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**SUSTAINABLE URBAN LIVELIHOODS:
CONCEPTS AND IMPLICATIONS FOR POLICY**

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SUSTAINABLE URBAN LIVELIHOODS: CONCEPTS AND IMPLICATIONS FOR POLICY

1. INTRODUCTION

How poverty is understood determines the way policy makers and planners respond to it. A sustainable livelihoods approach (SLA) adopts a distinctive perspective on the understanding of poverty and how to intervene to improve the conditions of the poor. A sustainable livelihoods approach to poverty eradication is one that acknowledges that poverty is a condition of insecurity rather than only a lack of wealth. Broadly a 'sustainable livelihood' (SL) is a means of living which is resilient to shocks and stresses, and which does not adversely affect the environment.

"Livelihoods compromise(s) the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and manage to enhance its capabilities and assets both now and in the future, while not undermining the natural resource base" (Chambers and Conway, 1992).

A range of key features have been ascribed to sustainable livelihoods by a variety of agencies and authors. This paper, commissioned by DFID, examines the discussions which range around the concept; considers the implications of the urban setting for this approach; presents a sustainable urban livelihoods model and considers some policy and practical implications of the approach for urban development interventions. Many of the concepts and implications reviewed in this paper are not new to DFID. What is new is the synthesis of a wide range of literature to provide an explicit urban perspective.

The sustainable livelihood approach takes as its starting point not deprivation but the 'wealth of the poor' (UNDP, 1998 p.7). In doing so it builds on the findings of participatory poverty assessments (Booth et al: 1997 cited in Carney, 1998 p.9) and owes much to Chambers's work on participatory methodologies which, in the main, have been rooted in the rural context (Chambers, 1995; 1997, Chambers and Conway, 1992), as well as to the work of Singh and Titi (1994). Although initially the concept was rural in focus it is becoming increasingly used in both peri-urban and urban contexts (Moser, 1996; 1998, Tacoli, 1998, Rakodi, 1997: Beale and Kanji, 1999).

The 'sustainable livelihood' concept has received legitimacy over the last decade through acceptance and development by government and international forums. The 1997 UK Government White Paper on International Development commits the Department for International Development (DFID, 1997) to promoting 'sustainable livelihoods'. This objective is expected to contribute to the overall goal of poverty eradication. The Brundtland Commission on Environment and Development, Agenda 21, the Social Summit, the Beijing Conference, Desertification Convention and UNIFEM have all incorporated and further developed the concept (UNDP, 1997). The UN system is currently 'operationalising' this concept (1999).

There is a basic similarity in terms of the principles underlying the livelihood approach in rural and urban areas. However there are contextual differences (social, economic, governance and environmental) between rural and urban areas, as well as among urban areas themselves. These differences affect the specifics of both the nature of the poor's 'wealth', and how they can make a living. An understanding of the particular nature of the urban context is therefore critical when examining the specifics of urban sustainable livelihoods. A key example of such a difference is the greater influence of the cash economy on the lives of the urban compared with the rural poor (Wratten, 1995, Satterthwaite, 1997, Beall, 1997, de Haan, 1997). These contextual differences have an impact not only on the character of sustainable urban livelihoods but also have implications for policy and other interventions.

2. SUSTAINABLE LIVELIHOODS

2.1 Characteristics of sustainable livelihoods¹

Central to an understanding of the concept of sustainable livelihoods is an appreciation that poverty is not a stable, permanent or static condition. The poor move in and out of relative poverty as they respond to the opportunities, shocks and stresses - social, economic and environmental - which they experience (Moser, 1996, Chambers, 1995). In this light the concept of vulnerability, variously defined, but acknowledged to be a dynamic concept, is central to an understanding of the condition of the poor (DFID, 1998, Chambers, 1995, Moser, 1996,

1998, Lipton & Maxwell, 1992 cited in Moser, 1998, Dersham and Gzirishvili, 1998). The poor survive in their precarious state by employing a variety of livelihood or survival strategies (Chambers, 1995, Rakodi, 1997, Wratten, 1995).

Such livelihood strategies are multi-faceted as men and women draw on their assets (DFID, 1998, UNDP, 1999, Moser, 1996, DFID, 1998) which are both tangible and intangible (Chambers, 1995), and entitlements (Sen, 1992, Moser, 1998). *There are a myriad (of) ways that individuals manage to build and contribute to the livelihood systems of families, communities and larger societies* (UNDP, 1997, para 5). In much of the developing world people are engaged in multiple activities rather than relying on a more limited range (e.g. one household member with full time paid employment) of livelihoods strategies to ensure their well being (UNDP, 1997 10). While such systems may incorporate paid employment this will not be the only, nor in many cases the most significant, strategy (Wratten, 1995, Chambers, 1995, Potter & Lloyd Evans, 1998, Kortzen, 1996). The more diverse and complex livelihood strategies become, the more they are likely to reduce vulnerability (Rakodi, 1997).

Clearly, the livelihood opportunities offered by rural, peri-urban and urban areas are likely to be different from one another. While everywhere the livelihoods of the poor are diverse and complex, their content will vary according to the local opportunities available. Many authors suggest that livelihoods tend to be at their most complex in urban areas, with households drawing on a wide variety of activities to capture income and other resources (Rakodi, 1999 Devas, 1999 Beall, 1997 Chambers, 1995).

There is generally an explicit or implicit perception that livelihood strategies are household centred. (Moser, 1998, Beall and Kanji, 1999, Satterthwaite, 1997) and that each profile of social (household-individual) assets is distinctive (Friedman, 1996). *The household is a basic institution for reproducing society in its material as well as non-material aspects. This includes pooling and allocating labour and resources which, as has been widely noted, neither goes uncontested nor can be assumed to be egalitarian but is nonetheless an arena of social co-operation. This 'mini political economy' of decision making about status, power, property and work between men and women, generations and kin is multifaceted and dynamic in its formation and life.* (Douglass, 1998 p121.).

In this light any analysis of livelihoods or policy decisions about poor households should take account of the differentiated contribution and roles which are related to the differences of power relationships and capabilities of individual household members (Frazer, 1989 cited by Beall, 1999). A full appreciation of the character of livelihoods and the implications of exogenous changes for their viability can only be achieved through gender and inter-generation analysis of the contributions of household members and of their linkages into the wider fabric of society. Further, as the profile of household assets changes over time (Friedman, 1996, Rakodi, 1997), livelihoods need to continually adapt to such changes (Singh & Titi, 1994 cited in IIDS-CASL, 1999).

If livelihoods are to be sustained they require the capability to respond to change. (UNDP, 1997 Singh and Titi, 1994 cited in IIDS-CASL, 1999, Rakodi, 1997 Chambers, 1995). Households and communities react to changing circumstances, external or internal pressures or shocks, by adapting how they use their portfolio of assets and capabilities and their traditional livelihood systems (Chambers, 1995). They may adopt either short-term responses or long-term adaptive strategies (Singh and Titi, 1994). Thus the capacity of households and communities is both reactive in responding to changes in conditions (e.g. policies, market conditions or environmental conditions), as well as proactive and dynamically adaptive as men and women develop and improve their strategies in an attempt to improve their livelihood outcomes (ISSD, 1999).

It is therefore possible to say that *(s)ustainable livelihoods are derived from people's capacity to make a living by surviving shocks and stress... This requires reliance on both capabilities and assets for a means of living. A livelihood is sustainable if it can cope with and recover from stress and shocks, maintain and enhance its capabilities and assets and enhance opportunities for the next generation* (UNDP (A), 1997).

2.2 Core elements of sustainable livelihoods

A sustainable livelihood (SL) has been described as:

- incorporating the capabilities, assets (material and social) and activities which are available to poor men and women and together make up a living (Chambers, 1995, Sen, 1992, UNDP, 1999). The variety of opportunities available differ

according to whether people live in, and/or have access to resources in rural, peri-urban or urban areas (Wratten, 1995, Satterthwaite, 1997, Tacoli, 1998).

Livelihoods may incorporate paid jobs but these are only one element, and not necessarily the most important, of the web of functional relationships which together comprise a living (UNDP, 1997, ISSD, 1999). Other elements include social networks and a variety of institutions which provide household support and access to resources (de Haan, 1997 Dersham and Gzirishvili, 1998, Douglass, 1998).

- dynamic and adaptable. A SL has the capability to respond to change and is continually renewed through the development of adaptive strategies. Thus it can recover from stresses and shocks and is stable and sustainable over the long term (Chambers, 1995, Chambers and Conway, 1992, ISSD, 1999, Singh and Titi, 1994, UNDP, 1998, UNDP, 1999).
- related to poor people's own priorities, interpretations and abilities (DFID, 1998, Chambers, 1997). People are at the centre of the livelihoods framework and are perceived as capable actors, not helpless victims. A livelihood therefore draws on the wealth, knowledge, skills and adaptive strategies of the poor (UNDP, 1998). While sustainable livelihoods reflect the priorities of poor people it should be noted that there may be a difference between their short term, pragmatic survival-oriented priorities and longer term priorities which aim at the development of sustainable livelihoods. For example a short term priority of reducing household expenditures might lead to taking children out of school, or cutting out health care costs, but this does not mean that the same household might not value investments in health or education in the longer term.
- household and community centred, and thus location sensitive. Household members contribute in different ways depending on their various roles, responsibilities and capabilities (Moser, 1996). Households draw on social capital and a mesh of obligations (Putnam, 1993 Chambers, 1995 and Douglass, 1998). They are therefore integrated into the wider social fabric, and draw on links with a variety of individuals and groups within the community as well as opportunities presented by local business and government (Katepa-Kalala, 1997, Beall, 1997). It should also be noted that some livelihood strategies may be based on individual rather than household activities, and others may draw on cooperation between family members who do not live

together (e.g. cooperation between rural and urban extended family members).

- achieving the components outlined above without undermining the natural resource base. This is explored below in section 2.3.

2.3 Principles of a sustainable livelihoods approach to poverty eradication

A sustainable livelihoods approach to poverty eradication is one that acknowledges that poverty is a condition of insecurity rather than only a lack of wealth (Chambers, 1995 Moser, 1996, UNDP, 1997, IISD, 1999). Further it recognises that the circumstances of the poor change constantly, and that they sustain themselves, despite precarious conditions, by employing a variety of assets (Sen, 1992, Rakodi, 1997 Beall & Kanji, 1999, Moser, 1996). It is therefore possible to improve their security, and thus contribute to the eradication of poverty, through a variety of wide ranging interventions which support their activities (Satterthwaite, 1997, Wratten, 1995) rather than merely attempting to provide paid employment (Korten, 1996). A number of principles have been identified as underpinning such an approach to poverty eradication. These include:

- **a community sensitive** approach that, appreciating the importance of social links for sustainable livelihoods and thus the significance of stable social groups and location, fosters mutually beneficial relationships among people by encouraging and supporting strong dynamic networks (ISSD, 1999, Korten, 1996, UNDP, 1997). Further, a sustainable livelihoods approach aims to strengthen the community by stimulating community investment and helping to retain resources within the local economy (ISSD, 1999).
- **sensitivity to the environment.** Acknowledging the particular importance of the natural resource base for poor people, in accord with the Bruntland principles, a sustainable livelihoods approach aims to maintain the quality of the natural environment (Chambers and Conway, 1992 UNDP, 1997, Douglass, 1998) as well as addressing the environmental impact of poor local conditions on local residents. Thus the approach encourages a beneficial relationship between people and their environment (ISSD, 1999 UNDP, 1997). It aims to ensure that everyone has equitable access to safe and sufficient environmental resources in order to maintain a healthy life (Korten, 1996, Werna et al, 1998). The environmental

needs of the poor should be central to any urban environmental policy that seeks to enhance sustainable livelihoods. The livelihood activities of the poor also have an impact on the wider environment. Although there is often considerably more active re-cycling and a much reduced use of resources by poor communities, the sustainable livelihoods approach needs to be particularly sensitive to the environment to ensure that the broader issues of environmentally sustainable development are addressed.

- promotion of a living based on individual **men's and women's priorities**. Acknowledging that livelihoods are linked to peoples' own priorities and interpretations a sustainable livelihoods approach demands the participation of poor people in all stages of the decision making process (DFID, 1996, ISSD, 1999, Goldman, 1998) and encourages local self reliance and the avoidance of external dependence (Korten, 1996).
- acknowledging and addressing **issues of equity**. The priority of a sustainable livelihoods approach is to contribute to satisfying the basic needs of all poor men and women. In doing so it aims to provide security against deprivation and promote equity between diverse groups in relation to their access to wealth and resources. Consequently it aims when providing for one group not to foreclose options for others (Korten, 1996 de Haan, 1997 UNDP, 1999). However, catering for the livelihoods of the poor may also mean addressing those of other groups. The poor's lack of access to various resources is often due to over consumption by wealthier groups (e.g. the use of water for private swimming pools by the rich in Mexico city where water is a crucially scarce resource). In this light, the livelihoods of the rich can be seen as having an impact on the livelihoods of the poor and affect the fairness of access to resources (Stephens, 1996). The sustainable livelihoods approach also aims to encourage the sharing of productive and reproductive roles and the transfer of knowledge and skills between groups of individuals (IISD, 1999). In seeking to encourage ways of making a living that are fulfilling it aims to provide everyone, what ever their position within the household or community, with opportunities to contribute meaningfully to meeting the needs of family, community and society as a whole (Korten, 1996, UNDP, 1997).
- a **holistic integrated** approach to the achievement of sustainable livelihoods. A sustainable livelihoods approach

acknowledges that the foundation of a sustainable livelihood is a complex mesh of activities which draws on multiple and varied assets and not just paid employment (Korten, 1996). Moreover a sustainable livelihoods approach appreciates that livelihoods strategies are both dependent on the opportunities presented and affected by the social, economic, institutional/ governance and environmental contexts in which poor people live. This results in a need for a cross sectoral approach. Furthermore, a variety of authors make it clear that individual and household livelihoods are linked into the wider, social and political/economic fabric of society (Katepa-Kalala, 1997, Beall, 1997, Douglass, 1998).

2.4 The sustainable livelihoods model

The key elements of the sustainable livelihoods model: assets, livelihood strategies, livelihood outcomes, context and men's and women's short and long term objectives are defined and examined in detail in section 4.

3. URBAN CONTEXT

3.1 Introduction

While it is clear that urban poverty is an extensive problem, differences in definitions and measures make the exact figures uncertain. World Bank estimates, for example, indicate that about a quarter of urban residents in developing countries are poor, while many national studies in Asia, Latin America and Africa indicate that more than half of their urban populations are living below poverty lines (UNCHS, 1996). Furthermore, factors such as poverty lines that are not weighted for higher living costs in urban areas and fail to take account of non-income based aspects of poverty mean that poverty is frequently under-counted (Satterthwaite, 1999). Despite the uncertainty, large numbers of urban residents are clearly living in conditions of poverty and, in many countries (particularly sub-Saharan Africa) these numbers rose significantly during the economic restructuring of the 1980s (UNCHS, 1996).

The livelihoods of the urban poor are defined in large part by the opportunities and constraints under which they are operating. It is therefore necessary, in order to understand the nature of sustainable urban livelihoods, to understand the urban context. Thought is given below to key aspects of this context

under the headings of social context, economic context, governance, and environmental and health and urban/rural linkages.

3.2 Social context

Cities are more culturally diverse, and are likely to be less safe and more socially fragmented than generally more stable rural areas. Urban neighbourhoods contain a diversity of household types which are often fluid in their structure. This social diversity is likely to create tensions and the need for different survival strategies from those practised in rural areas (Wratten, 1995 Rakodi, 1993, Moser, 1996).

A key asset for both the urban and the rural poor is social capital. *(s)ocial capital...refers to features of social organisation, such as trust, norms, and networks that can improve the efficiency of society by facilitating co-ordinating actions...Further, like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence...For example, a group whose members manifest trustworthiness and place extensive trust in one another will be able to accomplish much more than a comparable group lacking trustworthiness and trust* (Coleman cited in Putnam, 1993, p 167). As well as local social relations, social capital may also include the wider networks of social relations between poor and non-poor including systems of patronage - systems which may not always be considered benign.

However, the identification of social capital as a valuable and critical resource which contributes to the well-being of the poor, especially during times of crisis and socio-economic change, is widely acknowledged - not only by development professionals (Moser, 1996 Dersham and Gzirishvili, 1998 Douglass, 1998) - but also by the poor themselves. Thus there is evidence that the existence of informal social networks significantly decreases the likelihood of poor men and women perceiving their household's food, economic or housing conditions as vulnerable (Moser, 1996 and Dersham and Gzirishvili, 1998).

The general characteristics of social capital in cities are difficult to identify, as the concept is rooted in relationships between specific individuals and groups, and therefore tied to specific locations. However the various theoretical interpretations of urban poverty have clear implications for social capital. One ongoing debate has been on whether the urban poor suffer from conditions of social disintegration and the erosion of community,

or whether they rely on strong networks of solidarity between groups and individuals. This debate has its roots in theorists such as Oscar Lewis whose studies of Mexico city in the 1960s and 1970s led him to develop the concept of the 'culture of poverty', and Larissa Lomnitz, whose studies in Mexico city in the 1970s stressed the strong networks of support among poor households.

Today, urban poverty is still characterised in these dual terms. On the one hand are ideas of urban blight, linking poverty to family break-up, drug use, crime and social disintegration (which would be expected to undermine the social capital of the poor) - an idea often linked to studies of the 'inner city' in developed/northern countries (Wratten, 1995). As explained by Moser (1998: p. 4) *(c)ommunity and inter-household mechanisms of trust and collaboration can be weakened by greater social and economic heterogeneity...This contrasts with the 'moral economy' of rural areas, where the right to make claims on others, and the obligation to transfer a good or service is embedded in the social and moral fabric of communities.* On the other hand are those that point to the existence of strong community and household networks and the importance of 'social capital' as an asset for the urban poor (Douglass, 1998, Dersham and Gzirishvili).

Another issue in this area is the concept of social exclusion. 'Social disintegration' may be the result of the exclusion of specific groups of men and women, with a resulting breakdown of integrated communities. Furthermore, poor communities may have internal solidarity but may, at the same time, be excluded from wider, city-wide social networks.

Actual situations clearly relate to context. *Why some households are able to organise to improve the conditions of their life spaces, and others are not, can be traced along the dimensions of individual, household, social and community networks of mutual support* (Douglass, 1998).

Furthermore to view the social capital of the urban poor as a distinct phenomenon would obscure the strong linkages that frequently exist between urban and rural households with extended family or other linkages, which may rely on each other for support in response to crises or shocks - social capital often transcends the city to include wider rural urban linkages (Tacoli, 1998).

3.3 Economic context

Cities are engines of economic growth (Harris, 1992, UNCHS, 1996). They are the

locations for complex networks of activities essential to basic human functions of living and working and operate by drawing on the skills and labour of their populations (Mattingly, 1995). As a result, cities often represent economic opportunities for the poor, while (at the same time) increasing their dependence on cash income.

In urban areas, where the economy is characterised by a greater degree of commercialisation, and where most basic goods such as food and rent are bought through the market, poor men and women need higher cash incomes than most rural households in order to survive (Wratten, 1995 Satterthwaite, 1997).

Cities in most countries are now expanding mainly as a result of natural growth rather than immigration. Nevertheless the economic opportunities they present means that they continue to attract migrants from rural areas or less developed towns in search of work and the chance to improve their lives. Such migrants are likely to be younger, more adventurous and entrepreneurial than those who remain in their home areas (Harris, 1992 Drakakis Smith, 1996). However, as well as representing opportunities, the city also represents costs - housing, basic infrastructure and other needs, such as food and clothing, are more expensive and less accessible in urban areas, and many migrants experience the burdens as well as the rewards of the city life.

The urban poor, whether or not they are migrants, survive through undertaking a variety of activities, which mainly take place in the informal sector. However, not all those working in the informal sector are poor, and nor do all those working in the formal sector avoid poverty. In many countries (for example Egypt or Tanzania), government employees commonly undertake a variety of additional jobs and activities to supplement their income. Informal activities generally, but not always, provide poor men and women with low cash incomes and insecure conditions.

The city economy does not function in isolation and is affected by national and international macro policy (Douglass, 1988). Such policies and global forces frequently have mixed impacts on poor households and in particular the condition of women (Elson, 1995 cited in Katepa-Kalala, 1997, Beall and Kanji, 1999 Moser, 1998). Previously, under policies of modernisation, formal employment was increased as a result of growth in manufacturing industry. However, since the 1980s, policies such as structural adjustment have affected employment in some areas. Losses of formal manufacturing jobs in some countries and sectors, as well as 'down-sizing' in the public sector have resulted in a large

number of men and women looking for jobs in other areas such as part time service sector employment or the informal sector (Potter and Lloyd, 1998, UNCHS, 1996). It should be noted however that the 1980s were characterised in other countries and sectors by employment growth. Bangladesh, for example, saw the creation of two million jobs in garment exports, and Mexican border employment rose from 120,000 in 1982 to over one million today.

3.4 Governance

The urban poor are linked into structures of governance through their dependence on the delivery of infrastructure and services by city institutions, as well as through the impact of meso- and macro-level policies (Beall and Kanji, 1999 Katepa-Kalala, 1997).

This linkage between the poor and city institutions is not unproblematic. A number of authorities have highlighted the weaknesses of local governments, which are frequently unable to address the needs of the poor and in some cases actively exclude and discriminate against them. In light of this inability of the state to deliver there has been *renewed interest in decentralisation, democracy and citizen participation... representing a potentially major shift in state-community relationships in cities in almost all settings* (Banuri, 1998). This is linked both to democracy for its own sake and to state attempts to devolve responsibility to the poor to pay their own infrastructure and services.

Further...the rise of the NGO movement in many countries has provided substitutes for government action (Banuri, 1998, p. 2). Such civil society organisations can have a critical role, in urban areas, in strengthening democracy and in directly reducing poverty to ensure that inclusive development strategies are secured. It should not, however, be assumed that all civil society organisations play a positive role in urban poverty reduction; some may have a neutral or even a negative impact (Miltin, 1999, Douglass, 1998, Rakodi, 1999 Beall, 1999).

Whether the poor are actively involved in systems of city governance also depends on their legal status, which is often ambiguous. The high cost of shelter in cities, for example, means that poor households are frequently forced to illegally occupy marginal land. They therefore lack the tenure rights which are normally linked to the right to register and vote. Migrant workers also generally lack formal registration or rights, even where they spend long periods resident in cities. In China, for example, where migrant workers are estimated to represent 20% of the population of many cities, they lack formal rights to public

services and are excluded from governance decisions even after long periods of residence (Meikle and Walker, 1999).

However, while there are many instances of the poor's exclusion from systems of governance, some instances of innovation, such as the participatory budgeting of Porto Alegre with its citizen involvement in decision-making about public investment (Abers, 1998), highlight more positive trends. Furthermore, while the tenure status of many urban poor residents has precluded their involvement in urban governance, changes in ethos and policy approaches have meant that in some countries 'squatters', or informal occupants, are increasingly integrated into systems of political decision making, as in the Barangay system in the Philippines (Meikle and Walker 1998).

3.5 Environment and health

The unsatisfactory quality of the residential and working environments, and associated health problems, of poor urban people is now generally recognised. The urban poor are commonly concentrated at high densities in areas of low rent. These low rents reflect the poverty of the environments and the consequent low demand for such locations (Elliott, 1994). They are frequently on polluted land close to industrial facilities or where waste dumps are sited and watercourses are contaminated, or on hillsides and river plains which are susceptible to landslides and flooding. The result is that the urban poor are frequently vulnerable to a range of environmental and health hazards (Wratten, 1995, Bartone et al, 1994, Moser & McIlwaine, 1997).

The urban poor, living in inadequate over crowded shelters (or less crowded but spatially poor peri-urban areas), suffer from diseases and injuries resulting from proximity to toxic and hazardous wastes; lack of clean water and sanitation; water, air and noise pollution (Satterthwaite, 1997). They are particularly vulnerable to typhoid, diarrhoeal diseases, cholera and intestinal worms from contaminated water and food, as well as diseases associated with poor drainage and garbage collection such as malaria (Wratten, 1995, Werna et al, 1998). Poor men and women make a trade-off between the quality and the location of their living spaces - living in areas with poor, insanitary environments in order that they can be in a preferred location with access to livelihood generating assets.

Furthermore, as well as threatening men and women's health and security, poor urban environments may directly affect their ability to undertake livelihood activities by occupying time which could otherwise be used for

productive tasks. For example *Simply getting daily supplies of potable water or fuel may absorb the energies of several family members (in particular women and children) who are compelled to allocate their time to these tasks at the expense of seeking income generation work* (Douglass, 1998, p. 213).

3.6 Urban/rural linkages

While cities, and by association urban poverty, have distinct characteristics, it is both difficult and unsatisfactory to examine them in isolation. This is because, for a number of reasons, there is a fuzzy line between 'urban' and 'rural' areas and extensive interlinkages between the two. This lack of definition is seen to stem from:

- *the large number of residents (officially) classified as 'rural' who work in urban areas or in sectors generally considered 'urban' (i.e. services and industry) and men and women with dual livelihoods drawing on both rural and urban areas;*
- *the fact that many rural residents, especially in wealthy countries, benefit from infrastructure and services generally associated with cities (e.g. piped sewerage and water and solid waste collection);*
- *the difference in definitions of urban in different countries. The proportion of the world's population currently living in urban centres is best considered not as a precise percentage...but as being between 40-55% depending on the criteria used to define what is an urban centre. (UNCHS, 1996, p. 14).*

Furthermore, as Wratten (1995) argues, defining "urban poverty" is difficult because:

- human settlements comprise a wide spectrum that cannot easily be reduced to two categories;
- there is an interdependence between town and country; and
- many of the casual factors of poverty cannot be tackled adequately by focusing only on urban or rural level interventions. There is instead a need to focus on structural determinants.

In addition, *rural-urban linkages play an important role in the ways which livelihoods are constructed* (Tacoli, 1998, p. 78) as for example with:

- remittances from urban to rural areas;
- the giving of goods between rural and urban areas (e.g. food);
- sharing of caring responsibilities for members of an extended family e.g.

- elderly relatives in rural areas, children and new migrants from the extended family in the urban area;
- seasonal labour by the urban residents with the extended family in the country and;
- short term migration

It is important to take account of such linkages in any consideration of sustainable urban livelihoods.

4. A SUSTAINABLE URBAN LIVELIHOODS MODEL

4.1 Introduction

As has been noted above and will be discussed further below, the central ideas in the sustainable livelihoods approach are an awareness:

- that *vulnerability* to shocks and stresses, rather than just lack of wealth, is a defining factor of poverty
- of the variety of assets that are used by the poor to overcome vulnerability
- of the complex short and long term strategies used by the poor to mobilise these assets
- of the dynamic character of poverty and adaptability of livelihood strategies
- of the need to understand livelihoods from the point of view of poor women and men
- of the focus on household/families as a key unit for organising livelihoods

This paper has also indicated in 2.3 that a sustainable livelihood approach to poverty eradication must be:

- sensitive to people and communities and appreciate the importance of social links for livelihoods;
- focused on the need for equity and the participation of the poor, who must be treated as citizens rather than clients;
- related to other policy objectives and human right issues;

- sensitive to environmental needs and conditions, both of poor communities and of the requirements of broader environmentally sustainable development, and;
- holistic in approach in order to reflect both the multidimensional nature of poverty and the survival strategies of the poor.

The ways in which these generalised notions are manifested in practice depends very much on specific contexts. The factors which make men and women vulnerable vary from place to place and from time to time, as do the assets available and strategies used to overcome this vulnerability. Thus any sustainable livelihoods approach must be tailored to specific conditions and needs. However, as discussed in Section 3 there are certain continuities which tend to make conditions in urban areas similar. These conditions differ, or differ in emphasis, from those generally found in rural areas and will affect the ways in which poor men and women are vulnerable, the assets available for them to draw on and the strategies they adopt for coping and betterment.

The remainder of this chapter proposes and describes a sustainable urban livelihoods model which incorporates these concepts.

Figure 1 presents a sustainable urban livelihoods model. It illustrates the relationship between key elements; assets, livelihood strategies, the urban context, and livelihood outcomes.² In addition the model incorporates men and women's short and long term objectives in order to reflect the fact that the SL model aims to be people centred, and reflect the priorities and ideas of poor men and women themselves. The specific elements and linkages of the sustainable urban livelihoods model are described in detail below. This description highlights the specific features which distinguish the needs and conditions of urban from rural livelihoods

Insert SUL figure 1.

4.2 Assets

Assets have been defined in a variety of ways
- four ways of categorising them are set out in

Box 1. The ability to avoid or reduce vulnerability depends not only on the initial assets available but also on the capacity to manage them and to transform them, for example, into income, food or other basic necessities (see section 4.4).

information about, and rights of access to or ability to exchange other assets. Again access is the key. The infrastructure itself belongs individually or collectively to others.

Chamber's distinction between tangible and intangible assets (i.e. those owned at

Box 1: Comparison of assets by various authorities			
Chambers (95)	UNDP (99)	Carney (98)	Moser (96; 98)
tangible assets: <ul style="list-style-type: none"> • Stores e.g. food, jewellery • resources 	<ul style="list-style-type: none"> • land • livestock • skills • knowledge • natural resources 	<ul style="list-style-type: none"> • natural capital • human capital • financial capital • physical capital • social capital 	<ul style="list-style-type: none"> • labour • economic and social infrastructure • housing • household relations • social capital
intangible assets <ul style="list-style-type: none"> • Claims -made for material, moral or practical support • opportunity in practice to obtain resources 			

	Identified from rural livelihoods analysis
	Developed from urban livelihoods analysis

Much of the work done on livelihood assets has been in a rural context.

The definitions and groupings of assets set out in Box 1 cover similar areas. Some areas, however, are noteworthy. For example, many of the specific assets that could be expected to fall under the headings of 'physical capital' or 'economic and social infrastructure' (for example, sewerage, school, transport infrastructure, banking systems) are significant in that they are not *owned* by the men and women who use them as livelihood assets. This highlights the fact that the existence of assets is not sufficient to promote livelihoods - what is key is their *accessibility*. This will be determined by the entitlements (see glossary of terms) that men and women are able to command, which largely relate to contextual factors (institutional structures and processes which determine peoples legal, social and economic rights). This occasionally leads to some confusion about what is an asset, and what is a contextual factor determining access to an asset. For example, the existence of policies and infrastructure promoting universal primary education encompass both an asset and the access to an asset - the existence of schools is irrelevant to people who are unable to use them due to economic and legal structures which exclude them.

Capabilities, such as physical capacity, knowledge and skills, are assets in the most direct form - 'human capital' attributes are owned by the individual to whom they apply. However, they depend on access to social and economic infrastructure - which in turn depend on physical distance from, basic

hand versus those such as social capital, which give the opportunity to access resources) helps to clarify this distinction, pointing to the significance of accessibility beyond the immediate sphere of ownership and control, and viewing factors which promote accessibility as an asset in themselves.

The assets in Figure 1 have been presented as a pentagon of five types of assets: financial, human, natural, physical and social, as is proposed in the Carney model (1998). While these generic types are the same for the rural and urban SL models, the urban setting may result in a different emphasis for each type of asset. Thus, for example, natural capital will generally be of less significance in the urban setting and financial capital more significant. The pentagon acts as a five axis bar chart in order to highlight the relative importance of each of the five asset types for a particular household or livelihood system. There is no attempt to use the pentagon to quantify each asset accurately - rather the pentagon allows for a subjective, but visually clear, assessment of the relative importance of each asset. The purpose of this is not only to give a clear comparison of the availability and importance of each asset type but also to force "*users to think holistically rather than sectorally about the basis of livelihoods*" (Carney 1998,p.7).

However if there is to be a complete understanding of the significance of each type

Box 2: Assets commonly used by the urban poor	
Financial Income	Income deriving from the <i>sale of their labour</i> is a key asset for the urban poor as a result of the 'commoditized' nature of cities which increases dependency on cash income (Moser 98)
Access to credit	The availability and accessibility of affordable credit is important in reducing the likelihood of severe indebtedness of the urban poor
Human Health	As the sale of labour is important in the context of the city economy, health care is vital in determining the quality of labour of the poor.
Education and other skills	Like wise accessibility to education and training provides the opportunity for poor men and women to improve the value of their 'human capital'
Natural	<p>Generally less significant in cities - although the widespread practice of 'urban agriculture' (Rakodi, 1993) means that for some urban residents land and livestock are important assets. As urban agriculture is often practised on marginal or illegally occupied land, this asset is frequently vulnerable to environmental contamination or the threat of eviction. In addition while natural resources and/or common property resources (such as rivers or forests) are generally less significant assets for urban poor residents, some natural resources are used in urban settings - rivers in particular - may be used as a source of water for washing and even drinking, and for livelihoods activities such as fishing or poultry rearing (DFID, 1998).</p> <p>In addition health impacts of the environment will have an indirect impact on human capital - clean, safe local environments may therefore be considered an asset.</p>
Physical Housing	Housing is often one of the most important assets for the urban poor, as it is used for both productive (renting room, using the space as a workshop area) and reproductive purposes (Moser 98) in addition to shelter.
Livestock	Livestock is generally less important in cities, nevertheless many urban residents undertake livestock rearing for the pot or for sale. Even downtown residents may rear small animals such as chickens or rabbits in crowded living spaces (Rakodi: 97)
Economic and social infrastructure	Access to education and health facilities provides the opportunity for poor households to improve their own 'human capital' and is often the justification for much rural/urban migration.
Other assets	Assets such as jewellery or household goods obtained to satisfy cultural norms and basic needs, can be sold, or pawned for cash during times of stress or low income (Chambers: 97, UNCHS: 96)
Social Social support mechanisms	The network of support and reciprocity that may exist within and between households and with communities which people can call on, for example, loans, child care support, food and accommodation (Moser: 98, Dersham and Gzirishvili: 98).
Information	A key aspect of social networks is access to information about opportunities and problems - one important area is information about casual labour markets and other opportunities

Source: Compiled by the authors

of asset, there is a need to distinguish between assets which are significant on the pentagon because they are relatively *available* - and thus figure largely in poor household portfolios (e.g. free resources such as urban rivers, or dump sites) - and assets which are significant because they are ascribed particular *importance* or *value* by men and women undertaking livelihood strategies who may therefore make an extra effort to invest in them or seek them out (perhaps credit, education or information, for example).

Research shows that the poor are managers of complex asset portfolios (Moser, 1996, 1998). Some examples of the assets that are used in urban areas are examined in Box 2.

4.3 Livelihood strategies

Livelihood strategies are shaped by a combination of the assets available, the urban contextual factors which determine the availability of these assets, and men's and women's objectives. Individuals and households build up various patterns of activities which together constitute their livelihood strategies. Many households' livelihood strategies integrate rural and peri-urban activities.

Many poor urban households are opportunistic, diversifying their sources of income and drawing, where possible, on a portfolio of activities (such as formal waged employment, informal trading and service activities). In much of Asia, for example, *they (poor households) are not only tightly integrated into the economy, but also seek to diversify their income earning and pooling activities by having different family members engage in different types of activities and sectors of the economy* (Douglass, 1998, p. 124). Clearly the activities undertaken by poor households will in part be determined by the assets available to household members.

Chambers (1997) also stresses the importance of the poor diversifying their income as a broad survival strategy, distinguishing between full time employees with one main source of livelihoods ('hedgehogs'), and poor people with a wide portfolio of activities ('foxes'). 'Fox' households undertake many different activities and strategies. Box 3 lists *some of* the survival strategies typically undertaken by poor household members.

It is of note that the list in Box 3 includes activities which could not be considered as desirable, or even sustainable. While the sustainable livelihood approach stresses the need to accentuate positive aspects of

livelihood systems, highlighting the strengths and capabilities of poor men and women, nevertheless it should be noted that many livelihood strategies are adopted out of necessity rather than choice. It should also be noted, however, that there is a distinction between short term strategies, often adopted out of necessity (e.g. strategies that aim at reducing expenditure) and long term strategies which aim to invest in future capacity to build livelihoods. In this light it would be wrong to assume that parents who take their children out of school as an immediate response to a financial household crisis do not attribute value to education in the long term.

Livelihood strategies may also cater to the priorities of more powerful household members rather than the interests of other household members and thus be inequitable and socially unsustainable; or they may be deleterious to the natural environment. In this light some strategies may be unsustainable in the longer term. Strategies that undermine the rights and conditions of some (weaker or less influential) household members or may have negative impacts on other groups or damage the environment should clearly not receive support from development agencies.

Some examples of 'livelihood strategies' which may be undertaken by poor urban households, but which could not be termed sustainable are:

- stinting on education, basic food stuffs, medical costs which leads to cost cutting in the short term but which undermine human capital in the longer term, lessening the ability of poor men and women to use or sell their labour;
- triage/discrimination, child bonded labour, for example, undermining the rights of less powerful household members
- activities such as theft and organised crime that may satisfy the needs of the poor households or household members engaged in them, but have negative impacts on other individuals, households or groups who may also be poor.
- activities which abuse common natural resources such as water supplies or land, for example the pollution of rivers by small industry such as dying and paper manufacture.
- activities which are deleterious for the health of those undertaking them such as 'waste-picking' in unsanitary conditions, as is the case with the Zabeleen of Cairo, or running small dangerous furnaces or other unprotected machinery.

Box 3: Some strategies used by poor households³	
Mainly urban	Urban and rural
Income raising <ul style="list-style-type: none"> • domestic service - e.g. cleaning and childcare (esp. girls and women) • urban agriculture • renting out rooms 	<ul style="list-style-type: none"> • home gardening • processing, hawking, vending • transporting goods • casual labour/piece work • specialised occupations (e.g. tinkering, food preparation, shoe-shining, prostitution) • child labour • mortgaging and selling assets • selling children into bonded labour • migration for seasonal work • seasonal food for work, public works & relief • begging • theft
Lowering expenditures <ul style="list-style-type: none"> • scavenging • cutting transport costs (e.g. walking to work) 	<ul style="list-style-type: none"> • changes in purchasing habits (e.g. small frequent purchases, rather than cheap bulk buys, and/or poorer quality food that needs longer preparation) • stinting on goods and services (e.g. buying less and/or cheaper food) • discrimination and triage (e.g. giving less food to weaker/ less favoured household members).
Social capital <ul style="list-style-type: none"> • community kitchens (comedores populares) • shared childcare 	<ul style="list-style-type: none"> • mutual help e.g. loans from friends or saving groups • family splitting (e.g. putting children out to others) • remittances from household members working away

Adapted from Chambers, R., 1997, Cornia, 1987, UNCHS 1996 and Moser, 1998.

Another reason why not all livelihood strategies are necessarily 'good' and should therefore not be unquestioningly supported is that, like development professionals or anyone else, poor people can be misinformed, or simply wrong. While the sustainable livelihood model stresses that poor people are the experts on their own conditions, it is patronising to assume that all poor people's tactics are inherently 'right' merely because they are chosen by the poor. In real life many poor households lack access to information, broader overviews, and a knowledge of prior experiences outside their own local area which mean that they may make mistakes and adopt livelihood strategies which are unsatisfactory at best or doomed to failure at worse. This is of significance where policy makers attempt to lend support to the survival strategies of the poor. It is clear that policy makers should not give blanket support to all survival strategies, and in some instances should promote alternatives.

marginal resources (e.g. waste sites, land which is polluted, prone to flooding, or unmanaged state owned land). However the very fact that these resources are marginal frequently makes livelihoods strategies which depend on them precarious or dangerous. Such resources are generally freely, or cheaply, available because other, wealthier, individuals would not want them, as they are open to legal eviction, health dangers or social stigma, for example. Policy approaches to support such livelihoods strategies should therefore address these issues.

Other strategies, such as migrant labour in areas such as construction, and remittances to extended households highlight the fact that efforts to secure sustainable livelihoods cannot be simply distinguished as 'rural' or 'urban' - rather, any tactics involve household members drawing resources from both rural and urban areas.

One of the key general livelihoods strategies adopted by the urban poor is the use of

The strategies of individuals and households, (i.e. the choices made by men and women on the utilisation and management of assets available to them) are central to their overcoming vulnerability. Such choices are generally made in response to the availability of assets and contextual factors which determine the reliability, use and usefulness of these assets. For instance, the decision to diversify survival strategies or to increase the number of household members working - in order to increase the assets available to the household - may be key in guarding against household vulnerability to the vagaries of the employment market. In many countries experiencing retrenchment of staff in the public sector many household members who have previously worked in the public sector undertake a variety of activities in the 'informal' private sector. At the same time children may drop out of school to become members of the work force thus both saving expenditure and increasing income.

The availability of and access to assets affects the strategies of households. For example households with an extra room may rent the extra space out for cash, and those with easy access to natural resources often use them - by, for example, practising urban agriculture on marginal land. Furthermore it is possible that the outcomes of particular strategies can maintain, deplete or strengthen the asset base of the household. Thus sending children out to work early will limit their access to education, thereby undermining their long term livelihood. On the other hand communities investing in social capital, by building local institutions such as crèches or clinics, build assets in the long term by investing in children's health and education and freeing up women's time to undertake paid employment or other productive tasks.

Strategies are more than a simple response to the assets available and contextual factors however. They are also the result of men's and women's objectives and choices. These in turn are affected by individual and cultural preferences (although this, in part, may be determined by context). Cultures not favouring women working outside the home will determine, in part, the types of productive activities that women or men undertake. In many countries certain foods (for example rice in much of south east Asia) are ascribed particular value, meaning that a disproportionate amount of household budgets are spent on this food rather than cheaper, but less valued alternatives. In addition, cultural preferences or habits determine key strategies such as household types, as the regional disparities between large extended households and other types,

such as single female headed households, illustrates.

In addition, some development policies may undermine livelihood strategies. The processes of structural adjustment have affected urban survival strategies in many areas, with results in some countries such as overall reduced consumption and increased labour force participation by children⁴ (Rakodi, 1993). Policies should therefore be reviewed in the light of their impact on the livelihood strategies of the poor, who should not be expected to make untenable sacrifices in the interests of national development.

4.4 Livelihood outcomes

The livelihood outcomes of individuals or households are the results of people's success or failure in transforming, through a variety of strategies, the assets available to them into income or basic goods and services.

Livelihood outcomes can be aggregated and seen in relation to their position on a continuum between vulnerability and security (Moser, 1998). Thus the livelihood strategy of an individual or household is more or less vulnerable to unexpected changes which could affect his/her/its asset base. A sustainable livelihood is one which is secure and guards people against shocks and stresses. For example, a household which depends on the work of only one man or woman is generally less secure than one where there is more than one person working.

As some household members have more power and influence, outside or within the household, than others, livelihood outcomes may not affect all members in the same way. For example where only male household heads have legal standing (e.g. in regard to credit agreements or property deeds) a household's security will depend on both the man's commitment to the household and his continued good health. Some members may therefore be more secure and others more vulnerable in regard to livelihood outcomes.

Many of the underlying causes of the vulnerability of the poor relate to the context in which they operate. This is explained in more detail below.

4.5 Context

Because the context in which poor household members pursue their livelihood strategies is a key determinant of the types of assets available to them and the types of livelihood strategies that they are likely to pursue - and thus, in the end, of the security or vulnerability of their livelihoods - it is the context which makes the SUL distinctive.

As explained earlier, according to a sustainable livelihoods approach the situation of the world's poorest people is defined not only by their lack of wealth but by their insecure and precarious position in terms of coping with stress and shocks more generally (Chambers, 1995 Moser, 1996, Carney, 1998, Watkins, 1995, UNCHS, 1996, Beall, 1999 Wratten, 1995). The high cost of living is one of many exogenous factors which can result in insecurity or vulnerability - others include legal status, the environment, or social and political exclusion. It is now generally accepted that understanding the vulnerability of the poor and the ways that they cope with it is essential for well-informed policy decisions (Carney, 1998 Moser, 1996; 1998 Dersham and Gzirishvili, 1998 Watkins, 1995).

Vulnerability has been defined as *the insecurity of the well being of individuals or communities in the face of changing environments (ecological, social, economic, political) in the form of sudden shock, long terms trends, or seasonal cycles* (Moser, 1996). It is generally accepted that vulnerability has two dimensions. Firstly, the scale of the response to external shocks and secondly how quickly each household's system of livelihood tactics recovers from shocks (Chambers, 1995, Moser, 1998).

The analysis of vulnerability, therefore, involves not only identification of the possible threats to the household's welfare but also requires an assessment of the resilience of households in exploiting opportunities, resisting or recovering from negative effects. The main means of resilience are assets which act as a buffer against vulnerability (Moser, 1998 Carney, 1998). Vulnerability is therefore closely linked to access to and control over assets.

In an urban setting poor men and women are likely to be vulnerable to certain specific shocks and crises. The main sources of this vulnerability vary from city to city - but certain elements appear common to many urban poor residents. These are: the informal legal status of many and poor men and women in cities; poor living environments; and a dependence on the cash economy for basic goods and services. Box 4 summarises some of the causes and effects of these forms of vulnerability.

The forms of vulnerability outlined in Box 4 can alter in response to new policy approaches and changing conditions. For example the insecurity of informal residents with no legal tenure is variable. Evictions threaten the livelihoods of many urban residents (Audefroy, 1994, PHILSSA/UPA 1995), and can have wider ranging livelihood impacts than just the loss of housing. Evicted households may also lose access to key markets or livelihood resources as they are moved to other locations, and the disruption of whole communities poses significant threats to social networks and capital.

However, in some cities...*while official policies often declare slum and squatter settlements to be illegal and potentially subject to eviction without warning, in selected areas governments have given implicit recognition to such communities by providing them with basic services and limited infrastructure* (Douglass, 1998, p. 125). Such positive policy approaches by local authorities can diminish the vulnerability of the poor by responding to their need for security.

Another factor which has affected vulnerability in many cities has been structural adjustment policies. These have increased the vulnerability of many poor urban households, through the loss of secure public sector employment, removal of state subsidies on basic goods and services and the affect of free market policies on prices and employment. Whether or not these processes have affected the poor depend on how successful state welfare and employment systems were in reaching the poor in the first place. In India, for example, there is evidence that very little of the funds devoted to the poor ever reach them - meaning that reforms have more of an effect on the middle classes than on the poor (Harris et al, 1993). Where loss of public subsidies have affected the conditions of the poor, socially sensitive approaches to structural adjustment have been introduced since the late 1980s in an attempt to diminish the vulnerability of urban poor groups dependent on the support of government subsidies in a cash economy. This has been achieved by targeting, instead of completely removing, public subsidies and transfers - an approach which has been successful in some countries (Mehrotra and Jolly, 1997).

Box 4: Vulnerabilities common among the urban poor

Legal status	
Informal employment	Those in informal employment generally lack labour rights. They are therefore susceptible to sudden unemployment, and the dangers accruing to unprotected working conditions (long hours, poor pay, insanitary or unsafe conditions) (Potter and Lloyd, 1998)
Shelter and land	Urban residents living on illegally occupied land or in informal low cost rental housing lack legal tenure rights. As such they experience poor housing quality and face the threat of summary eviction ⁵ . Linked to housing rights, those residents undertaking urban agriculture may also lack legal tenure, and risk losing their land and crops.
Political rights	Informal residents lacking legal registration may be disenfranchised and excluded from political decision making and, in addition, may suffer from police harassment and bureaucracy (Wratten, 1995)
Services and infrastructure	Lack of legal status may also limit the access of informal residents to basic social services (health and education), or financial services (e.g. bank loans) ⁶ . In addition, the prevalence of illegal connections to infrastructure (such as electricity or water) mean that many informal residents are vulnerable to the sudden withdrawal of key services, and may also be fined or punished in some way for illegal use of these services.
The local environment	
Physical environment	Poor living environments often endanger the lives and health of the urban poor, especially where they are forced to live and work in marginal areas through lack of cheap alternatives. This creates further vulnerability, as ill health undermines one of the chief assets of the urban poor -their labour (Satterthwaite, 1997)
Social Environment	As noted in section 3.2., the social context in cities may be characterised by crime, fragmentation and other social problems which will reduce the ability of households to support on another in order to further their livelihood strategies (Wratten, 1995). In addition, poor men and women may be excluded from livelihood opportunities due to differences such as culture/ethnicity which result in their exclusion from social networks (Beall and Kanji, 1999)
Dependence on the cash economy	'Free' goods and services, such as common land, clean water and fuel, are rare in cities. Most of the basic living needs of urban residents must be paid for in cash - making the urban poor particularly vulnerable to market vagaries such as inflation, and the removal of governments subsidies (Moser 98). In addition dependence on the cash economy frequently means that poor households are vulnerable to debt (especially where they cannot rely on informal on social networks for loans). Borrowing, normally at usurious rates, may lead to long term indebtedness with disastrous results such as bonded child labour.

Vulnerability relating to poor environments may also be diminished as a result of housing upgrading, environmental projects or community efforts dealing with issues such as sanitation. The Orangi Pilot project in Pakistan is an example of a locally based and funded initiative which has been highly successful (and replicable) in installing basic

sanitation infrastructure, with the resultant significant improvements to local environments (IIED, 1995).

Nonetheless some of the most significant threats posed to poor men and women relate to individual factors which are difficult to address at the broad policy level - for example the death of main bread-winning family

members, loss of housing and assets due to natural disasters, or loss of assets as a result of theft or chronic illness. In Sub-Saharan Africa, for example, the HIV epidemic has led to the dependency of children on grandparents in many households a generation of adults is lost. In such cases only the availability of alternative assets may prevent extreme poverty. Those living without access to a range of alternative assets are, therefore, the most vulnerable.

Not all contextual factors are beyond the deliberate control of poor men and women, who may make efforts to adapt their environment to be more in line with their needs. They may achieve this for example by grassroots political demands for and local support of social infrastructure such as soup kitchens and child-minding facilities or for basic infrastructure such as sewerage, as was the case in the Orangi project (IIED 1999). Figure 1 therefore shows the contextual factors as a continuum ranged between two notional poles; transformable and non-transformable. While the collective actions of individuals and households can ultimately affect even the most 'distant' factors, such as global economics or environmental patterns, the ability of households to *deliberately* transform contextual factors through household or community efforts, as per the examples above, are far more limited.

cars, and disposing of human waste and solid waste in rivers, which leads to environment degradation, thereby transforming the local environment.

Another key factor determining whether the context in which the poor undertake their livelihood strategies is supportive or hostile to their efforts is the livelihood strategies of the rich. If the poor's access to various resources is severely restricted due to the over consumption by wealthier groups, then the context of livelihood strategies cannot be divorced from the wider picture of inequality.

The promotion of sustainable livelihoods is limited because a large proportion of the contextual factors determining assets and choices available to the urban poor are difficult to transform - both by the urban poor, or by agencies attempting to intervene on their behalf.

Some key contextual areas affecting the livelihoods of poor men and women in urban areas are outlined in Box 5.

Another key contextual factor is that part of the context that determines the extent of people's access to assets - the policies, institutions and processes through which people can gain access to assets, or which act as barriers to their access. In urban areas these kind of intermediary institutions may include public sector agencies (e.g. social services).

Box 5: Examples of selected contextual variables			
	more transformable		less transformable
	poor men and women	agencies & government institutions	
Physical	local level waste collection	physical infrastructure	natural disaster e.g. volcanoes
Political	community based organisations	legislation	international legislation (e.g. WTO)
Economic	'informal' credit	access to credit	world prices of primary products
Socio cultural	intra household relationships	gender stereotyping	religious norms

Source: Compiled by the authors.

Even those contextual factors which cannot be deliberately transformed by individuals or small community groups may be unintentionally transformed by the collective impact of men and women's livelihood strategies - one negative example of this process is the water pollution resulting from the habit of washing people, clothes and

4.6 Men's and women's short and long term objectives

The selection and design of livelihood strategies relates to women and men's objectives - what type of livelihood they want to achieve and what area of their livelihoods they prioritise. Livelihood strategies are

therefore based on the values and priorities of the men and women who pursue them, rather than simply on the options and resources available to them.

In practice however, and particularly for poor men and women, many of these objectives will be constrained by the options available and by the pressure of immediate needs. In this light there often needs to be a distinction made between short term, pragmatic objectives, and longer term, less bounded objectives.

Short term objectives are generally more linked to the concept of 'survival strategies', as they are constrained by the need to address immediate pressures. Short term objectives may therefore include features such as the need to raise financial resources from day to day (to buy food, pay loans, pay rent etc.). In contrast longer term objectives can be more idealised and distanced from day to day pressures - more of an overall 'game-plan' than distinctive day to day actions. Long term objectives may include investments in education or health, purchase of physical capital (such as housing or vehicles) or strategies such as migration to other areas.

The pressure of short term objectives may be in conflict with longer term objectives; for example, meeting day to day expenditures as a short term objective may clash with longer term, more 'developmental' objectives such as educating the household's children (i.e. if children are taken out of school to cut costs and raise household income through child labour)

A focus on women and men's objectives is a vital component of a sustainable urban livelihoods model if the model is to reflect the SL stress on the need to understand livelihoods from the point of view of poor men and women themselves. A focus on people's own objectives should help to avoid assumptions about what they prioritise and why they choose to undertake particular livelihood strategies.

4.7 Indicators

4.7.1 Purpose and nature of SUL indicators

The characteristics and range of indicators required for use with the SUL model are determined by the purposes for which they are used and the underpinning principles of the SUL approach.

The SUL model requires a range of indicators for four main purposes:

- *System analysis: understanding how specific livelihood systems function, or fail to function.* Indicators are needed to

highlight the constraints on individual and household attempts to achieve sustainable livelihoods. They can also, by assessing assets and contextual factors, contribute to an understanding of the conditions which result in vulnerable or secure livelihoods;

- *Intervention: determining appropriate points for intervention by DFID or other agencies.* Indicators are needed to highlight the weaknesses or strengths within individual, household or community livelihood systems. This information can be used to help policy makers decide where interventions can best contribute to the promotion of sustainable, secure urban livelihoods;
- *Evaluation: assessing the effects of policy interventions on livelihoods.* The efficiency and effectiveness of policy can be evaluated using indicators to assess the changes in vulnerability or security of households and individuals before and after interventions.⁷ Successful interventions will show an improvement in security, such as a steadier, more certain income, greater asset bases, or improved health indicators.
- *Comparison: provide broad measures for comparison between countries or regions or for use in advocacy.* Composite and universal indicators, discussed in section five, can be used for comparison of livelihoods among regions, areas or communities and over time.

The SUL model's basic principles: (its complex integrated nature; its contextual specificity; the acknowledgement of livelihoods as a process rather than an end state; the importance of intra household relationships of men and women as well as individual households and its emphasis on men's and women's own priorities) means that the SUL model should incorporate indicators which can assess:

- short, medium and longer term change;
- a wide range of livelihoods;
- both the complexity and local specificity of livelihood systems;
- broad comparison among communities, regions and countries;
- the disaggregated differences among individual livelihoods according to identities such as age, gender or ethnicity both at the community and intra household levels; and,
- qualitative aspects of livelihoods such as participation and vulnerability

The sustainable livelihood model stresses the dynamic nature of livelihoods and the importance of change in people's lives. This

implies, as noted by UNDP (Singh and Schmetzer 1997) that any attempt at evaluation of livelihoods requires indicators which can be used to assess short, medium and long term changes. Moreover (ISSD, 1999) because sustainable livelihoods are processes and therefore are likely to change their character over time, it is also important to have a portfolio of indicators so that appropriate indicators are available to assess a wide range of livelihoods.

In addition to the need for context specific indicators there is also a need for more generic indicators which could be used for broader comparisons and advocacy purposes. One example of such an indicator is that suggested by UNDP (UNDP, 1998) - the use of a vulnerability line and indicators similar in approach and format to the UNDP standard poverty line and indicators (UNDP 1995). The need to take account of both local specificity and complexity and the need for broader measures for comparison and advocacy has led to the suggestion of using a composite index with specific weightings, along with location and context specific indicators to assess the impact and accountability of programmes and projects (ISSD, 1999).

4.7.2 Information gathering for sustainable livelihoods indicators

Both quantitative and qualitative data are required to inform SUL indicators. Quantitative indicators and composite measures can draw on a variety of secondary data sources, including existing national and local data and the findings of quantitative research. One such source is information gathered for participatory poverty analyses (PPAs), which provide a good overview of the state of poverty in specific countries at the macro-level and look at how poverty is localised or how livelihood systems have fared in the face of increasing or decreasing levels of poverty.

As the SL approach stresses the importance of individual men's and women's opinions and attitudes in designing and executing their own livelihood strategies ideally indicators of the principal assets and sources of vulnerability should be identified by poor men and women, or at least representative groups of poor men and

women, themselves (UNDP 1999). To make this possible, the initial selection of indicators should be part of a participatory/ consultative process. A group of information gathering approaches which could be used to ensure this are the 'participatory inquiry' approaches.

It is recommended that three levels of indicator are developed, incorporating participatory/ qualitative indicators at the project specific level (to illustrate local people's knowledge and local conditions), and both individual and composite quantitative indicators for purposes of advocacy or comparison for use in SUL projects in general. These three approaches should not, however, be entirely free standing - the issues prioritised during localised participatory research should act as a guide for the issues to be included in individual and composite quantitative indicators.

4.7.3 Existing evaluation models and indicators

Although the development of methodologies for evaluating SL models is still at an early stage, nevertheless various agencies have already begun work in this field. The names of four methodologies which do address livelihood issues are:

- Singh and Schmetzer's sustainable livelihood methodology.
- the UNDP PAPSL (Participatory Assessment and Planning for Sustainable Livelihoods)
- Moser's *Assets Vulnerability framework*
- CARE's *Households livelihood security* approach

The nature of these methodologies are summarised in Box 6. which brings together key attributes of the four SUL indicator models and looks briefly at the differences in their coverage and approach. The one clear area that all of the models have in common is indicators of assets - which may be linked to the fact, mentioned earlier, that assets is the one key area of the SL model which can be illustrated with relatively straightforward indicators.

Fuller details of each methodology is given in the Appendix.

Box 6: Nature of selected evaluation methodologies

Methodology	Type of analysis				Information	Focus	Comments
	Systems analysis	Where to intervene	Evaluation of interventions	Comparisons			
Singh and Schmetzer (1997)	•	•	• (weaker)	• (weaker)	Qualitative/descriptive Context specific	Access to assets Strategies Context	4 step methodology implemented in parallel or sequentially. Step 1 linked to a set of indicators of assets and livelihood strategies. Steps 2-4 linked to context and strategies
PAPSL* UNDP (1998)	•	•		•	Qualitative Quantitative, including composite measures Context specific Bench marked against existing secondary data	Assets Strategies Livelihood outcomes	Focus on understanding assets and strategies. Little or no attempt to develop measures of vulnerability or security.
Moser (1998)	•		•		Qualitative/descriptive Quantitative	Livelihood strategies to illustrate vulnerability Assets	Only model emphasising vulnerability/security
CARE (1999)	•	•	•		Qualitative: Knowledge Attitude Practice Quantitative	Access to assets Empowerment Livelihood outcomes	Project specific Micro level focus Villagers develop own indicators

Compiled by the authors

*Participatory Assessment and Planning for Sustainable Livelihoods

5. IMPLICATIONS OF THE SUSTAINABLE URBAN LIVELIHOODS APPROACH FOR POLICY AND OTHER INTERVENTIONS

5.1 Introduction

How poverty is understood determines the way policy makers and planners respond to it. A sustainable livelihoods approach adopts a distinctive perspective on the understanding of urban poverty and how to intervene to improve the conditions of the poor. This paper has discussed the nature of this approach and highlighted its key characteristics.

An understanding and acceptance of these characteristics by policy makers should affect the way that they address the eradication of poverty and therefore has various implications for urban interventions. The over-riding aim should be to support the poor in securing sustainable livelihoods. This will include a wide range of interventions including, where possible, support for the generation of secure paid employment. Particular care should be taken to avoid actions that might increase the vulnerability of poor individuals and households. A detailed analysis of these implications is given below. The broad implications for policy include a need to:

- see people as citizens not clients;
- acknowledge the contextual specificity of livelihoods tactics;
- take account of structural constraints on sustainable livelihoods which limit men and women's capacity to undertake livelihood activities
- recognise and support multiple livelihood strategies;
- address constraints on livelihood strategies; and
- consider poverty as a process.

5.2 Citizens, not clients

There has been a tendency in development policy to view urban people in poverty as undifferentiated and passive groups. The sustainable urban livelihood model shows that poor men and women are in fact active agents responding to social and economic change (Beall and Kanji, 1999). Poor men and women themselves are central in developing their livelihood strategies. There is therefore a need to consider them not just as clients but as citizens who have fundamental rights to democratic accountability and to a role in decision-making about urban management. Urban interventions therefore need to:

- be participatory (Goldman, 1998, Miltin, 1999);
- address priorities identified by men and women from poor communities (Moser, 1996), and;
- take account of the collective actions of households and communities and established livelihood systems of the poor (Beall and Kanji, 1999).

While the sustainable urban livelihoods approach highlights the importance of human capabilities and agencies, policies should not obscure the vulnerabilities of people in poverty or over emphasise the options available. Policy makers need to take account of the important contribution the poor can make but at the same time be aware of the need to support their contributions with the relevant legislation and resources if such initiatives are to be successful.

5.3 Contextual specificity of livelihood tactics

Men and women's livelihoods strategies are context specific as they respond to local conditions. Furthermore socially constructed identities such as gender vary from place to place and time to time (Beall and Kanji, 1999) as do the needs of specific households. Policy makers therefore need to:

- make context specific interventions;
- incorporate an understanding of gender and household relations;
- disaggregate specific groups of men and women in order to cater for their particular livelihood needs;
- address the issue of particular urban poor groups, such as female headed households and their children (Moser, 1996).
- be aware of the importance of local cultural values in selecting livelihood strategies, and the possible conflicts that may arise from these values

While recognising the significance of social relations at the micro-level and (Beall and Kanji, 1999) policy makers also should be aware of the need to undertake initiatives, when appropriate, at the broader community and settlement level (Satterthwaite, 1997).

5.4 Significance of structural constraints

Households are linked into the larger scale economic, social and political processes operating in the city (Beall and Kanji, 1999). Policy makers therefore need to take account of wider and longer term social and economic

change, such as macro economic policy, on livelihoods and not just the immediate micro situation. Moser (1996), for example, recommends long term support for communities' basic infrastructure rather than short term transfers to support household efforts. At a wider scale there is a need to address development models which make people dependent for sustenance on jobs that are linked to unpredictable global financial markets and corporations (Korten, 1996). While acknowledging the needs of increasingly global markets, policy makers can, for example, foster social protection at local levels, using tools such as targeted subsidies, or protection for domestic migrant labourers (Cheng, 1999).

Another set of structural constraints which must be taken into account are those imposed by the existing status quo and those powerful interest groups with policy making roles. It would be naive to assume that all the interventions proposed by a sustainable livelihoods approach would be gladly accepted by the establishment. The promotion of sustainable livelihoods requires certain political processes in order to promote the interests of the poor and undermine the influence of local special interest groups. These processes include the 'neutralisation of the state' (i.e. breaking the integrated structure of power at local and national levels) and resistance to the monopoly of power by the local level elite groups. Clearly such approaches would not easily enlist the support of the state or of powerful interest groups, and as such would be an unrealistic point of entry for bilateral donors.

5.5 Recognition and support of multiple livelihood strategies

Urban livelihood strategies are complex and diverse. Policy should therefore approach urban poverty through a devolved non-sectoral system (Goldman, 1998). Strategies and sectoral interventions need to be integrated to deal with social, economic, political and environmental problems in a co-ordinated way. Policy interventions can support livelihood strategies in a variety of ways.

In many urban contexts increased income for low income households may be the most effective means of addressing deprivation and helping the poor to increase their asset base or to find (or build) better quality and more secure accommodation (Satterthwaite, 1997). The problem is, of course, that this is a far from simple task, and is something that governments and

development organisations have been trying, and frequently failing, to do for many years. However, policy makers can adopt pro-poor policies and interventions which can help the poor to increase their income. Some schemes have been successful in removing major obstacles which have limited poor men and women's income generating capacities. Thus, for example, the Grameen Bank's delivery of cheap credit has improved the access of poor men and women to the financial resources they need for undertaking micro-enterprises.

As social capital is a key to the ability of many households to cope with economic crises and reverse downward spirals (Moser, 1996) policy should encourage and support social networks (IISD, 1999) and work to maintain and expand various types of social capital (Dershem and Gzirishvili). Thus, for example, policy makers should lend support to initiatives such as community soup kitchens, and ensure that communities resettled during housing upgrading initiatives or site clearance for infrastructure have the chance to move as a group to the same resettlement site in order to maintain their existing social networks (Davidson, 1993).

However, as noted in section 4.3, the assumption that all survival strategies are inherently a good thing and should be supported is not tenable - many livelihood activities or survival strategies represent a violation of human rights (child labour and discrimination against girl children in dividing household resources) and are not sustainable in the long run. While livelihood strategies must be sustainable or reliable for those undertaking them, it is also necessary to consider whether or not they affect the rights of or have a negative impact on other groups. Many of the livelihood strategies adopted by wealthier men and women, for example, may provide them with secure livelihoods, but may also have a negative impact on the poor by limiting their access to already scarce resources.

In addition there is a need to distinguish between short and long term livelihood strategies. Some of the livelihoods strategies adopted by poor men and women for pragmatic reasons may provide for incomes in the short term, but may not be sustainable in the long term. For example, reduced consumption will affect people's health in the long run and reduce their ability to undertake productive tasks. Policy makers should therefore have an understanding of all the livelihood strategies undertaken by men and women, but not necessarily give blanket support to all these activities -in many instances a more useful approach would be to explore viable alternatives.

5.6 Constraints on livelihoods activities

Policy should help remove the constraints which are limiting people's ability to develop livelihoods.

A variety of constraints block men and women's ability to attain sustainable livelihoods. Many constraints are particularly significant in urban areas. Authors discussing sustainable urban livelihoods note a variety of areas of concern. For example, land and land tenure are a key constraint, and policy should strengthen the land rights of the urban poor (Mitlin, 1999). In addition there is a need to facilitate access to infrastructure and basic services such as, sanitation, solid waste collection, electricity, road improvements health centres and schools (Mitlin, 1999). In addition the provision of effective public or non-profit private provision for schools, healthcare and child care also lower the income needed by households to avoid poverty and generally mean increased employment (Satterthwaite, 1997).

Removal of obstacles to men and women's livelihoods activities may require legislative change. As noted earlier in section 4.4, much of the vulnerability of the urban poor derives from situations which undermine their legal status and rights. Where feasible policy should be adapted to take account of this and to promote the secure access of the poor to livelihoods and assets. It should be noted, however, that legislative change is not sufficient in itself as even where existing pro-poor legislation exists it is frequently not put into practice (PHILSSA, 1995, Onstad, 1997). Legislative change must therefore be supported by commitment to enforcement if it is to have any effect on the conditions of the poor. In addition, there is a need to acknowledge the importance of institutional arrangements that allow people to achieve sustainable livelihoods. Such arrangements should improve the inclusion of marginalised groups in, for example, credit systems, markets, and tenure (UNDP - SL programme) as well as institutional backup for social support networks (Dershem and Gzirishvili, 1998).

5.7 Poverty as a process

Livelihoods are dynamic and adapt rapidly to changing local conditions. Policy makers therefore need to take account of this by adopting a similar flexibility and ability to respond to changing conditions. This flexibility should be within a framework of action which adopts a long term perspective. Thus it should avoid, as far as possible, a crisis management response to short term changes in conditions.

5.8 Points of intervention

DFID, as with rural livelihoods, can usefully intervene in urban livelihoods either by supporting individuals and households in building up a secure asset base or by making the context in which livelihoods are undertaken more supportive of (or less detrimental to) the livelihood strategies of poor households (Carney, 1998).

5.9 Types of intervention

Ideally interventions, in accord with the principles of the sustainable livelihoods approach, will be participatory, locally led and address the priorities of poor men and women. However in some cases such individuals and groups may benefit from support in the design and execution of their livelihood strategies. Such support may be no more than providing information, through a variety of ways, on successful strategies which have been used elsewhere in similar communities. Such strategies may need to be adapted by the community to their local context. A database of such successful and replicable strategies would be a useful resource which could be developed by DFID.

In some cases where poor men and women do not have the power to achieve needed structural transformations, as where there is a need to change legislation or regulations, there may be a need for more direct interventions by DFID, government agencies or NGOs to bring about structural transformations. This was the case for example with the social conciliatory boards and commissions of Sri Lanka and Poland in which a lower tier to the judicial system was added, making access to justice for the poor easier (Onstad, 1997).

6. The way forward

Sustainable Urban Livelihoods model that has been outlined in this paper is a generic model. Clearly, because the SL approach stresses the importance of locally specific conditions, and the views and priorities of poor men, women and children themselves, deeper understanding of SULs can only come from the study of and work with a large number of cases on the ground. Furthermore, a full understanding of the differences between urban and rural livelihoods can only come from a detailed review of field experience.

In this light there is a need for field research. The aggregated experience of a large number of specific cases will illustrate common SL themes in urban poor communities in general. For example, which assets are most valued and/ or least

accessible to poor men and women? What are the main sources of vulnerability in urban communities? What are the key contextual factors that support or hinder poor urban men and women in their livelihoods strategies? The answers to these questions will be invaluable in helping policy makers in DFID and other organisations to design and implement pro-poor interventions in cities.

There is also a need to further develop SL indicators which can be used to assess key elements of the SL model, principally access to and control over assets, vulnerability/ security of livelihood conditions, positive or negative contextual influences and the participation and empowerment of local people. Ideally this work should be undertaken in co-operation with men and women whose livelihoods are the subject of concern.

Two key areas around indicators justify particular consideration. The first relates to the need to develop indicators for conceptually difficult areas. The second is concerned with the development of generic/universal single or composite indicators on the basis of case experience.

- *Conceptually difficult areas.* Some areas of the SL model, such as *access to and control over assets, vulnerability/ security of livelihoods* and the positive or negative influence of *contextual factors*, as well as the model's heavy stress on the importance of *participation and empowerment* do not lend themselves to easy quantitative measurements. It is recommended that research should be undertaken into how these areas can be assessed and the indicators that can be used in such assessment.
- *Generic/universal single or composite indicators.* In order to reflect the realities of poor women, men and children, the indicators that make up a composite SUL indicator should be based on the aggregated experience of urban case experience - i.e. the indicators that together comprise a composite SUL indicator or indicators should be those that have been consistently highlighted on the ground during participatory research.

It is recommended that a large portfolio of cases be researched to obtain knowledge of the indicators that people generally prioritise. This knowledge should then be used to develop universal single or composite indicators.

APPENDIX

EXISTING PRACTICAL SUSTAINABLE LIVELIHOODS MODELS

1. Introduction

Although the development of practical sustainable livelihoods is still at an early stage, nevertheless various agencies have already begun to develop models which can be used in the field, drawing on indicators to evaluate the extent of, and changes in, the sustainability of livelihoods. While some of these indicator based models for sustainability are already relatively well established⁸ these mainly focus on *environmental* sustainability and do not deal with issues related to livelihoods and livelihood security.

However four models which do address such livelihood issues are:

- Singh and Schmetzer's sustainable livelihood methodology.
- the UNDP PAPSL (Participatory Assessment and Planning for Sustainable Livelihoods)
- Moser's *Assets Vulnerability framework*
- CARE's *Households livelihood security* approach

2. Singh and Schmetzer

Singh and Schmetzer (1997) have proposed a methodology with four steps which can be implemented in parallel or sequentially.

1. Identification of the assets, entitlements, activities and capabilities that people are currently using for their livelihoods. These include land ownership, birth-rights and other forms of social capital, like allegiances and alliances which can best be recorded through participatory research techniques.
2. Identification of statutory policies which either disrupt or reinforce local adaptive strategies.
3. Assessment of key technologies that contribute to livelihood systems. Linked with which should be the establishment of a technology information bank, including best practices and innovative approaches to problem solving.
4. Identification of investment patterns, micro-finance systems and the possible creation of new livelihood opportunities.

The four steps outlined are linked to a set of indicators of assets and livelihoods strategies (step one) and indicators of context and strategies (steps two to four). In a large part these steps seem to require information that is detailed, context specific and best collected using qualitative methods. These indicators could be used to help understanding particular livelihood systems and identifying points for intervention. However the scope of this methodology for evaluating the effects of interventions and measuring change over time or for broad based comparison between different areas is weaker, as the areas examined (e.g. policies, technologies) lend themselves principally to qualitative or descriptive data.

3. PAPSL (Participatory Assessment and Planning for Sustainable Livelihood)

Another SL methodology is the Participatory Assessment and Planning for Sustainable Livelihood (PAPSL) developed by the UNDP (1998). PAPSLS aims both to profile community characteristics and, at the same time, to empower people through their opportunity to set policy priorities and draft community action plans. SL indicators used in PAPSLS projects are based on asset use and are primarily qualitative in nature, identifying primary, secondary and tertiary livelihood strategies and the assets used for these strategies (UNDP 1998).

While the indicators used are primarily qualitative and context specific, it is recommended that they are bench-marked against existing indicators (from secondary data) for associated areas such as poverty, nutrition or food security. In this way it is possible to give an indication of how a specific community is faring compared to a national / sub-national average.

One composite measure which is used to benchmark context specific SL indicators is the Capability Poverty Measure (CPM - Human Development Report, 1996). Capability poverty means people's inability to attain basic levels of essential human 'functioning' or achievement (i.e. people who are

malnourished, suffer from preventable disease or inadequate shelter are termed capability poor). Basic areas addressed by CPM are therefore linked to the SL focus on access to and use of assets. The CPM includes three equally weighted indicators: the percentage of under five children who are underweight; the percentage of adult women who are illiterate; and the percentage of births unattended by a trained health worker. This can act as a benchmark to assess whether livelihood strategies are contributing to overall improvements in a) the human capabilities of households; and b) access to the means to capabilities. In addition it is suggested that other specific capability indicators can be used as a benchmark for SLs, including:

- *Income/consumption poverty*;
- *Direct measures of human capabilities* such as children under five who are underweight / stunted/ wasted/ low birth weight babies or adult literacy;
- *Indirect (proxy) measures of human capabilities*, net primary enrolment ratio, primary school completion rate, immunisation rates health institutions;
- *Proxy Indicators for Access to Means of capabilities*, access to potable water/ sanitation/ primary health care, access to primary or secondary education; and
- *Human Capability and Assets* (direct indirect and proxy measures), ownership of land, livestock, equipment, access to micro-finance services, number of people per room, percent of homes with piped water.

The PAPSL approach attempts, therefore, to use qualitative, context specific indicators to give an in depth understanding of specific livelihood systems. In addition, through bench-marking with existing secondary data there has been an attempt to provide a basis for comparison across communities and areas and over time. However, it should be noted that the main focus is on an understanding of assets and strategies, while little attempt has been made to develop measures of vulnerability or security.

4 Moser - Vulnerability matrix

Moser (1998) proposes a vulnerability matrix which could act as a structure for indicators which are used to assess vulnerability and assets (see below). This matrix lists a variety of household responses to increased vulnerability. This model could be used as a basis of indicators for vulnerability, and thus sustainability, where an increased incidence of these strategies can be taken to indicate that households are in a more vulnerable condition. However this is not unambiguous as an indicator of vulnerability as the household actions that indicate vulnerability are also attempts to increase security. Thus if a community is characterised by growing labour force participation by women, household income diversification and increased community activity it could be taken as a sign that households in that community were in a state of growing vulnerability. However at the same time, these actions could help to reduce that vulnerability, making the direct relationship between these indicators and vulnerability unclear. Nonetheless, Moser's model is important as the only model which attempts to directly address indicators for vulnerability, rather than focusing solely on assets or livelihoods strategies.

Vulnerability matrix	
Type of Asset	Household Response
Labour	<ul style="list-style-type: none"> • Increase in the number of women working, mainly in the formal sector • Allocate a disproportionate share of women's time to meet increasing responsibilities • Allocate more time in obtaining services in response to declining quality of infrastructure • Increase reliance on child labour
Housing	<ul style="list-style-type: none"> • Diversify income through home based enterprises and renting out • Adopt inter-generational plot identification strategies to accommodate children's households
Social + Economic Infrastructure	<ul style="list-style-type: none"> • Substitute private for public goods and services
Household Relations	<ul style="list-style-type: none"> • Increase reliance on extended family support networks • Increase labour migration and remittances
Social capital	<ul style="list-style-type: none"> • Increase reliance on informal credit arrangements • Increase reliance on informal credit arrangements • Increase informal support networks among households • Increase community level activity

5 CARE - Household livelihood security

The Household Livelihood Security (HLS) model is an approach which the NGO CARE has developed. While similar to the DFID sustainable livelihoods model developed by Carney, the HLS has a stronger focus on the household/ micro level.

The indicators developed by CARE for Household Livelihood Security (HLS) reflect the emphasis on a household based analysis. As a result the majority of the indicators used to assess HLS are qualitative, and appropriate for use on a local project-specific scale. Broad indicator areas include food security, income and expenditure, employment, status and access, as well as indicators on knowledge and attitudes, although the majority of indicators used are project specific.

One example of a project specific set of indicators produced under the CARE HLS approach is the village self monitoring process used for the Lesotho Training for Environment and Agricultural Management (1999). In this system village members select their own criteria for measuring change and evaluating interventions in their own communities. The indicators selected illustrate impact at three levels:

- Knowledge, Attitude and Practice (KAP) changes in response to project inputs;
- the effect KAP changes have on farm production and marketing; and
- overall impact on household livelihoods

The specific indicators selected by villagers for each of these categories are outlined in the following boxes:

Knowledge, Attitude and Practice (KAP) changes in response to project inputs

Knowledge

- increased knowledge on use of locally available resources
- more understanding of technical concepts and why things happen
- understanding of techniques and practices

Specific examples of increased knowledge on:

- use of organic matter in reduction of soil erosion
- use of organic matter to reduce loss of nutrients through leaching
- use of organic matter to counteract effects of drought
- use of compost where manure is not available
- factors that affect decomposition rate

Attitudes

- before we only produced without any observations, now there is a web of perceptions - many ways to see something
- feel like I am in the new world and spiritually grown up
- feeling of improvement and development
- motivated to go back and apply this new knowledge
- feel different after this workshop, e.g. thinking ability has multiplied, understanding has developed
- feel inferior before, now feel confident
- feeling powerful
- acceptance of others knowledge and willingness to share knowledge
- before sceptical about training/ workshops focused on experimentation and appreciated method of learning

Practices

- used to farm traditionally, but will now practice other learned aspects of farming
- will apply learning and share with other farmers
- will combine new learning to improve on what is already practised
- inspired to grow more than before
- will abandon chemical fertilisers and use natural and locally available resources

Source: Drinkwater, Michael and Tamara Rusinow, 1999, "Application of CARE's livelihoods approach, presentation for NRAC 1999", CARE, London.

The effect KAP changes have on farm production and marketing

- increased grain yields from x - x after 2 years (amount x depends on individual fields)
- home gardens and fields produce more as a result of new practices
- increases in yields will result in sale of surplus and generate extra income
- ability to market produce
- decrease in livestock diseases, resulting in better manure for fields
- increase in wool production from 4 to 14 bags
- increase in goat reproduction as a result of better care, i.e. at least 10 kids born

Source: Drinkwater, Michael and Tamara Rusinow, 1999, "Application of CARE's livelihoods approach, presentation for NRAC 1999", CARE, London.

Overall impact on household livelihoods

Food security

- increase/ improvement in yields will result in improved food security through direct consumption of produce and indirectly through sale of surplus
- poor families are food secure, i.e. have enough stores and income to eat throughout the year
- increase in amount of daily meals and improvement in quality of meals
- improved nutritional status will result in improved health, i.e. balanced diet consisting of beans, meat, vegetables etc.
- decrease in diseases caused by malnutrition

Income and expenditure

- Improved vegetable production and field crops result in extra income from sale of surplus
- increase in income (money from sale of surplus) increases ability to pay school fees and to purchase other assets such as livestock, clothing, inputs required for improved new housing and vehicles.

Employment

- Local employment opportunities increase as a long term result of farmers' increased income through sale of surplus higher yields. These farmers will employ locally available labour to work higher producing fields, as will have the financial means to do so. Expect this to happen after five years of new practices.

Status

- Change from poorer status to higher one

Access

- access to safe water i.e. protected water tanks in all villages
- access to community gardens

Source: Drinkwater, Michael and Tamara Rusinow, 1999, "Application of CARE's livelihoods approach, presentation for NRAC 1999", CARE, London.

Clearly this case study is of a rural project, but a similar method could be adopted in urban areas. The indicators selected by villagers in this case included both qualitative, attitudinal and descriptive information, and other quantifiable indicators (e.g. those listed in the second box).

In terms of the purposes of SL indicators outlined in section 4, the CARE HLS indicator approach could therefore be used as a model for indicators to be used for understanding how specific livelihood systems function, or fail to function (thereby determining appropriate points for intervention/ assistance for livelihood), and assessing the effects of policy interventions on livelihoods. The HLS indicator approach does not attempt to develop a universal composite livelihoods indicator, however, and would therefore not be appropriate for indicators to provide broad measures for comparison between countries or regions or for advocacy.

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ENDNOTES

¹ The term sustainability has been used to denote a wide variety of meanings, including social, economic and political as well as environmental concerns (Satterthwaite, D. 1997). While the sustainable livelihoods approach has evolved from environmental concerns, with its roots in documents such as the Bruntland report, most of the current literature, while noting the need to ensure that natural resources are used in a sustainable manner, focuses principally on the need to ensure resilience of resources of livelihood for the poor.

If the concept focused purely on the resilience of the livelihoods of the poor, then sustainable livelihoods would not need to be complementary to environmental sustainability - livelihoods which are not vulnerable to shocks and stresses in the short and medium term, and which may therefore improve the quality of life of the poor, may nonetheless be detrimental to the environment. In this light it is key that both resilience and environmental sustainability of livelihoods are stressed in the definition of sustainable livelihoods.

² This is an adaptation of the Carney (1998) SRL model. The main difference between livelihood in urban and rural settings is in terms of the specific conditions imposed by the local context and how the context affects the type of vulnerability that poor household members are exposed to, the kind of assets that are typically available to poor urban men and women, and thus the types of livelihood strategies that the urban poor can evolve. Thus while the general model is applicable in both rural and urban context, there is a need to be aware that the specific stresses and details of sustainable livelihoods should be expected to differ in an urban setting.

³ This provides an illustrative list old strategies and is exhaustive.

⁴ This kind of change in labour patterns due to reforms is highly context specific - for example many countries undergoing structural adjustment reforms have experienced falling child employment over recent years. No generalised assumptions should be made without supporting data.

⁵ It should be noted however that the poorest often rent, even in illegally occupied settlements and therefore do not benefit from regularisation of tenure.

⁶ For example, Harris et al (1993, p. 60) in their study of the labour market in Cuttack, India, cite the case of the SUME public micro-credit scheme which, though aimed at the poor, was inaccessible to most slum dwellers. Loans were dependent on possession of ration cards which were unavailable to slum residents who were unauthorised occupiers of land.

⁷ UNDP 1998 "Sustainable Livelihoods; Concepts, Principles and Approaches to Indicator Development - Draft" (<http://www.undp.org/>).

⁸ see, for example, Foxon, Timothy J. et al, 1999, "Useful Indicators of Urban Sustainability: Some Methodological Issues", in *Local Environment*, Vol. 4 No. 2.

GLOSSARY OF TERMS

Assets are the resources on which people draw in order to undertake their livelihood strategies. They include financial, human, natural, physical and social capital. Assets do not necessarily need to be owned by the men and women who use them but they do need to have access to the assets that they require for their livelihood strategies.

Capability refers to the freedom or ability of individual to achieve 'functionings' (i.e. what people are, or do), which range from being healthy or well nourished to being happy or having self-respect. As such, capabilities constitute people's freedom and opportunities to achieve well-being (Sen, 1981).

Entitlement refers to the ways in which people gain access to assets, including, for example, access to social services such as education and health. The ability to command entitlements derives from, for example, legal rights, access to financial resources, or relationships with other groups and individuals. The concept of entitlement has been specifically used to examine how individuals and households are able to access resources during periods of change and poverty (Dreze and Sen, 1989; Sen, 1981).

Human capital are the attributes that men and women need to undertake productive and reproductive tasks - principally: skills deriving from formal and informal education, and; health.

Social Capital are the social relations, networks and norms that make society work more efficiently, promote social integration, and help individual men and women gain access to other resources through mobilising social networks and social status.

Survival strategies are the tactics that people use in order to 'get by'. The concept is similar to that of livelihood strategies, but the implications of survival strategies is that they are generally short term and reactive, unlike livelihood strategies which also take account of long term aspirations and use proactive approaches in an attempt to realise these aspirations.

Sustainability (1) When referring to livelihoods, sustainability refers to the capacity to withstand shocks and stresses while, at the same time, not compromising the environment.

Sustainability (2) When referring to development interventions, sustainability refers to the scope of projects and programmes to continue to function after the withdrawal of external support. This issue of sustainability is often applied to projects which are intended, after an initial intervention by donors, public sector organisations, or NGOs, to be managed locally by community organisations.

Vulnerability refers both to external exposure to shocks, stress and risk (e.g. loss of income sources, illness, natural disasters, crime) and the inability of people to cope with these risks without suffering damaging loss. While both the poor and the better off are subject to risks, the poor are usually less able to cope without suffering from damaging loss (UNDP (B), 1997),