demonstrated by eliminating gender disparity in primary and secondary education by 2015'

'The death rate for infants and children under the age of five years should be reduced in each developing country by two-thirds the 1990 level by 2015. The rate of maternal mortality should be reduced by three fourths during the same period'

'Access should be available through the primary health care system to reproductive health services for all individuals of appropriate ages, including safe and reliable family planning methods, as soon as possible and no later than the year 2015.'

- *Environmental sustainability and regeneration:*

'There should be a current national Strategy for sustainable development, in the process of implementation, in every country by 2005, so as to ensure that current trends in the loss of environmental resources are effectively reversed at both the global and national levels by 2015.'

These targets correspond to the *means and ends* approaches outlined above providing measurable outputs which can be used to evaluate policy success or failure but which provide very little insight into the reasons and processes underlying such success or failure. One of the problems with conventional poverty targets and measures is that they are often imposed from the 'outside', based on western understandings of poverty. With the exception of Local Agenda 21 (see Policy briefing paper), these recent policy initiatives have furthermore failed to fully acknowledge the recent shift away from objective *means and ends* poverty indicators towards more people-centred *process and opportunity* measures which have resulted in the inclusion of more qualitative, subjective, indicators of poverty constructed using community-based participatory approaches. According to the United Nations Development Programme (1997:1) "*The current shift in thinking and action towards a more people-centred, human development paradigm has necessitated a concurrent re-orientation of the policies and programmes pursued by development agencies, CSOs and governments. Evaluating these efforts has meant looking beyond conventional quantitative indicators to more qualitative ones (i.e., governance). This has been, by no means, an easy task.*

Qualitative processes such as empowerment, for example, do not easily lend themselves to being objectively measured". Table 2 provides an example, drawn from the work of Robert Chambers (1995), of subjective criteria used by local people in sub-Saharan Africa and Asia to describe levels of poverty.

Chambers (1997) argues that criteria employed by poor people to describe their situation and those employed by policy-makers belong to different and irreconcilable paradigms. Policies he argues can only be poverty-reducing if the poor are consulted and involved in their implementation. Moreover as policies increasing target poor women there is a need to recognise that poverty means different things to men and women who also become impoverished through different routes (Lockwood 1995). For example, divorce often means impoverishment for women yet marriage provides them with greater access to resources.

Table 2 Example of Subjective Poverty Indicators: Criteria used by local people in Asia and sub-Saharan Africa for "well-being"

- having food security for only a few months each year
- being dependent on common property resources

(Source: Chambers 1995)

As a result of more subjective considerations of poverty and the development of process indicators, there has been a movement away from considering poverty *per se* and a re-orientation of policies and programmes towards the consideration of sustainable livelihoods as a means of poverty elimination.

4. Sustainable Livelihoods: Linking Poverty and the Environment

Underpinning new policy initiatives to eradicate poverty is the concept of sustainable livelihoods which are livelihoods that can "*cope with and recover from stresses and shocks, maintain or enhance ..capabilities and assets both now and in the future, while not undermining the natural resource base*" (Hussein and Nelson 1998: 3). By introducing the concept of sustainability, 'sustainable livelihoods' addresses the linkages between poverty, the environment and empowerment/participation remedying some of the shortfalls that have characterised poverty analyses to date. Rural livelihoods, namely '*the means, activities and entitlements by which people make a living*' (UNDP 1997) are diverse and constituted from a variety of resources and activities which include, for example, subsistence and commercial agriculture, pastoralism, hawking/ trading, waged/unwaged labour (see for example Toulmin 1983, Chambers 1995, Adams and Mortimore 1997). These livelihoods are context-bound, that is, they are specific to regions, groups or even individual households (Heyer 1989) and are dynamic over time (Thomas and Sporton 1997) and as such are generally not responsive to blanket coverage anti-poverty policy initiatives. The poor are therefore viewed as a heterogeneous rather than a homogeneous group. A livelihood system according to UNDP (1997:4) is a '*dynamic realm that integrates both the opportunities and assets available to a group of people*

for achieving their goals and aspirations as well as interactions with and exposure to a range of beneficial or harmful ecological, social, economic and political perturbations that may help or hinder a groups' capacity to make a living' The key mechanisms underlying this approach, which are of pertinence to the DFID PANRUSA project, are *coping and adaptive strategies* which are employed/or not employed when livelihoods are under stress in ways which may or may not be sustainable.

- *Coping Strategies* are often short-term responses to a specific shock such as drought. For example, an *El Nino* associated drought event was predicted for Southern Africa by academics and national government scientists in 1988 which failed to happen. Many farmers, however, in Botswana did not sow seeds for fear of a failed harvest, instead realizing capital through the sale of cattle as a short-term coping strategy. Migration was also found to be a coping strategy in times of economic hardship and drought on TGLP ranches in the Kalahari of Botswana (Sporton *et al* in press)

- *adaptive strategies* involve long-term change in behaviour patterns as a result of shock or stress. Livelihood diversification is an important adaptive strategy to raise incomes and reduce

environmental risk. Ellis (in press:5) defines livelihood diversification as '*the process by which rural families construct a diverse portfolio of activities and social support capabilities in their struggle for survival and in order to improve their standard of living'*. Livelihood diversification has been referred to as the *Third Agriculture* (Scoones and Thompson 1994) which is complex, diverse and risk prone yet supports 1.9-2.2 million people world-wide.

Chambers (1995) (Figure 1) argues that the extent to which the rural poor employ adaptive or coping strategies will depend on their capability to adapt and diversify livelihoods which are based upon tangible assets (stores and resources) and intangible assets (claims and access to those resources). It is the interaction of these components that produces a living.

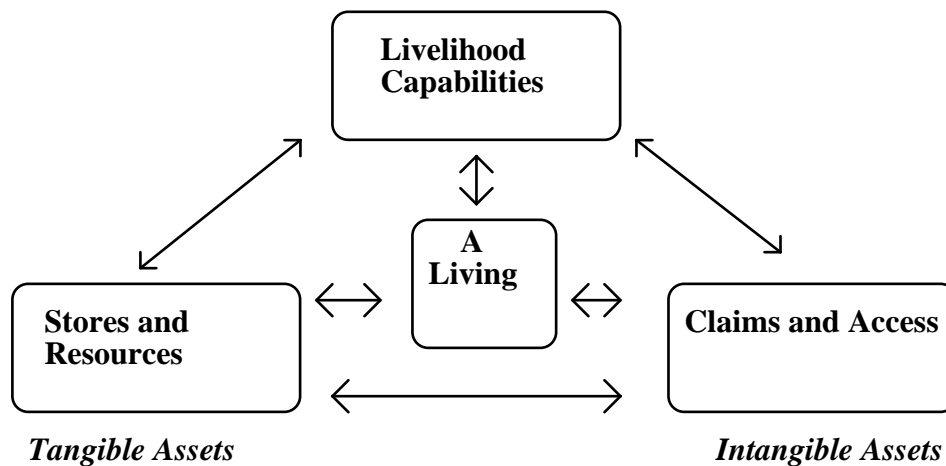


FIGURE 1. COMPONENTS AND FLOWS IN A LIVELIHOOD

(Source: Chambers 1995:24)

Until recently policy and academic thinking around the issues of rural livelihoods has been influenced by the *environmental entitlements approach* (Leach and Mearns 1991, Leach and Mearns 1997) which like Chambers components and flows model recognises that livelihoods are not simply based on access to, or effective command of, natural resources (entitlements) but also to the rights and resources (endowments) that the rural poor have at their disposal. Both entitlements and endowments are structured at the micro, meso and macro level by Institutions, which through the imposition of rules and regulations, mediate the effect of wider social, environmental and political processes. As rural populations are heterogeneous, individuals will have different capabilities in adapting livelihoods and accessing resources (Figure 2).

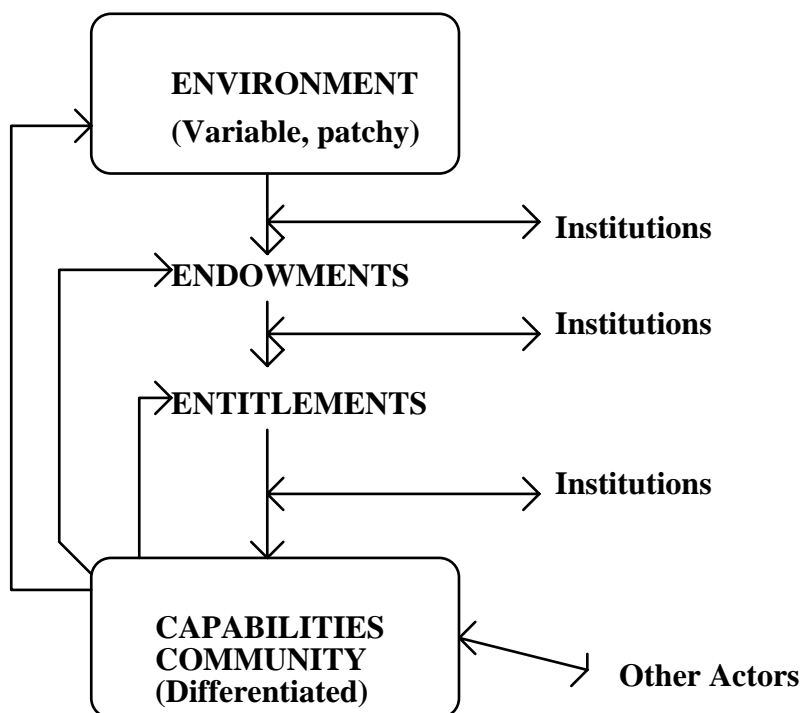


FIGURE 2. ENVIRONMENTAL ENTITLEMENTS

**(Adapted from Twyman 1997
after Leach and Mearns 1991,1997)**

The entitlements approach complements the sustainable livelihoods approach to understanding rural poverty by contrasting the resources available to the poor with their ability to use them; by making the distinction between institutional structures and human agency; and by acknowledging that individuals are differentiated and are therefore affected by different capabilities. The entitlements framework, unlike the sustainable livelihoods approach, however, does not fully consider the role of alternative livelihoods which are NR based but which may be relied upon in times of environmental stress. Although the focus of the DFID PANRUSA project is on the linkages between poverty, policy and NR use, the role of NR use must be considered alongside other alternative livelihoods.

5. Discussion Points

This brief discussion paper has introduced concepts and potential frameworks for understanding poverty and sustainable NR management which are the focus of international and national policy initiatives and are central to the DFID PANRUSA project. This final section highlights some key issues emerging from the document which are of relevance to the project.

1. Poverty is a multi-dimensional phenomenon which has to date been measured on the basis of indicators which have then be used to set targets. The DFID (1997) White Paper has adopted targets established by the UN to evaluate the relative success of poverty-reducing policies. A preliminary stage in the PANRUSA project *could* be to examine these indicators to provide an 'objective' assessment of the extent of poverty in each of the study areas.
2. Many of the broader definitions of poverty now accept the importance of qualitative dimensions such as empowerment, capability and governance. It is important that these less-tangible concepts are incorporated into assessments of poverty. Moreover, there is often a mismatch between elite or policy perceptions of poverty and the actual experience of poverty and its manifestation at grass-roots level which requires community-based participatory investigation
3. Poverty assessments should distinguish between vulnerability and poverty and examine the situations and processes that give rise to such vulnerability, be they social, environmental, economic or political. In the context of the PANRUSA project and the DFID development objectives, it is crucial to identify marginalised groups such as women, the old and certain ethnic groups who are more vulnerable than others.
4. A distinction should also be made between temporary poverty induced by short-term shocks or crises (e.g. drought) and situations of long-term poverty. Policy responses required to tackle long-term poverty will differ significantly from short-term safety-net initiatives.
5. The concept of sustainable livelihoods provides a useful framework for understanding the strategies employed by rural populations to sustain their livelihoods

in times of stress. Although the focus of the PANRUSA project is on NR management, the linkages between policy, NR use and poverty cannot be understood without examining the whole range of livelihood options open to rural populations and their relative capabilities to exploit them.

6. Livelihoods are diverse and complex and will vary between each of the study areas in the PANRUSA project and most probably within these areas as populations are differentiated and subject to different institutional arrangements and environmental situations.

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