Livelihood diversification and natural resource access



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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Livelihood Support Programme (LSP) An inter-departmental programme for improving support for enhancing livelihoods of the rural poor.

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The Livelihood Support Programme

The Livelihood Support Programme (LSP) evolved from the belief that FAO could have a greater impact on reducing poverty and food insecurity, if its wealth of talent and experience were integrated into a more flexible and demandresponsive team approach.

The LSP, which is executed by FAO with funding provided by DfID, works through teams of FAO staff members who are attracted to specific themes being worked on in a sustainable livelihoods context. These crossdepartmental and cross-disciplinary teams act to integrate sustainable livelihoods principles in FAO's work, at headquarters and in the field. These approaches build on experiences within FAO and other development agencies. The programme is functioning as a testing ground for both team approaches and sustainable livelihoods principles.

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Access to natural resources sub-programme

Access by the poor to natural resources (land, forests, water, fisheries, pastures, etc.), is essential for sustainable poverty reduction. The livelihoods of rural people without access, or with very limited access to natural resources are vulnerable because they have difficulty in obtaining food, accumulating other assets, and recuperating after natural or market shocks or misfortunes.

The main goal of this sub-programme is to build stakeholder capacity to improve poor people's access to natural resources through the application of sustainable livelihood approaches. The sub-programme is working in the following thematic areas:

- 1. Sustainable livelihood approaches in the context of access to different natural resources
- 2. Access to natural resources and making rights real
- 3. Livelihoods and access to natural resources in a rapidly changing world

This paper contributes to the third thematic area by exploring linkages between livelihood diversification and access to natural resources by the rural poor in low income countries. The paper shows that use of the livelihoods approach tends to uncover aspects of rural poverty that have not been well understood, or have been neglected in mainstream policy discourses.

Livelihoods diversification and enterprise development sub-programme

Diversification can assist households to insulate themselves from environmental and economic shocks, trends and seasonality - in effect, to be less vulnerable. Livelihoods diversification is complex, and strategies can include enterprise development.

The sub-programme aims to improve the effectiveness of FAO in addressing the needs and interests of poorer people in livelihood diversification programmes and projects. Specific objectives are:

- ∉ To identify and appraise circumstances, inhibiting and enabling factors and approaches
- ∉ To catalyse and facilitate use of innovative practices
- ∉ To increase inter-disciplinarity and learning in FAO and partner agencies

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SUMMARY

This paper sets out to explore the links between livelihood diversification and access to natural resources, and it does this bearing in mind the need to make micro-macro policy links between local level rural livelihoods and national level poverty reduction efforts represented by Poverty Reduction Strategy Papers (PRSPs). Diversification refers in this paper to the changing character of household activity portfolios and income sources, not to switching full-time occupations, nor to the relative diversity of sub-sectoral non-farm enterprises in rural areas.

The paper provides a synopsis of the livelihoods approach, summarises ideas and recent evidence concerning livelihood diversification, links diversification to natural resource access considerations, considers policy environments pertinent to both diversification and natural resource access, and proposes policy areas that could form the basis of action oriented research initiatives in this area.

The paper takes the view, supported by a considerable literature and much empirical evidence, that livelihood diversification is generally a good thing for rural poverty reduction. It helps to lessen the vulnerability of the poor to food insecurity and livelihood collapse; it can provide the basis for building assets that permit individuals and households to construct their own exit routes out of poverty; and it can improve the quality and sustainability of natural resources that constitute key assets in rural livelihoods.

These effects occur because diversification widens people's options, reduces reliance on particular natural resources, encourages spatially diverse transactions, increases cash in circulation in rural areas, and enhances human capital by providing those who diversify with new skills and experiences.

These beneficial effects of diversification depend upon social attributes of mobility, flexibility, and adaptability, as well as on the ease of engaging in spatially diverse transactions. These attributes are often inhibited by local level policy environments, as well as by poor local governance, which as often as not are characterised by fees, fines, permits, bribes, licenses, roadblocks and other petty barriers to exchange and mobility. The poor find it more difficult to negotiate such barriers than the better off.

In emphasizing the benefits of diversification, the inference should not be drawn that agriculture becomes less prioritised in policy. Diversification encompasses on-farm diversity, other natural resource access diversity, and non-farm diversity in combinations that reflect people's capabilities and options. Agriculture continues to play a critical role in diverse livelihoods and in household food security.

Natural resources are fundamental assets in rural livelihoods, but access to them needs to be viewed through the same lens of widening options and opportunity as livelihood diversification itself. Natural resource management regimes that inhibit exchanges, substitutions and transactions also inhibit livelihood diversification with negative consequences for their long run quality and sustainability. Land tenure and common property management institutions can be inhibiting in this way either by placing barriers in the way of transfers between users or by being founded on exclusionary principles in their establishment.

Land tenure regimes may cause multiple difficulties for diverse livelihood strategies. In customary tenure systems, ownership security may be contingent and unclear and risky, making it difficult to exit or enter farming and resulting in patchy and inadequate development of rental transactions in farmland. Inheritance rules are typically conservative and patriarchal and exclude women from inheriting or bequeathing land. New land legislation often fails to address fundamental inflexibility problems and is unadventurous in seeking workable institutional methods that could create more scope for land rental transactions while providing security for owners and tenants.

Contemporary approaches to common property resources in the form of communitybased natural resource management (CBNRM), including co-management regimes, also have flaws in a livelihood diversification context. They are almost always sectoral in conception (forests, fisheries, wildlife etc) whereas diverse rural livelihoods are fundamentally cross-sectoral in character; for this reason they assume a homogeneity in reliance on or demand for access to a resource which rarely corresponds to variations in underlying livelihood priorities; they often also embody exclusionary notions of territory that inhibit flexibility and create barriers to the ability of new or different users to access the resource.

The gender construction of property management regimes is almost always disadvantageous to women. Women are often not permitted to own or inherit land; if they are widowed or divorced the land to which they have been entitled within their marriage may be withdrawn from them; within patriarchal societies CBNRM regimes tend to be dominated by men even if it is women who have the greatest stake in the livelihood contributions of the resource that is being regulated.

The contemporary approach is to site all poverty policy matters within the umbrella of the Poverty Reduction Strategy Paper (PRSP) process at central government level. PRSPs are informed by stakeholder consultations and participatory poverty assessments that often prioritize cross-sector issues and reducing barriers to the exercise of livelihood choices; however the documents themselves have a tendency to end up as disconnected sector and sub-sector expenditure plans. PRSPs are more often than not found to be basically inimical to migration and mobility, weak in their articulation of cross-sector issues, and weaker still in providing enabling environments for spatially dispersed livelihoods.

The PRSP process is associated with democratic decentralization processes that are being pursued in many low income countries supported by donors. Devolved natural resource management in the form of CBNRMs is also becoming linked retrospectively to decentralization, even though these originated from distinct starting points. For livelihood diversification, decentralization represents both an opportunity and a threat. The opportunity is that local institutions can be better adapted to local needs, and can grasp the nettle of the cross-sectoral diversity that actually characterises people's lives. The threat is that cash-strapped local councils will merely devise more onerous blockages to people's livelihood options in pursuit of revenues in order to pay for the costs of running district and regional assemblies.

The paper proposes five policy topics that could provide the basis for policy oriented research linking livelihood diversification to natural resource access. In practice, worthwhile research may combine components from more than one of these topics.

Gender is a cross-cutting theme that should be central to all the policy research topics, and could also constitute a priority research area in itself. These are:

- ∉ How is on-going land tenure reform affecting poor peoples' access to land?
- ∉ How does rural taxation and business licensing (linked to decentralization) affect poor peoples' incentives and ability to engage positively in a diversity of livelihood activities?
- ∉ What impacts do migration and remittances have on people's access to natural resources and diversification opportunities?
- ∉ How does diversification affect the functioning of CBNRM institutions?
- ∉ How can cross-sectoral thinking be integrated in PRSPs?

It is appropriate to conclude this paper in the spirit with which it began. While livelihood diversification is an established fact of rural people's struggle to improve their lives, and an accumulating body of evidence points to the benefits of this process for both people and sustainable natural resources, poverty reduction policies lag far behind these insights. In particular, a considerable unwillingness to move away from orthodox sectoral thinking is manifested in PRSPs, and in the government expenditure plans that they contain, and almost no thought is given to constructing the elusive "enabling environments" that would make it easier for people to exercise their own initiatives in the quest to move out of poverty.

1. INTRODUCTION

This paper is concerned with making policy links between livelihood diversification in rural areas of low income countries and access to natural resources by the poor. As such it brings together three intersecting factors that play a critical role in the effectiveness or otherwise of efforts to reduce rural poverty. First, there is the substantially improved understanding that we now have of the multiple and diverse character of rural livelihoods. Second, there is the interaction between diverse livelihoods and the management of the natural resources upon which they to a greater or lesser extent depend. Third, there is the challenge that diverse livelihoods pose for connecting livelihood strategies to national level policies, and especially to Poverty Reduction Strategy Papers (PRSPs).

Livelihood diversification challenges conventional wisdoms about poverty reduction in rural areas across several important strands of policy. While it is well understood that diversification occurs in large measure to ameliorate the riskiness of natural resource-based livelihoods, and to overcome the consumption smoothing problem created by seasonality, it is less commonly noted that it also represents a failure of the structural adjustment project of the 1980s and 1990s to deliver the improving economic conditions for agricultural production that were promised in countless policy documents of that period. For many poor small farmers, the past two decades, far from securing them more robust and improving livelihoods from crop and livestock production, have in reality created conditions in which agriculture is unable to provide them with a sufficient livelihood, thus making the pursuit of alternative sources of livelihood a necessity as much as a choice.

Research into the nature of rural poverty utilising the livelihoods approach tends to uncover aspects of rural poverty that have not been well understood, or have been neglected in mainstream policy discourses. Poverty and vulnerability are often associated with undue reliance on agriculture, rather than the converse. As illustrated by the food security crisis that occurred in southern African countries in 2001-03, it was semi-subsistence agriculturalists with few options for alternative sources of income generation that were most prone to acute food insecurity in the face of relatively rather minor adverse climate hazards. Moreover, evidence is accumulating that growth linkages to and from agriculture may work in opposing ways to prevailing orthodoxies. Instead of yield growth in agriculture being the origin of linked growth in other rural sectors (the rural growth linkage model), yield growth may occur due to resources generated from non-farm (and often non-rural) activities. Migration, mobility, flexibility and adaptability are downplayed, ignored, and sometimes blocked by policy and institutions; whereas these are the very attributes of diverse rural livelihoods that can lead in the end to stronger rather than declining rural livelihoods, and improving rather than degrading natural resources

This paper explores these themes, relating them especially to natural resource access considerations. The next section provides a brief resumé of the livelihoods approach and the status of natural resource access in livelihood thinking. The third section summarises the current state of knowledge concerning diversification and its dynamics from a poverty reduction perspective. The fourth section makes the links between diversification and natural resource access, differentiating this between land access and common property resource access that has tended to come under community-based natural resource management (CBNRM) regimes in recent years. A fifth section begins to make connections between the livelihood diversificationnatural resource access nexus and the wider policy environment which in various ways hampers or facilitates spatially dispersed livelihood options. This wider policy environment includes local level policies and institutions, often nowadays evolving in a decentralization context, and the micro-macro links to central policies converging on the Poverty Reduction Strategy Paper (PRSP) process. The sixth section sets out an action-oriented research agenda arising from the findings of the preceding sections.

The paper draws extensively from recent research by the authors linking livelihood diversification to policy processes in eastern and southern Africa.¹ While the discussion and conclusions are thus related closely to Sub-Saharan African concerns, examples from other regions are also used to explore more generally applicable issues.

¹ The research referred to was the LADDER project, a DFID-funded research programme on rural livelihoods and diversification conducted in Uganda, Kenya, Tanzania and Malawi. The principal findings of this programme are summarised in Ellis and Freeman (2004)

2. ANCHORING NATURAL RESOURCE ACCESS IN A LIVELIHOODS APPROACH

The term livelihood attempts to capture not just what people do in order to make a living, but the resources that provide them with the capability to build a satisfactory living, the risk factors that they must consider in managing their resources, and the institutional and policy context that either helps or hinders them in their pursuit of a viable or improving living. The basic livelihoods approach or framework is illustrated in Figure 1.

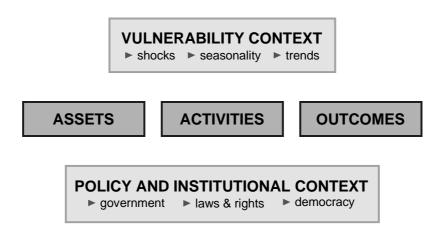


Figure 1: The Basic Livelihoods Framework

In the livelihoods approach, resources are referred to as 'assets' or 'capitals' and are often categorised between five or more different asset types owned or accessed by family members: human capital (skills, education, health), physical capital (produced investment goods), financial capital (money, savings, loan access), natural capital (land, water, trees etc.), and social capital (networks and associations). These asset categories are admittedly a little contrived, and not all resources that people draw upon in constructing livelihoods fit neatly within them. For example, livestock-keeping plays multiple roles that crossover at least three of these asset categories. Nevertheless, they serve a useful purpose in distinguishing asset types that tend to have differing connections to the policy environment. For example, human capital connects to social policies (education and health), while natural capital connects to land use, agricultural and environmental policies.

The livelihoods approach regards awareness of the asset status of poor individuals or households as fundamental to an understanding of the options open to them. One of its basic tenets, therefore, is that poverty policy should be concerned with raising the asset status of the poor, or enabling existing assets that are idle or underemployed to be used productively. The approach looks positively at what is possible rather than negatively at how desperate things are. As articulated by Moser (1998: p.1) it seeks "to identify what the poor have rather than what they do not have" and "[to] strengthen people's own inventive solutions, rather than substitute for, block or undermine them". This means identifying institutions that hamper and block people's ability to construct improved livelihoods, whether such institutions are traditional

Source: Ellis (2003a; 2003b)

(e.g. customary land tenure), modern (e.g. centralized state rules and regulations), or in some sense 'post-modern' (e.g. recent CBNRM policies and institutions).

In this context it is worth recalling North's (1990) observation that just because institutions have been around a long time it does not mean that they work well or that they are equitable. Institutions often persist long after the reasons that called them into being have disappeared, and many 'traditional' institutions were constructed to serve the interests of hierarchical and patriarchal authority rather than to contribute to the empowerment and voice of ordinary citizens.

As illustrated in Figure 1, the things people do in pursuit of a living are referred to in the livelihood framework as livelihood 'activities'. The risk factors that surround making a living are summarised as the 'vulnerability context', and the structures associated with government (national and local), authority, laws and rights, democracy and participation, and NRM institutions are summarised as the 'policy and institutional context'. People's livelihood efforts, conducted within these contexts, result in outcomes: higher or lower material welfare, reduced or raised vulnerability to food insecurity, improving or degrading environmental resources, and so on. Figure 1 is consciously devoid of arrows implying causality or feedback. Livelihoods are complex and changing. Although of course they encompass links between cause and effect, as well as cumulative processes, these cannot be captured adequately in such a simplified representation.

The livelihoods approach sets out to be people-centred and holistic, and to provide an integrated view of how people make a living within evolving social, institutional, political, economic and environmental contexts (Carney, 1998; Bebbington, 1999). It has proved to have considerable strengths, especially in recognising or discovering:

- ∉ the multiple and diverse character of livelihoods (Ellis, 1998; 2000)
- ∉ the prevalence of institutionalised blockages to improving livelihoods
- ∉ the social as well as economic character of livelihood strategies
- ∉ the principle factors implicated in rising or diminishing vulnerability
- ∉ the micro-macro (or macro-micro) links that connect livelihoods to policies

Natural resource management institutions, understood as the customs, rules, laws and organizations that determine peoples access to different types of natural resource, evidently play critical roles in the livelihoods of rural households. The immediate connections to the livelihoods framework in Figure 1 are to natural capital (access to land, grazing, water, forests, fisheries and so on), and to the set of activities that comprise the occupational portfolio of the household. More than this, however, attention needs to be directed to the policies and institutions that mediate natural resource access, and the degree to which these facilitate rather than block asset transfers and substitutions that occur as people construct and change their livelihoods. Land tenure and other natural resource management institutions have multiple and complex effects in either reducing or increasing the vulnerability of households, and in enabling or disabling virtuous spirals of asset accumulation that can provide families with exit routes from poverty. The nature of these effects are explored as the argument of this paper proceeds in subsequent sections.

3. DIVERSIFICATION

While the prevalence of livelihood diversification is now well-recognised (Reardon, 1997; Ellis, 1998; 2000), there remains ample scope for differences in interpretation about what this signifies, especially for poverty reduction strategies and policies. This section provides a synthesis of some of the key factors that emerge from diversification research, from which connections to the role of natural resource access institutions are then later derived.

Studies of rural income portfolios generally converge on the once startling figure that, on average, roughly 50 per cent of rural household incomes in low income countries are generated from engagement in non-farm activities and from transfers from urban areas or abroad (remittances and pension payments being the chief categories of such transfers). This has been verified by recent studies in Africa (Bryceson & Jamal, 1997; Ellis & Freeman, 2004), as well as past evidence from Africa and Asia (Reardon, 1997). In Latin America, the average figure is slightly lower, at around 40 per cent (Reardon et al., 2001).

There is evidently a great deal of variation around these mean figures at the household level, but less variation than might be supposed when comparing sample evidence across different countries in a particular region. A strong positive correlation between the proportion of household income obtained from non-farm sources and overall household income per capita has been observed in numerous studies (Adams & He, 1995; Barrett et al., 2001; Ellis & Freeman, 2004). It is also widely found that while diversity of income sources is prevalent across different income classes, the nature of this diversification differs greatly between better off and poorer households. The better off tend to diversify in the form of non-farm business activities (trade, transport, shop keeping, brick making etc.) while the poor tend to diversify in the form of casual wage work, especially on other farms. Diversification by the poor tends to leave them still highly reliant on agriculture; while that by the better off reduces such dependence.

The way diversification patterns change across the income ranges is illustrated for a case-study of 344 rural households in Tanzania in Table 1 below.

It is observed that the average farm/non-farm split for the entire sample is almost spot on the 50:50 division that was referred to earlier as a widespread finding in Africa and elsewhere. The relative dependence on agriculture declines across the income ranges from 68 percent for the poorest quartile to 43 percent for the richest. It is notable that the share of livestock in the income portfolio of the top quartile more than doubles compared to the bottom quartile, and the share of non-farm business income quadruples from 11 to 44 percent of the income portfolio.

It might be thought that the attention paid by better off households to non-farm activities would result in the neglect and poor performance of their farming activities. Not so at all. Table 2 below shows for a cross-country sample of 1,355 households conducted in 2001 and 2002 (of which the Tanzania example given above was a part) how agricultural productivity per hectare rises steeply across the income ranges. Net farm output per hectare in a series of country samples was between three and six times higher for the top income quartile of households compared to the lowest income quartile. The result for Uganda, as a representative case, is graphed in Figure 2 below.

- composition of household incomes % -						
Income Sources						
income sources	I II		III	IV	Total	
	<i>n</i> =87	n=88	<i>n</i> =88	n=81	n=344	
Maize	27.1	21.5	15.1	7.9	12.4	
Rice	12.3	14.2	10.3	8.8	10.0	
Other Crops	23.3	19.9	23.8	11.8	16.3	
Livestock	5.0	7.7	6.5	14.1	11.0	
Sub-Total Agric	67.7	63.3	55.7	42.6	49.7	
Wages	14.6	8.9	9.3	11.0	10.5	
Non-Farm	11.5	23.7	29.3	44.0	36.1	
Transfers	6.3	4.2	5.7	2.5	3.7	
Total	100.0	100.0	100.0	100.0	100.0	

Table 1: Tanzania – income portfolios by income quartile(sample of 344 rural households, 2001)

Source: Ellis & Mdoe (2003)

Table 2: Four Countries – net farm output per ha, by income quartile (US\$/ha)

Country	Income Quartile				Ratio
Country	Ι	II	III	IV	IV:I
Uganda	131	215	295	487	3.7
Kenya	135	266	358	430	3.2
Tanzania	81	108	156	381	4.7
Malawi	18	44	84	109	6.0

Source:	Ellis	&	Freeman	(2004)
50111001	10000	\sim	1 100110011	(=001)

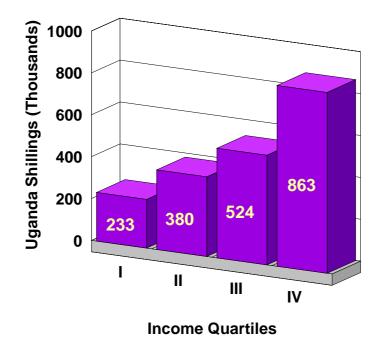


Figure 2: Uganda – rising farm output per ha with rising incomes

This result is not new, certainly for studies in Sub-Saharan Africa. Non-farm income generates cash that can be used to improve farm yields by hiring labour and purchasing farm inputs (Evans & Ngau, 1991). It may also reduce risk aversion and encourage innovation such as trials of new crop varieties due to the cushion that it provides against the potential failure of new methods. More broadly, a strong flow of non-farm income sources have been observed to bring environmental benefits, reversing environmental degradation and resulting in investment in improved soil and water management as well as rising yields (e.g. Tiffen et al., 1994).

Interpreting the dynamics of rural livelihood diversification is critical for deciding on whether and how to facilitate the process, and the changing role of natural resources access for rural families. The orthodoxy that has been restated in countless different ways over the decades (from Mellor, 1966 to IFAD, 2001) is that rural poverty reduction depends on rising yields in agriculture, creating growth linkages in rural non-farm sectors (e.g. Hazel & Haggblade, 1993; Delgado et al., 1998). According to this conventional wisdom the flow of wealth creation is inevitably from farming outwards, and primacy is given to policies that can stimulate innovation and change in agriculture. In recent times, such policies have been more hands off than hands on, with a high reliance on markets to deliver an encouraging economic environment for agricultural growth. Nevertheless, a continued public role is considered by some observers to exist in the area of technology promotion, including, controversially, the potential of GM crops to provide fresh impetus to farm output growth (Lipton, 2001).

A growing body of literature argues, however, in a different direction to the agriculture-centred orthodoxy. Certainly in Sub-Saharan Africa, diversification can be represented as a failure of agriculture to provide a sufficient livelihood for a

substantial proportion of rural dwellers (Bryceson & Bank, 2001; Bryceson, 2002). According to this argument, an active process of 'deagrarianization' is occurring whereby farming becomes a part-time, residual, or fall-back activity and livelihoods become increasingly oriented to non-farm and non-rural activities. Some of the factors implicated here are long term demographic and economic trends; others are associated with economic policies. The main factors driving 'deagrarianization' in rural Sub-Saharan Africa would appear to be:

- ∉ decreasing farm size caused by sub-division at inheritance, to the point where even under favourable agro-economic conditions, farming can only provide a part-livelihood;
- ∉ increasing inability of young people to access enough land to take up farming as their main occupation;
- ∉ poor farm performance and, in some instances, declining yields due to declining soil fertility;
- ∉ increased climatic variation, causing greater extremes across seasons and years
- ∉ declining returns to farming due to factors in the policy or global environment, including:
 - © dismantling of subsidies, especially on fertilizer,
 - © increased price instability following market liberalization,
 - $\ensuremath{\mathbb{C}}$ poor geographical coverage by private traders, especially in remote areas,
 - © low agricultural prices due to world price trends, aggravated for some crops by the export subsidies of rich countries
- ∉ the impact of HIV/AIDS when superimposed on these other disadvantages, in many areas reducing significantly the availability of able-bodied labour to carry out physically onerous agricultural tasks.

The deagrarianization hypothesis obtains qualified support from rural livelihoods research conducted in four African countries in 2001 and 2002, some of the findings of which have been reported in preceding paragraphs (see footnote 1 and Tables 1 and 2 above). Some key findings that emerge from that research are as follows (Ellis & Mdoe, 2003; Ellis, Kutengule & Nyasulu, 2003; Ellis & Freeman, 2004):

- ∉ the rural poor tend to exhibit a highly eroded asset status, manifested by land holdings below 0.5 ha., no cattle or goats, low levels of educational attainment of household members, no savings, and decline in some elements of 'social capital' (community level social support; civil security); to these must be added the depleting effects on household labour caused by HIV/AIDS infections;
- ∉ a tremendous reliance on subsistence amongst customary tenure small farmers in general, and especially amongst poor rural households: subsistence ratios with respect to maize production are commonly in the range of 80 to 95 per cent, and for grain deficit households can be routinely 100 per cent (i.e. zero market sales);

- ∉ the emergence over the past 5-10 years of an expanding category of subsistence farm household that can only at best produce enough maize to cover 6-8 months consumption, this coverage shrinking to 3-5 months in years when there are climatic shocks (too much rain, hailstorms, shortened rains, droughts etc.);
- ∉ subsistence ratios in total household income that decline steeply with rising per capita income: for example, in the Malawi country study comprising 280 households, the lowest income quartile exhibited a subsistence ratio in total income of 44 per cent, while for the highest income quartile this fell to 18 per cent (Ellis, Kutengule & Nyasulu, 2003);
- ∉ as already noted (Tables 1 and 2 above), reliance on crop and livestock production in total livelihood portfolios that declines steeply as per capita income rises, and net farm income that rises steeply across the income ranges.

These widely observed rural livelihood patterns shed light on the dynamics of rural vulnerability. The poorest and most vulnerable are those most heavily reliant on agriculture, and most strongly locked into subsistence within agriculture. The same category of the rural poor also tend to be dependent on work on other farms in order to cover the deficit in their household food balance. This exacerbates rather than diminishes their vulnerability for two reasons: first, labour on other farms can mean neglect of good cultivation practices on own farms (Alwang, 1999); and, second, work on other farms proves an unreliable buffer when adverse natural events occur that affect all farms in a geographical zone.

While the latter findings apply with particular force in Sub-Saharan Africa, in other regions it is often the landless rural poor that are found to constitute the most vulnerable group. This group, as well as relying on wage labour, may also depend on natural resource use through access to common property resources (CPR) due to lack of land or insufficient land to support subsistence needs (Beck & Nesmith, 2001). Their livelihood activities include gathering wild foods (honey, fruits, insects), harvesting forage crops, collecting firewood, making charcoal etc. Hunter-gatherers, nomadic pastoralists, shifting cultivators, migrant fisherfolk and forest-dwelling people are included in the CPR-dependent poor; their vulnerability may be high due to insecurity of resource access and ownership, but their income and asset status can exhibit wide variations, with some households within such groups (for example migrant fisherfolk - Allison, 2003; Allison & Mvula, 2002) being relatively wealthy compared to resident land-owning households in the same locations.

CPR-dependent livelihood systems are often associated with ethnic minorities and 'indigenous groups' and such groups are often found in areas of environmental or biodiversity conservation interest. For these reasons, they sometimes assume greater prominence in international policy discourses than their absolute numbers perhaps warrant. Among people living around protected areas, for example, promotion of livelihood diversification away from dependence on 'wild' natural resources, or securing their use rights to such resources to promote 'sustainable use' are two alternative interventions implemented by integrated conservation and development programmes (Salafsky & Wollenberg, 2000).

The diversification literature tends to categorise livelihood sources as either farm or non-farm, with the latter often implicitly being taken to be non-natural resource based (trading, construction, service industries etc). In practice, many farming systems comprise a complex mix of activities that take place within recognisable farm boundaries (crop agriculture) and those that may take place both on farms and on commonly held resources. Two such examples are the 'tri-economies' of hillside farming systems of Nepal and lakeshore areas of Sub-Saharan Africa (Box 1), where the use of common property resources has long been an integral component of household strategies. Non-farm activities as diverse as ecotourism and brick-making are also natural-resource based. Thus, access to natural resources remains critical to rural livelihoods, whether they are based primarily on 'agriculture' in its narrow sense or not.

The overall monetization of the agrarian economy is highly pertinent to the vulnerability status of rural populations. If markets are working well, and trade and exchange are flourishing, then this increases the cash in circulation in rural areas and gives individuals broader alternatives to construct diverse livelihoods that help to reduce vulnerability. The prevalence of subsistence behaviour towards the lower end of rural income distributions militates against these conditions occurring; indeed, on the contrary, the more families seek, or are pushed by external pressures into seeking, security from subsistence, the less options are created to construct more diverse and secure livelihoods. This is because their cash economy, literally, shrinks; and with this happening, the scope for monetised activity of all kinds also shrinks.

Potential exit routes from rural poverty and vulnerability are to some extent revealed by the livelihood patterns of the better off. Fundamentally, these patterns reveal an interdependence in the achievement of livelihood security between diverse non-farm and farm components, in which the farm component simultaneously becomes more productive and diminishes in importance within a diverse livelihood portfolio. Better off households are distinguished by 'virtuous spirals' of accumulation typically involving diverse livestock ownership, engagement in non-farm self employment, and diversity of on-farm and non-farm income sources (Ellis & Freeman, 2004).

To summarise this discussion on rural livelihood diversification, it is the dynamic factors at work that create or recreate relative poverty or wealth that need to become the focus of poverty reduction policies. Numerous studies have observed that moving out of poverty is a cumulative process, often achieved in tiny increments. Assets are traded up in sequence, for example, chickens to goats, to cattle, to land; or, cash from non-farm income to farm inputs to higher farm income to land or to livestock (Ellis & Mdoe, 2003). It is also well established that a critical constraint slowing down or preventing such 'virtuous spirals' is the inability to generate cash that can be turned into savings and investment. A fundamental role of diversification in a poverty reduction context is that it helps to overcome that constraint. As such, diversification should be broadly encouraged by policy. The degree to which it is not so is discussed in due course; in the meantime we shortly turn to consider more closely natural resource access aspects of evolving rural livelihoods.

BOX 1

Interdependence of Private Farms and Common Property Resources: The 'Tri-Economies' of the Middle Hills of Nepal and the Lakeshore Regions of Africa.

Middle Hills, Nepal

In Nepal's middle hills, agriculture is the primary livelihood activity, based on the ownership of small terraces of farmland. Many farmers lack access to chemical fertilizer, so that soil structure and fertility are maintained by the use of compost and the addition of crop residues and leaf litter gathered from forests that are either held in common or state-owned. Grasses and leaves for livestock fodder are gathered from forests, as are fallen leaves used for livestock bedding. Manured livestock bedding forms the majority of compost later spread on farmland. Livestock are either kept in paddocks or grazed on fallow land or in the common property forests and upland pastures. The biomass and fertility transfers are indicated by arrows in the figure below.

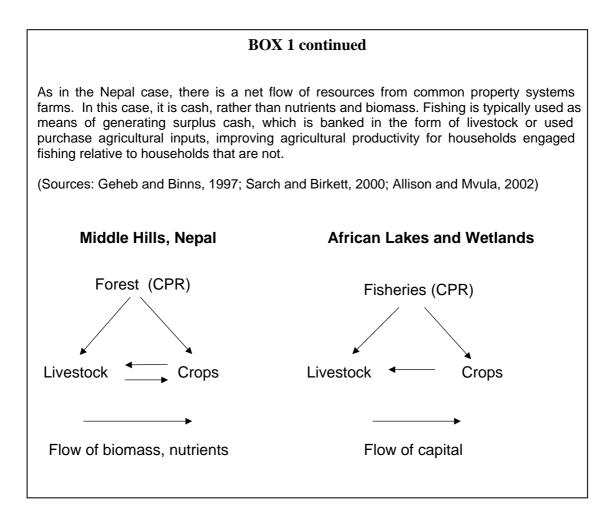
Richer households may supplement farming with incomes from local businesses or employment. They often have land outside the village and may spend only part of the year in the hills. They commonly have irrigated as well as unirrigated land holdings; extensive on-farm tree resources, grazing land and private forest and a substantial number of livestock. Middle households commonly have land-holdings and cattle, but only modest private tree resources and grazing land. They tend to be heavily dependent on inputs to their farming systems (fodder, leaf-litter, grazing land) from common forest land. Poorer and landless households depend on non-land based activities such as labouring, artisanal work and non-timber forest product collection; they have specific needs from the forest distinct from the other wealth-rank groups, such as charcoal for blacksmithing and fuelwood and medicinal plants

(Sources : Garforth et al., 1999; Floyd et al., 2002, Springate-Bajinsky et al., 2003)

African Lakes and Wetlands

Around the shores of the African Great Lakes, the wetlands of the Sudd and Niger delta and shallow inland lakes such as Lake Chad and similar, smaller waterbodies scattered throughout Africa, the agricultural economy is typically based on a combination of cultivation of private land and access to common property resources. Households combine crop agriculture with fisheries and livestock grazing. Crop agriculture, which often includes paddy rice in wetland areas, takes place on land held under customary tenure (including land claimed when lake levels retreat seasonally or when lake levels drop more extensively due to inter-annual climatic variations). Floodplains and seasonally inundated areas that are not claimed by individual households for crop agriculture are also typically used for livestock grazing. Fisheries have been state-controlled but are managed as *de facto* commons, with access regulations developed within local societies.

Resident households typically combine all three activities. Wealthier households own assets related to fishing (boats, nets, traps) and may have control over access to the best fishing areas. They also own more land and livestock than other groups, as well as owning non-farm businesses (shops, accommodation for rental etc). Middle-income households often own land, but have not generated sufficient capital to own substantial fishing-related assets, although they may have shares in a fishing net and male household members may work as crew labourers on fishing boats. They also have land, used largely for subsistence cropping and small numbers of livestock. Lower-income households also have access to land, used for subsistence cropping. They own few livestock and have access to fishing opportunities only as crew labourers on boats owned by others. Much of their cash income comes from low-paid wage labour in agriculture and fishing. There are also specialist fisherfolk and livestock keepers who visit lakeshore and wetland areas as migrants. Migrants typically access common property resources, sometimes in exchange for informal fees and taxes paid to resident community leaders.



The positive poverty and vulnerability reduction attributes of livelihood diversification are summarised in Figure 3. Livelihood diversification is both partly predicated on, and itself increases, human capital in terms of experience, skills and willingness to innovate. Livelihood diversification generates earnings and remittances that tend to alter significantly the options open to the household by providing it with cash resources that can be flexibly deployed. These factors contribute to lessening vulnerability by ameliorating risk and reducing the adverse consumption effects of seasonality. They also result in increasing assets beyond human capital, thereby permitting poverty to be reduced. In general, livelihood diversification improves livelihoods, and to the extent that it fails to do so, this can often be traced to adverse institutional environments that penalise people on the move.

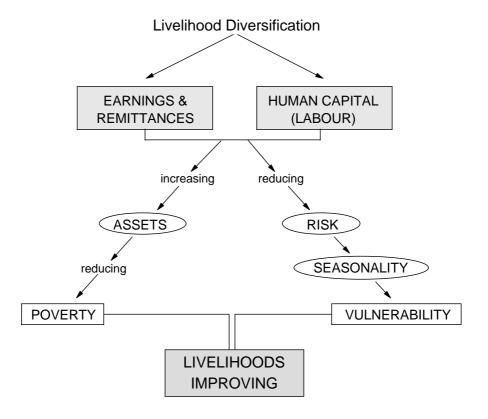


Figure 3: Positive Attributes of Livelihood Diversification

4. DIVERSIFICATION AND NATURAL RESOURCE ACCESS: POLICY ISSUES ARISING

Little systematic thought has hitherto been given to the linkages between diversification and access to natural resources, although some suggestive strands emerge from the preceding discussion of the dynamics of diversification. There are some relevant distinctions and categories that need to be kept in mind before giving a view of such linkages, and as a precursor to considering the natural resource policy implications of diversification. One such distinction is between natural resources that are mainly under private control as against common pool or common property resources; another is that livelihood diversification can to some degree occur within a natural resource based context, as well as outside it.

For most purposes, the distinction between private and common property natural resource regimes comes down to considering cultivated land access separately from that of resources such as grazing, forests, fishing and wildlife that nearly always take the form of social rather than private access². This distinction is of course by no means watertight – irrigation systems, for example, typically combine common property features with private land access and grazing land can be either communal (rangelands) or private (ranches) – however, it provides a useful first distinction. Even though tending to be utilized privately, cultivated land access involves multiple different forms of tenure in different settings, with customary tenure remaining widely prevalent in Sub-Saharan Africa. Tenure systems constitute the institutional rules that govern access to land, and, as such, they form part of the institutional and policy context in the livelihoods framework.

There has been a worldwide trend over the past fifteen years to change the management regime surrounding certain types of common property from state control to so-called community-based natural resource management (CBNRM). This may take the form either of co-management, implying joint responsibilities by government and community-based organizations (CBOs), or of the more wholesale devolution to communities themselves. The resources involved have been forests, fisheries and natural parks (wildlife and tourism), formerly mainly state owned and administered. Other common property resources e.g. grazing, watersheds, watercourses etc have in the past tended to be under local jurisdictions in any case, although increasing pressures imposed upon them have often resulted in CBNRM being advocated to replace previous social regulatory systems that are considered impaired or disintegrated. Like land tenure systems, CBNRM regimes may be characterised as institutions; although in this instance they are new institutions, often created by outsiders, that sit uneasily or supplant pre-existing social conventions for dealing with conflict over access to common resources. Proponents of CBNRM argue that preexisting or 'traditional' institutions for common pool resource management may not be adequate to ensure sustainable resource use in the face of increasing population pressure and monetization of the rural economy, making their replacement with more relevant new institutions justifiable.

² A vast literature covers the categorization – or futility of doing so – of different land tenure regimes (e.g. Bromley, 1989; Toulmin & Quan, 2000). Land tenure is often complex, locationally specific, and socially interpreted, notwithstanding finite categories provided for in legislation.

Livelihood diversity can clearly occur via direct utilization of land and other natural resources, as well as from their indirect use (e.g. trading or processing NR products) in addition to non-NR diversification. Indeed, it is essential to consider diversification as covering this entire spectrum, since in practice diverse rural livelihoods make full use of all the opportunities available. Land may be used for one crop or multiple crops; low value crops can be replaced by high value ones. The use made of different common property resources will depend on other components of the livelihood system (e.g. livestock ownership), as well as on coping strategies at times of crisis (intensive collection of wild foods is observed as a response to acute food insecurity). The linkages between resources accessed by a single household and those accessed by multiple households are especially important, as illustrated earlier for hillside agricultural systems in Nepal (see Box 1).

Whereas the opportunities represented by non-NR diversification are theoretically unlimited (even though constrained in practice), the increased income that can be derived from an existing area of land, or patch of forest, or grazing zone is limited by current technology, resource depletion, market constraints, or some combination of all of these. Nor is 'human carrying capacity' static; in most poor rural areas rural population growth on its own ensures increasing land sub-division, or expansion of the cultivated area into formerly protected areas, or increased off-take of trees for charcoal etc., despite rapid rates of urbanization. Diversification thus occurs in part as a response to natural resource scarcity, and in such a context may be considered beneficial to resource sustainability.

An example of diversification and its drivers comes from Western Kenya, where, on the shores of Lake Victoria, livelihoods have traditionally combined farming, livestock herding and fishing (Geheb and Binns, 1997). Declining land availability and removal of subsidies on agricultural inputs under structural adjustment, together with new opportunities in Nile Perch fishing have combined to increase pressure on Lake Victoria's fishery resources as lakeshore households invest more in this sector. As profit margins in fishing diminish under heavy exploitation, further diversification, in the form of migration to urban areas or non NR-based activities is occurring (Freeman, Ellis & Allison, 2004).

It is tempting in the light of the foregoing to see diversification as running in linear fashion from natural resource scarcity to rising reliance on non-NR livelihood components. However, this is manifestly not always the case, as demonstrated by degrees of reliance on natural resources and yield gradients across income classes as observed in Tables 1 and 2 above. The rural poorest are typically both the most dependent on natural resources and those with least access to land. Meanwhile, the better off are both less dependent on natural resources and have best access to land, and, in addition, obtain the highest returns from a given unit of land. There are what Gunnar Myrdal (1968) years ago called 'circular causations' rather than linear relationships between diversification and natural resource access.

To take the links between diversification and natural resource access further it is necessary to disaggregate between different classes and types of natural resource. This is necessary anyway, since different institutions and policies apply to land as compared to common property resources, and within the latter, fisheries, for example, play a different role in the livelihoods of those with access, than do trees and forests. While disaggregation is inconvenient it should result in sharper perceptions, and patterns of contrast and similarity can emerge from looking at different cases in parallel.

Given the overall desirability of diversification, as concluded in the last section, the question needs to be posed how do land tenure arrangements promote or inhibit diversification, both of the on-farm type and the non-farm type. At least part of the answer is that insecurity of tenure, including insecurity in the hereditary transmission of tenure across generations, considerably inhibits both what is done with the land when it is under a particular stewardship, and the options open for its allocation as different livelihood alternatives present themselves. There is in addition a powerful gender dimension to all aspects of land management within diversified livelihood systems, since women often have a subordinate role in land use decision making despite being the members of the family most likely to be left behind when male members migrate to take up work opportunities elsewhere (Kothari, 2003). In addition, women rarely have ownership rights over land, and even more rarely are allowed to inherit land through customary or legislative forms of land inheritance.

Inflexible land tenure institutions typically act as a barrier to the optimum deployment of land as a resource in the widespread circumstances that have been described whereby people do best when they have the greatest ability to respond flexibly to new opportunities both near and far. Under customary tenure systems it is not at all unusual to see land lying idle adjacent to other areas that are intensively farmed. This occurs due to the absence or poor development of a rental market in land, so that a family that has lost its interest or ability to till the land is unable to make that land available to another family due to the fear of losing it altogether. Other reasons for the same phenomenon (idle or poorly-utilized land in the presence of acute land shortage) include family members working on other farms for immediate food security reasons, family members engaging in seasonal or circular migration, and inability of women to make full use of the land when male household heads are absent due to not having the decision-making capability to do so. These and related situations would occur considerably less often in the presence of a workable legislative framework that ensured security of land ownership at the same time as facilitating the development of a rental market in land.

There is, of course, also a much longer understood reason for land to be underutilized, and this occurs when land is held for purposes other than production by the (often absent) wealthy in rural areas exhibiting highly skewed land ownership distributions (Berry & Cline, 1979). The problem here differs from that in the preceding paragraph in that instead of thwarted motivation to make land available to others through rental, there is lack of motivation on the part of owners to cede or rent out land. A huge literature on land reform deals with the complex policy issues of changing land ownership distributions, and this is not entered into here. The immediate problem of leaving land idle can, at any rate in principle, be tackled by taxation penalties on idle land, and provision for such penalties exists in the land legislation of many countries, although how often they are applied in practice is beyond the scope of this paper.

Land tenure reform must chart a perilous course between, on the one hand, improving the access and security of the poor to land, and, on the other, not opening up the floodgates of 'land grabs' by the local rich and powerful when the opportunity to do so arises. Recent legislative changes put in place in the countries that were part of the livelihoods study in four African countries on which this paper has already drawn have tended to be too timid to help much with the land security pre-occupations of the poor and women, while at the same time just opening up the freehold option enough to permit highly unequal ownership distributions to emerge for 'new' land made available through the sale of former state-held land in plantation agriculture (Cross, 2003). In particular, the weak status of women with respect to land access and inheritance persists in all new legislation, with policy makers and legislators unwilling to enshrine land inheritance by women in law.

For women, the inter-relationship between land access and livelihood diversification is a particularly disadvantageous one in the Sub-Saharan African context in which male migration and male non-farm work opportunities are more prevalent than female ones. The position would doubtless be different in economies experiencing rapid growth in the demand for female labour in the manufacturing sector. In SSA, women tend to be left behind on the farm, but with little real scope for decision-making over farm resources and limited ability to generate cash on own account. Households with female heads (especially those resulting from widowhood or divorce) are often discovered to be amongst the poorest households, and in some rural societies both widowhood and divorce results in immediate reclaim of land by the male side of the family. Of course, this is not always the case, and of course, as much of the gender literature points out, women do exhibit agency within the constraints they confront. Nevertheless the structural circumstances of women with respect to both land and livelihood diversification is particularly debilitating for them in SSA.

At the risk of over-generalization, the links between livelihood diversification and land access may be summarised as follows (Ellis, 2003a):

- (1) land continues to play a critical role as a key asset within a diversified rural livelihood, and indeed diversification can enable improvements to the quality of land and its productivity that are not possible in the absence of the financial resources that it makes available;
- (2) nevertheless, the nature of this link varies according to differing circumstances and across income groups, with the poorest typically least able to achieve this virtuous synergy due either to lack of complementary assets (for example, low human capital) or poor security of land tenure, or some combination of both these factors;
- (3) poorly functioning or outmoded land tenure institutions that inhibit the development of a rental market in land hamper people's diversification options and can result in inefficient utilization of land as a resource;
- (4) in many rural areas characterized by widespread poverty and vulnerability, women are particularly disadvantaged jointly by diversification (absentee male family members) and customary constraints on land use decision making, despite at the same time often being responsible for ensuring the food security of the household;
- (5) approaches to land tenure reform often take a myopic view of land security and the development of a rental market in land, providing little or no scope for improving the land security of women or for creating workable land rental regulatory institutions at local levels.

Some different and some similar arguments apply to the links between livelihood diversification and common property resources, including former state-owned resources that are devolved to community management or co-management under CBNRM policy initiatives. Again here, the general question must be posed whether CBNRM regimes on balance encourage or inhibit individuals and families from deploying their resources flexibly in order to construct less vulnerable and improving livelihoods. All common property type resources represent potential assets on which rural livelihoods can be built, although the significance of such assets within livelihoods in general, and for the poor in particular, vary considerably across resources and locations. The chief motivating forces behind CBNRM regimes have been to do with equity of access (ensuring that the poor have access as well as the better off) and sustainability, linked to resource conservation concerns.

A great deal has been written on CBNRM and space does not permit here more than the briefest outline of some critical features and arguments. The CBNRM approach originates from two main directions: a positive stance taken on the capability of communities to manage common property resources argued in an earlier literature (Wade, 1987; 1988; Ostrom, 1990); and the search for institutional alternatives to costly and failing top-down state management regimes over resources such as gazetted forest reserves and national parks. Mixed in with these precursors are a host of subsidiary arguments concerning the ability of local actors to participate in and take control of their own development destiny in the face of the manifest failings of bureaucratic central authority to do so (Blaikie, 2004). This has included conservationist arguments to the effect that giving communities a stake in the conservation of their own resources will result in more sustainable utilization than the 'fences and fines' approach of centralised management.

In the academic literature CBNRM has exhibited a cycle comprising initial enthusiasm (Western & Wright, 1994), followed by critical analysis (Agrawal & Gibson, 1999; Leach, Mearns and Scoones, 1999; Kellert *et al.*, 2000), followed in turn by empirical evidence of substantive failures in practice (Campbell *et al.*, 2001; Kumar, 2002). Policy lags far behind the debate, with enthusiasm by NGOs and other practitioners peaking in the mid-1990s just when a critical literature was starting to emerge, and governments redesigning their forestry, wildlife and fisheries policies along CBNRM or co-management lines in the 2000s just when evidence is beginning to accumulate of failures of CBNRM to achieve its stated objectives.

At the centre of both the critical literature and observed failures of implementation lies the false notion of community as a homogeneous group of people with a single identity of interest (Agrawal & Gibson, 1999; Leach *et al.*, 1999; Allison, 2004). Although some (e.g. Wilson, 2003) doubt that such simplified conceptions of community can continue to exist in the face of decades of social science scholarship on the complexities and subtleties of human relations that make up communities, evidence from the design of many donor and NGO-promoted CBNRM regimes suggest otherwise. If indeed the promoters of CBNRM programmes realised the problems with their conception of 'community', then they regarded such problems as being more easily surmountable than they have proved to be. It is common, for example, to promote or legislate for the inclusion of women on CBNRM committees without addressing the underlying reasons for women's exclusion in the first place, often leading to 'token' participation (Agarwal, 2000). In the context of poverty reduction, the most important failing of CBNRM regimes is that they have been prone to so-called 'elite capture' which means their benefits are skewed towards the better off in rural society (Platteau & Gaspart, 2003). Often promoted within a conservation-led agenda, the benefits of some CBNRM projects (especially wildlife and tourism ones) have been, to say the least, peripheral to poverty reduction in rural areas at large (Songorwa, 1999; Ashley & Mdoe, 2002). Even CBNRM initiatives explicitly intended to benefit the poor, such as Joint Forest Management in India, have been judged to have largely failed in this objective (Kumar, 2002).

From a livelihood diversification viewpoint, different common property or CBNRM type resources play different livelihood roles for different wealth groups and thus have differing implications for poverty eradication. Communal grazing is not typically subject either to former state control or CBNRM regimes, and communities therefore resolve conflicts of access by custom rather than by recent design. Forest reserves, on the other hand, have tended to be public or state owned, sometimes as conservation areas, sometimes as relatively inaccessible and unexploited resources. The problem here has been resolving the cumulative pressures on access due to the multiple roles forest resources can play in livelihoods (wood fuel, building materials, charcoal for sale etc) with sustainability and conservationist objectives. CBNRM regimes have perhaps been more popular in forestry than for any other resources, sometimes building genuinely on pre-existing institutional arrangements governing access or failure of recent institutional innovation.

Fishing resources represent yet a different case again with former mainstream policy being to increase catch efficiency (improved boats and gears) for artisanal fishermen while simultaneously maximising overall sustainable yield by state-enforced limitation of access (Allison & Ellis, 2001). This approach rested on the mistaken belief that artisanal fishermen have specialized livelihoods and that they depend only on the fishery resource. There has also been a widespread and empirically unverified belief that artisanal fishing families are amongst the 'poorest of the poor' (Béné, 2003). Livelihoods approaches show that many of the earlier suppositions about the small-scale sector are wrong. Artisanal fishing is often a part-time or seasonal occupation, and fishermen turn to different activities when costs rise due to scarcity of fish. Fishermen are often seasonal migrants. Fishing strengthens diversified livelihoods, and those with access to it are typically better off than those who depend on farming alone in the same locations. One reason for this is that fishing is a highly monetised activity, thus providing cash that can be flexibly utilised between different livelihood objectives (Allison, 2004).

CBNRM has become popular in fisheries as elsewhere, and is predicated on an 'overfishing' paradigm similar to the 'deforestation' paradigm in forestry. However, just as in forestry it is often large scale commercial logging activities that initially disrupt and open up previously relatively undisturbed forest areas; so in fishing it is often large scale vessels using the full array of modern technologies that are responsible for resource depletion, not the artisanal fishermen with their flexible entry and exit capabilities. CBNRM in fisheries also tends to invoke principles such as territorial exclusion that make little sense for a fugitive resource.

Some of these difficulties are illustrated by empirical investigation in Malawi, utilising a livelihoods perspective, of artisanal fishing communities in fresh water lakes. CBNRM was introduced to Malawian fishing villages, first by the German aid agency GTZ, in the late 1990s, and later in generalised legislation that promoted its widespread implementation in the sector (Allison & Mvula, 2002; Allison, 2004). The institutional device that was created was the Beach Village Committee (BVC) as a coordinating and regulatory body at the community level.³ The negotiation and implementation of BVCs in Malawi seems to have been founded on several initial implicit or explicit CBNRM propositions:

- (a) that no pre-existing indigenous regulatory mechanisms regarding artisanal fishing existed in Malawian villages
- (b) that artisanal fishermen were specialised single occupation enterprises, who comprised the poorest of the poor in rural Malawi and had few if any alternative livelihood sources
- (c) that communities were ethnically, occupationally, and distributionally relatively homogeneous, resulting in a common interest in management of the resource
- (d) that artisanal fishermen exploiting an open access resource were chiefly responsible for endangering the future productivity of Malawian lakes
- (e) that territoriality (each village having command over its own fishing territory) could provide a useful principle for focussing community management efforts
- (f) that fisheries department officials, formerly charged with policing top-down fishing regulations, would take a background advisory and coordinating role with respect to the BVCs

Livelihoods research revealed an entirely different picture of how artisanal fishing operated in Malawi by comparison to this blueprint. First, in many Malawian fishing villages (especially those in the southern arm of Lake Malawi), fishing is predominantly undertaken by visiting fishermen from other parts of the country (migrants of varying durations from months to years). The migrants are a different ethnic group from the resident villagers, and as outsiders they have no customary rights with respect to village decision-making or access to resources other than the fishery (although for longer duration stays some such rights may be negotiated). Second, migrant fishermen are not the poorest of the poor, nor is fishing their only option (most of them have farms and families in their villages of origin elsewhere in Malawi). In the event of declining catches and rising costs in the fishery, they turn to other activities or return home

Their responsibility for destabilising the renewal of the most important species making up the fishing resource is thus difficult to demonstrate, particularly given recent evidence that stock fluctuations are driven more by climate-induced productivity variations than fishing-induced depletion (Allison and Mvula, 2002; Jul-Larsen et al., 2003). Larger, high value fish, of disproportionate interest to larger-scale fishing enterprises and wealthier consumers, have indeed been depleted and will

³ BVCs are now the institution of choice for fisheries management throughout Africa.

require management intervention to rebuild stocks, but these efforts may need to be more focused on the activities of the larger-scale sector, including the two or three large scale trawlers that ply Lake Malawi for which already sunk large-scale capital means that fishing is continued as long as the marginal cost of being on the lake is covered (and possibly beyond that point, due to subsidy arrangements).

Third, the fish species that are preferred for smoking and trading in Malawi, the *usipa* and allied shoaling species, do not obey territorial behaviours; they are fugitive species and can appear in abundance almost anywhere on the lake. Therefore the fishermen must move to the fish, and typically fishermen from up to a dozen different villages on both sides of the lake will converge on places where fish of this type are present.

Fourth, it becomes quickly apparent that pre-existing institutional arrangements exist for this type of artisanal fishery even though they are not codified and written down and parcelled up in such a neat concept as a Beach Village Committee. There is an implicit recognition on the part of resident villagers that migrant fishermen bring benefits to their village. Fish are landed there, and that attracts fish traders, as well as opening up the potential for fish trading as an occupation; fishermen and fish traders spend money in the village and purchase local agricultural output for sale; in the agricultural slack season work on migrant boats can provide an important seasonal livelihood activity for members of farming families. For this reason, migrants have historically been welcome: they are allocated land on which to build houses, or beach areas for temporary accommodation. Similarly, there are unwritten codes between fishermen with respect to territory; the general case is one of non-exclusion, on the basis that allowing fishermen from other villages into the waters of a particular village also ensures reciprocal access when the fish are somewhere else.

It can be seen that parachuting idealised, blue-printed CBNRM ideas into this negotiated pattern of social and economic inter-relationships risks adverse consequences for diverse rural livelihoods. BVCs risk being dominated by village authorities that represent the interests of some resident farmers, not those of migrant fishermen; the principle of territoriality if pursued by BVCs threatens the successful reciprocal exploitation of a fugitive resource by thousands of artisanal fishermen; complex patterns of complementarity in the livelihood patterns of artisanal fishermen and resident farmers that have arisen over decades are destabilised; and it is unclear whether the regulatory functions of BVCs will achieve any greater purchase on the depletion of certain fish stocks than the former top-down regime. For example, at Malawi's Lake Chilwa former fisheries officers were found to have taken over BVCs and used them to designate exclusionary rights over particular fishing areas.

The Malawi fisheries example illustrates some of the difficulties that CBNRMs may represent for successful livelihood diversification with its attributes of flexibility, mobility and adaptability. More generally:

- (1) CBNRM regimes tend to be spatially exclusionary; they identify the resource as a territory pertaining to a particular community, however, territorial exclusion may inhibit mobile livelihood strategies;
- (2) CBNRM regimes tend to assume a homogeneity of interest in the resource across community members, however, individual livelihood strategies vary

tremendously and some community members will have a lot less interest or reliance on the resource than others, and the exercise of communal access may not correspond to, or may even oppose, these variations in underlying reliance or needs;

- (3) CBNRM functioning will tend to represent the interests of resident community members, not those that are involved in mobile lifestyles away from the community and are therefore unable to be involved in local decision making;
- (4) In certain circumstances CBNRM regimes may exclude the interests of minority ethnic groups since decision making will tend to be dominated by majority groups; similar exclusions may occur along religious or caste lines;
- (5) In practice CBNRM regimes are often male dominated, and in patriarchal societies they may even strengthen the control of men over resources to which women previously enjoyed relatively unimpeded access under poorly implemented state regulation;
- (6) The foregoing points imply that the equity impacts of CBNRM are unclear, and it cannot just be assumed that equity goals are met through this institutional form of natural resource management.

This implied critique of the way that CBNRM initiatives have been designed and implemented does not mean rejection of the underlying principles of locally managed natural resources. Institutions that promote democratically negotiated, locally adapted, equitable access to natural resources, their sustainable use and have the possibility to empower previously marginalized people are self-evidently a good thing. CBNRM represents a potential way forward, despite past faults in conception and implementation. Many of the faults with CBNRM initiatives can be traced to misplaced assumptions about the sectoral nature of people's livelihoods and misplaced optimism about the ease of transforming the hierarchical societies that comprise many rural 'communities' into the democratic governance instruments that CBNRM requires if it is to contribute to rural poverty eradication. Optimism is an admirable quality in the context of development intervention, but if it blinds CBNRM proponents to the political realities of elite capture, it is damaging to the interests of the poor.

5. THE WIDER POLICY ENVIRONMENT AND MICRO-MACRO LINKS

To recap so far, this paper argues that livelihood diversification is generally a good thing both for reducing rural poverty and for improving rural natural resources and environments. Diversification gives individuals and families wider experiences, it strengthens human capital, it generates cash resources that can be used for natural resource investments, it can take pressure off sensitive natural resources by providing alternative income streams, and so on. Yet diversification is inhibited by many branches of state policy. Mobility and spatially separated transactions are often inhibited, licensed and taxed. Transfers of people and goods across space are made difficult by formal and informal barriers to movement. Migration is often actively discouraged, and few states have facilitating regulatory frameworks for migration and remittance transfers whether these are internal within countries or across borders with other countries.

An important example of this discouraging policy environment is that of rural taxation, a topic that is relatively little researched in low income countries. Rural tax regimes are overlooked because their revenue yield at central government level is insignificant compared to other sources of government income. Some taxes are formal e.g. market dues and business licenses; others are informal and variable e.g. a basket of fish that must be given to the chief or village leader in order to be allowed to go fishing. Still others are bribes that must be paid to gatekeepers – fisheries, forestry and livestock officers, police, army, customs officials – in order to do things like move livestock, trade in fish, carry crops from one village or town to another, engage in cross border trade and so on.

The apparently small levels of these various payments give the false impression that they are unimportant to the economic vigour of rural areas, and of minor significance compared to other factors in explaining rising poverty and vulnerability. This is not so, as research in a number of African countries has begun to demonstrate (Fjeldstad, 2001a; 2001b; 2002; Ellis & Bahiigwa, 2003). The enormous range and variety of such payments adds to the oppressive hopelessness of individual and household level attempts to construct routes out of poverty. While small in tax revenue generation terms, market dues can represent up to 30 percent of the farm gate value of items being sold; likewise business licenses that are applied to even the most micro of startup enterprises can represent a substantial proportion of net income generated. There is typically a strong anti-poor bias in tax and licensing regimes: market dues are proportionately higher on small quantities of produce (a basket or a heap) than on large ones (a sack or truckload); flat rate business licenses represent a larger proportion of turnover for smaller than larger enterprises operating in the same line of business.

Rural taxes tend to be multiple, complicated, bear no relation to service delivery, create numerous rent seeking opportunities, and accentuate relations of mistrust and subordination between ordinary citizens and those who possess revenue generating powers over them. They also inhibit market engagement and mobility since often the risk of incurring taxes, fees and fines increases markedly the more people engage in activities above the subsistence survival level or external to their communities of residence.

It might be thought that these types of barrier would tend to be tackled and moves made to dismantle them in Poverty Reduction Strategy Papers (PRSPs) that have poverty reduction as their overarching goal, and that are informed by widespread participation and consultation with stakeholder groups in society. However, PRSPs have proved disappointing as vehicles for adopting cross-sectoral policy thinking about poverty reduction. Despite the lip service they pay to contemporary development discourse (participation, empowerment, gender awareness etc.), the majority of PRSPs end up looking like elaborate sectoral expenditure plans, and indeed they are often supported in the background by strategic documents (agricultural development strategies etc) that are unashamedly based in an orthodox sector-based view of the world.

Migration is typical of the type of cross-cutting phenomenon that PRSPs seem poorly equipped to handle, and it therefore provides a suitable example of the mismatch between micro livelihood priorities and macro policy formulation that tends to occur a lot in practice. In a survey of 48 PRSPs undertaken in 2003, migration was found not to be mentioned at all in 21 of them. Most of the remaining 27 PRSPs referred to migration in negative or pejorative terms. Seventeen, for example, posed internal migration as a problem for development, eight cast migration as a cause of urban poverty, and others pointed to the negative effects of migration in spreading HIV/AIDS and contributing to crime. Eight PRSPs expressed the need for internal migration to be controlled by the state i.e. for rural-urban migration to be reduced (Black *et al.* 2003: pp.18-19).

The foregoing discussion suggests a number of areas in which action research could both improve our understanding of diversification-natural resource access linkages, and contribute actively to improving the policy environment for rural poverty reduction. These areas are listed here and amplified in subsequent discussion:

- ∉ livelihood diversification and land tenure institutions
- ∉ rural taxation and licensing (linked to decentralization)
- ∉ migration and remittances
- ∉ diversification and CBNRMs
- ∉ integration of cross-sector thinking in PRSPs

5.1 Livelihood diversification and tenure institutions

Almost no systematic research has hitherto been conducted on the links between land access, farm size, farm productivity and livelihood diversification; nor on the gender dimensions of these relationships. The dangers of superficial dismissal of customary tenure as an allocative mechanism for land have been emphasized by some researchers, and ensuing benefits of customary tenure identified (Shipton & Goheen, 1992; Platteau, 1996). The specific link between tenure and farm productivity was investigated for several SSA countries by Place & Hazell (1993) with the finding that customary tenure made no statistically significant difference to farm yields as compared to freehold in those case-studies. On the gender side, a number of observers have noted the erosion of matrilineal land inheritance systems in SSA societies where this has been a customary feature of land tenure.

With large numbers of countries revising their legislative frameworks governing land tenure over the past fifteen years (Toulmin & Quan, 2000), and decentralization proceeding apace in many countries (see also below), this is an appropriate juncture to carry out research at district and community levels into the more complex interrelationships between land tenure and poverty reduction that are suggested by previous discussion. In particular, such research might seek to explore, document, and derive policy-relevant findings with respect to:

- ∉ effectiveness of new legislation at achieving stated goals, when applied at district, sub-district and community levels;
- ∉ institutional mechanisms that have arisen at local levels in response to national level changes; their effectiveness in providing frameworks for equitable land access and for solving disputes;
- ∉ distributional benefits and harm so far realized, related to access and farm size aspects of land tenure;
- ∉ detailed examination of livelihood diversification relationships to land tenure and access; the effects of temporary and long term absence by family members from different income and wealth groups; re-allocations that occur or are inhibited by customary and legislative frameworks;
- ∉ investigation of workable mechanisms for introducing more flexibility into land access, while protecting the access rights of those least able to protect themselves. The emphasis here is on workable i.e. transparent, low cost, village level institutions that can help to stimulate and regulate a more vigorous rental market in land; and
- ∉ the position of women in all matters related to livelihood diversification and land access would be a fundamental feature of all the foregoing dimensions of research.

5.2 Rural taxation and licensing (linked to decentralization)

The critical positioning of decentralization in contemporary donor thinking about poverty reduction has been noted earlier in this paper. There is a huge literature on this, mainly dating from the 1990s (Crook & Manor, 1998; Manor, 1999). The principal thrust has been towards so-called democratic decentralization, implying local elections of councillors to represent their constituents in district level councils or assemblies. In some countries, previous larger administrative entities (provinces or regions) have been broken up into smaller ones with a resulting proliferation of parallel local government functions. For example in Tanzania decentralization resulted in the creation or redesignation of 96 rural districts replacing former local government functions conducted in 20 regions (Ellis & Mdoe, 2003). The democratic procedures of decentralization vary widely. In some instances, there are direct elections by citizens of councillors according to area-based constituencies, in others a tiered electoral system operates whereby directly elected representatives at sub-district tier comprise the electorate that then vote for alternative candidates standing for district council positions.

As already noted a critical research issue in decentralization concerns local revenue generation. While district level government continue to be predominantly supported

by central government transfers, with intended increasing autonomy in making spending decisions (fiscal decentralization), the ultimate intention is for them to rely more on generating their own resources thence achieving a desirable synergy between taxes paid and citizens expectations of improved public revenues.

Local revenue generation is important for the intersection between livelihood diversification and natural resource management in several ways:

- ∉ local taxes are often levied on crops, livestock and other NR products;
- ∉ such taxes can distort relative prices, adversely effect resource allocation decisions, and inhibit the expansion of the monetised economy in rural areas;
- ∉ such taxes are often regressive in effect, even if not in intention, due to flat rate impositions that penalise small quantities compared to large quantities or things produced by the poor more than those produced by the better off;
- ∉ business licenses are often utilized by local councils primarily as a revenue enhancement device rather than as a tool for establishing an enabling regulatory environment for small businesses;
- ∉ land itself may be taxed under some local revenue systems, or the potential exists for such tax as a progressive alternative to regressive commodity taxes, or land taxes may be used to discourage non-utilization of land by absentee landowners; and
- ∉ tax collection by itself often exhibits serious flaws manifested by substantial leakages between point of collection and delivery of receipts to local tax offices

Overall, substantive policy issues surround the impact of local taxation systems both with regard to the enabling versus disabling public sector environment for livelihood diversification, and on the utilization of land as a resource, and fertile area for action research could be developed in this area.

5.3 Migration and remittances

Migration plays crucial roles in diminishing vulnerability and lessening poverty in low income countries (de Haan, 1999; Skeldon, 2002). Migration may be seasonal (e.g. to participate in harvests), circular (involving periods away and periods at home), rural-urban (with a degree of permanence) or international (cross-border and distant migrations). Recent literature has emphasised the significance of remittances in international financial flows to developing countries (Nyberg et al., 2002); as well as the complex social as well as economic ties that bind migrants to the livelihood circumstances of those they leave behind (de Haan & Rogaly, 2002; Kothari, 2003).

Migration also involves important interactions with land, land tenure and the use made of land. Those left behind by migrants act as stewards and retainers of land that in the absence of secure ownership rights might otherwise be in jeopardy of being lost to the family. In the absence of a rental market, this land may be poorly utilized. Alternatively, migrant earnings can enable improved agricultural practices and raise yields as discussed earlier in this paper. A series of research questions are raised by these interactions and cumulative processes:

- ∉ how is management of land affected when individual family members migrate?
- ∉ what differences are made between male and female migration for land management?
- ∉ what is the evidence concerning use of remittance income for agricultural improvement compared to other uses?
- ∉ are those 'left behind' impoverished or their livelihoods improved when family members migrate?
- ∉ how do land tenure systems affect migration decisions?

5.4 Diversification, decentralization and CBNRM regimes

Decentralization and support for community-based management provide significant opportunities for rural people to gain increasing representation in decision-making that affects their access to and control over natural resources. Such opportunities hold out the promise, prominent in the rhetoric of both decentralization and CBNRM, of providing the poor with increased opportunity to defend their rights and interests. In practice, however, decentralization and CBNRM initiatives have been criticised from a range of perspectives. In the context of this paper, the most relevant criticisms are that CBNRM regimes have often failed to adequately account for peoples' livelihood diversity and dynamism – their occupational and geographical mobility – in their efforts to protect and strengthen their livelihoods.

CBNRM initiatives are often conceived and implemented on sectoral lines. East African and South Asian villages often have newly-developed fisheries management committees, forest-user groups, grazing committees, water-users' associations and various farmer-based organizations. These are often supported by donors or NGOs and may co-exist with earlier state-created village environment committees and with the remnants of customary land tenure and resource access arrangements (themselves often created by colonial governments under indirect rule, rather than being, in some sense 'traditional' and 'indigenous'; Ribot, 1999). Market-based institutions such as producer-organizations and trade co-operatives are also promoted under state and donor-funded programmes, alongside various civil-society organizations that may have direct or indirect impact on natural resource access. This complex institutional environment is seldom properly analysed prior to the design of interventions by donor programmes. It is not clear how conducive these institutional arrangements are to supporting livelihood diversification, nor how effective they are in blocking or facilitating people's activities.

A frequently-cited reason for the failure of CBNRM institutions to represent the interests of the poor is the observation that the poor (and particularly poor women) are often so burdened by work that they do not have the time and resources to become involved in decision-making, conflict resolution, management planning, lobbying and other activities of village-based CBNRMs. This constraint is multiplied in households with diversified livelihoods in villages where there is a different CBO regulating access to every natural resource. Each of these institutions needs to be financially self-sustaining, and potentially develop a surplus for investment in community-goods (e.g. successful forest-user groups in Nepal). Financial sustainability often comes from membership contributions; to be a member of a beach village committee or a forest-

user group or a water-users association requires subscription. The more diversified the CPR basis of a livelihood, the more subscriptions need to be paid. Obviously this may act as a barrier to diversification. Cross-sectoral analysis of local-level institutions, with emphasis on their comparative strengths and weaknesses, may help guard against unsustainable institutional proliferation and overlap.

Policy-level analysis of consistency between forestry, fisheries, communal grazing, water resources and land tenure programmes in PRSPs may be useful. Programmes to reform and improve the management of each of these resources are nearly always carried out separately, often with funding from different donor agencies, and often with little communication. There are so many common themes and policy directions, as well as practical overlaps at ground level that keeping such experience in separate compartments is counter-productive. While the theoretical literature on CBNRM is well integrated across the sectors, the empirical literature is invariably sector-focused; fisheries, forestry and irrigation experiences are seldom shared at the level of practitioners and policy makers at national level.

FAO has supported CBNRM in a variety of natural resource sectors (fisheries, forestry, pastoralism, irrigation), yet, to our knowledge, no comparative analysis of its project and programme support across these different sectors has taken place, despite their conceptual similarity and potential for lesson-learning. This would be relatively easy to achieve and would have the advantage, hopefully, of drawing together work carried out under a common organizational mandate, with similar expectations and standards of reporting. This would bypass one of the major constraints to comparative analysis of CBNRM experiences: the use of different measures of success (independent variables) and proliferation of possible causative factors (dependent variables), confounded by different levels and modes of reporting by different agencies (Agrawal, 2001). An action-research agenda to address these issues could focus on the following questions:

- ∉ Is CBNRM conceived primarily in instrumental terms, or does it seek to challenge social inequities, in association with decentralization?
- ∉ How can CBNRM institutions be designed to both sustain the natural resource base and challenge existing social inequities, to benefit the poor?
- ∉ Do sector-based CBNRM institutions at local level hinder livelihood diversification?
- ∉ Do diversified livelihood strategies undermine the effectiveness of sectorbased CBNRM institutions?
- ∉ What lessons for CBNRM programme design and process can be learnt by comparing FAO's sector-based programmes under a common analytical framework?

5.5 Integration of cross-sector thinking in PRSPs

As the overarching framework for achieving poverty reduction, PRSPs should hopefully take the lead in creating policy environments that work with, rather than against, people's own efforts to build routes out of poverty. This would entail considering carefully observable successful livelihood strategies and seeking to reduce barriers that inhibit people's ability to pursue such strategies. It would also require PRSPs to take on a much more active coordinating role across different branches of government than has so far been manifested in first round PRSPs.

A promising policy research agenda lies in deconstructing and reconstructing a selection of PRSPs from the foregoing perspective. As already observed, PRSPs have a tendency to maintain rather rigid sectoral demarcations and to develop pro-poor policies along traditional sector lines. These may, or may not, work at cross-purposes to each other. PRSPs are also formulated at a national, aggregate, level, and seldom are they critically examined with respect to consistency between national level strategic pronouncements and the actual discharge of policy at intermediate levels of government down to the district and village. The former observations about rural taxation typify situations where different layers of the public sector institutional context to people's lives may pull in opposite directions to each other. PRSPs may champion enabling environments as national level poverty reduction goals, but local governments may simultaneously be putting in place increasing barriers and blockages to exchange and mobility in the local rural economy.

6. SYNTHESIS AND CONCLUSIONS

This paper set out to explore the links between livelihood diversification and access to natural resources, and it did this bearing in mind the need to make micro-macro policy links between local level rural livelihoods and national level poverty reduction efforts represented by Poverty Reduction Strategy Papers (PRSPs). The paper provides a synopsis of the livelihoods approach, summarises ideas and recent evidence concerning livelihood diversification, links diversification to natural resource access considerations, considers policy environments pertinent to both diversification and natural resource access, and proposes policy areas that could form the basis of action oriented research initiatives in this area.

The paper takes the view, supported by a considerable literature and much empirical evidence, that livelihood diversification is generally a good thing for rural poverty reduction. It helps to lessen the vulnerability of the poor to food insecurity and livelihood collapse; it can provide the basis for building assets that permit individuals and households to construct their own exit routes out of poverty; and it can improve the quality and sustainability of natural resources that constitute key assets in rural livelihoods. These effects occur because diversification widens people's options, encourages spatially diverse transactions, increases cash in circulation in rural areas, and enhances human capital by providing those who diversify with new skills and experiences.

These beneficial effects of diversification depend upon social attributes of mobility, flexibility, and adaptability, as well as on the ease of engaging in spatially diverse transactions. These attributes are often inhibited by local level policy environments, as well as by poor local governance, which as often as not are characterized by fees, fines, permits, bribes, licenses, roadblocks and other petty barriers to exchange and mobility. The poor find it more difficult to negotiate such barriers than the better off.

Natural resources are fundamental assets in rural livelihoods, but access to them needs to be viewed through the same lens of widening options and opportunity as livelihood diversification itself. Natural resource management regimes that inhibit exchanges, substitutions and transactions also inhibit livelihood diversification with negative consequences for their long run quality and sustainability. Land tenure and common property management institutions are often inhibiting in this way either by placing barriers in the way of transfers between users or by being founded on exclusionary principles in their establishment.

Land tenure regimes are prone to cause multiple difficulties for diverse livelihood strategies. In customary tenure systems, ownership security may be contingent and unclear and risky, making it difficult to exit or enter farming and resulting in patchy and inadequate development of a rental market in farmland. Inheritance rules are typically conservative and patriarchal and exclude women from inheriting or bequeathing land. New land legislation often fails to address fundamental inflexibility problems and is unadventurous in seeking workable institutional methods that could create more scope for land transfers and exchanges while providing security for owners and tenants.

Contemporary approaches to common property resources in the form of CBNRMs, including co-management regimes, also have flaws in a livelihood diversification

context. They are almost always sectoral in conception (forests, fisheries, wildlife etc) whereas diverse rural livelihoods are fundamentally cross-sectoral in character; for this reason they assume a homogeneity in reliance on or demand for access to a resource which rarely corresponds to variations in underlying livelihood priorities; they often also embody exclusionary notions of territory that inhibit flexibility and create barriers to the ability of new or different users to access the resource.

The gender construction of property management regimes is almost always disadvantageous to women. Women are often not permitted to own or inherit land; if they are widowed or divorced the land to which they have been entitled within their marriage may be withdrawn from them; within patriarchal societies CBNRM regimes tend to be dominated by men even if it is women who have the greatest stake in the livelihood contributions of the resource that is being regulated.

The contemporary approach is to site all poverty policy matters within the umbrella of the Poverty Reduction Strategy Paper (PRSP) process at central government level. PRSPs are informed by stakeholder consultations and participatory poverty assessments that often prioritize cross-sector issues and reducing barriers to the exercise of livelihood choices; however the documents themselves have a tendency to end up as disconnected sector and sub-sector expenditure plans. PRSPs are more often than not found to be basically inimical to migration and mobility, weak in their articulation of cross-sector issues, and weaker still in providing enabling environments for spatially dispersed livelihoods.

The PRSP process is associated with democratic decentralization processes that are being pursued in many low income countries supported by donors. Devolved natural resource management in the form of CBNRMs is also becoming linked retrospectively to decentralization, even though these originated from distinct starting points. For livelihood diversification, decentralization represents both an opportunity and a threat. The opportunity is that local institutions can be better adapted to local needs, and can grasp the nettle of the cross-sectoral diversity that actually characterises people's lives. The threat is that cash-strapped local councils will merely devise more onerous blockages to people's livelihood options in pursuit of revenues in order to pay councillor's sitting allowances.

The paper proposes five policy topics that could provide the basis for policy oriented research linking livelihood diversification to natural resource access. Gender is a cross-cutting theme that should be central to all the policy topics. These are:

- ∉ land tenure reform
- ∉ rural taxation and business licensing (linked to decentralization)
- ∉ migration and remittances
- ∉ diversification and CBNRMs
- ∉ integration of cross-sectoral thinking in PRSPs

It is appropriate to conclude this paper in the spirit with which it began. While livelihood diversification is an established fact of rural people's struggle to improve their lives, and an accumulating body of evidence points to the benefits of this process for both people and sustainable natural resources, poverty reduction policies lag far behind these insights. In particular, a considerable unwillingness to move away from orthodox sectoral thinking is manifested in PRSPs, and in the government expenditure plans that they contain, and almost no thought is given to constructing the elusive 'enabling environments' that would make it easier for people to exercise their own initiatives in the quest to move out of poverty.

REFERENCES

Adams, R.H. and J.J. He, 1995, *Sources of Income Inequality and Poverty in Rural Pakistan*, Research Report No.102, Washington D.C.: International Food Policy Research Institute

Agarwal, B., 2000, 'Conceptualising environmental collective action: why gender matters, *Cambridge Journal of Economics*, Vol. 24, pp 283-310.

Agrawal, A., 2001, 'Common property institutions and sustainable governance of resources' *World Development*, Vol. 29, pp 1649-1672.

Agrawal, A. and Gibson, C.C., 1999, 'Enchantment and disenchantment: the role of community in natural resource conservation', *World Development* Vol 27, pp 629-649.

Allison, E.H., 2003, 'Linking national fisheries policy to livelihoods on the shores of Lake Kyoga, Uganda', *LADDER Working Paper* No 9, Norwich, U.K.: Overseas Development Group, University of East Anglia. (http://www.uea.ac.uk/dev/odg/ladder/)

Allison, E.H., 2004, 'Contribution of the fisheries sector to livelihoods and rural development in Eastern and Southern Africa', In: *Rural Livelihoods and Poverty Reduction Policies* (ed, F. Ellis and H.A. Freeman). London: Routledge.

Allison, E.H. and F. Ellis, 2001, 'The Livelihoods Approach and Management of Small-Scale Fisheries', *Marine Policy*, Vol.25, No.5, pp. 377-388

Allison, E.H. and Mvula, P.M., 2002, 'Fishing livelihoods and fisheries management in Malawi' *LADDER Working Paper* No 22, Norwich, U.K.: Overseas Development Group, University of East Anglia.

Allison, E.H., Mvula, P.M. and Ellis, F., 2002, 'Competing agendas in the development and management of fisheries in Lake Malawi', in K. Geheb & M-T. Sarch (Eds) *Africa's Inland Fisheries: The Management Challenge*, Kampala, Uganda: Fountain Books, pp 49-88.

Alwang, J., 1999, 'Labour Shortages on Small Landholdings in Malawi: Implications for Policy Reforms', *World Development* Vol 27, No. 8, pp 1461-1475.

Ashley, C. and N. Mdoe, 2002, 'Rethinking wildlife for livelihoods and diversification in rural Tanzania: a case study from northern Selous', *LADDER Working Paper*, No.15, Overseas Development Group, University of East Anglia

Barrett, C.B., Reardon, T. and P. Webb, 2001, 'Nonfarm Income Diversification and Household Livelihood Strategies in Rural Africa: Concepts, Dynamics and Policy Implications', *Food Policy*, Vol.26, No.5

Bebbington, A., 1999, 'Capitals and Capabilities: A Framework for Analyzing Peasant Viability, Rural Livelihoods and Poverty', *World Development*, Vol.27, No.12, pp.2021-2044

Beck, T. & Nesmith, C., 2001, 'Building on Poor People's Capacities: The Case of Common Property Resources in India and West Africa' *World Development*, Vol 29, No. 1, pp 119-133.

Béné, C., 2003, 'When fishery rhymes with poverty: a first step beyond the old paradigm on poverty in small-scale fisheries', *World Development*, Vol 31, pp 949-975.

Campbell, B., Mandondo, A., Nemarundwe, N., Sithole, B., de Jong, W., Luckert, M. and Matose, F., 2001, 'Challenges to the proponents of common property resource systems: despairing voices from the social forests of Zimbabwe', *World Development* Vol. 29, No. 4, pp 589-600.

Carney, D. (ed), 1998, *Sustainable Rural Livelihoods: What Contribution Can We Make?*, London: Department for International Development (DFID)

Berry R.A., and W.R. Cline, 1979, *Agrarian Structure and Productivity in Developing Countries*, Baltimore: Johns Hopkins

Black, R., R. Sabates-Wheeler, R. Skeldon, C. Waddington and A. Winters, 2003, *Mapping Study of Migration Issues*, Sussex Centre for Migration Research, March, processed

Blaikie, P., 2004, 'Community-Based Natural Resource Management in Malawi and Botswana', Ch.18 in F. Ellis & H.A. Freeman (eds), Rural Livelihoods and Poverty Reduction Policies, London: Routledge, forthcoming

Bromley, D.W., 1989, 'Property Relations and Economic Development: The Other Land Reform', *World Development*, Vol.17, No.6

Bryceson, D.F., 2002, 'The Scramble in Africa: Reorienting Rural Livelihoods', *World Development*, Vol.30, No.5, May 2002

Bryceson, D.F. and L. Bank, 2001, 'End of an Era: Africa's Development Policy Parallax', *Journal of Contemporary African Studies*, Vol.19, No.1, pp.5-23

Bryceson, D.F. and V. Jamal (eds), 1997, *Farewell to Farms: Deagrarianisation and Employment in Africa*, Research Series No.1997/10, Leiden, Netherlands: African Studies Centre

Crook, R. & J. Manor, 1998, *Democracy and Decentralization in South-East Asia and West Africa: Participation, Accountability and Performance,* Cambridge: Cambridge University Press

Cross, S., 2003, 'A Comparative Study of Land Tenure Reform in Four Countries: Uganda, Tanzania, Malawi and Kenya', *LADDER Working Paper*, No.31, Overseas Development Group, University of East Anglia

de Haan, A., 1999, 'Livelihoods and Poverty: The Role of Migration – A Critical Review of the Migration Literature', *Journal of Development Studies*, Vol.36, No.2, pp.1-47

de Haan, A. and B. Rogaly (eds), 2002, Special Issue: Labour Mobility and Rural Society, *The Journal of Development Studies*, Vol.38, No.5, June

Delgado, C., J. Hopkins, V. Kelly *et al.*, 1998, *Agricultural Growth Linkages in Sub-Saharan Africa*, IFPRI Research Report No.107, Washington DC: International Food Policy Research Institute

Ellis, F., 1998, 'Survey Article: Household Strategies and Rural Livelihood Diversification', *The Journal of Development Studies*, Vol.35, No.1, pp.1-38

Ellis, F., 2000, *Rural Livelihoods and Diversity in Developing Countries*, Oxford: Oxford University Press

Ellis, F., 2003a, 'Human Vulnerability and Food Insecurity: Policy Implications, *Forum for Food Security in Southern Africa*, Theme Paper No.3, London: Overseas Development Institute, July, processed

Ellis, F., 2003b, A Livelihoods Approach to Migration and Poverty Reduction, Paper Commissioned by the Department for International Development (DFID), November, processed

Ellis. F., 2004, 'Sustainable Livelihoods', entry in *Routledge Encyclopedia of International Development*, London: Routledge

Ellis, F. and G. Bahiigwa, 2003, 'Livelihoods and Poverty Reduction in Uganda', *World Development*, Vol.31, No.6, pp.997-1013

Ellis, F. and N. Mdoe, 2003, 'Livelihoods and Rural Poverty Reduction in Tanzania', *World Development*, Vol.31, No.8, pp.1367-1384

Ellis, F., M. Kutengule and A. Nyasulu, 2003, 'Livelihoods and Rural Poverty Reduction in Malawi', *World Development*, Vol.31, No.9, pp.1495-1510

Ellis, F. and H.A. Freeman, 2004, 'Rural Livelihoods and Poverty Reduction Strategies in Four African Countries', *Journal of Development Studies*, Vol.40, No.4, April

Evans, H.E. and P. Ngau, 1991, 'Rural-Urban Relations, Household Income Diversification and Agricultural Productivity' *Development and Change*, Vol.22, pp.519-545

Floyd, C., Harding, A-H., Paudel, K.C., Rasali, D.P., Subedi, K and Subedi, P.P., 2002, 'Household adoption and the associated impact of multiple agricultural technologies in the western hills of Nepal', *Agricultural Systems* Vol. 76, pp 715-738.

Fjeldstad, O-H, 2001a, 'Donors Turn Blind Eye to Extortion in Tax Collection in Africa', *Development Today*, Vol. XI, No.8, May

Fjeldstad, O-H, 2001b, 'Taxation, Coercion and Donors: Local Government Tax Enforcement in Tanzania', *The Journal of Modern African Studies*, Vol.39, No.2, pp.289-306

Freeman, H.A., F. Ellis and E. Allison, 2004, 'Livelihoods and Rural Poverty Reduction in Kenya', *Development Policy Review*, Vol.22., No.2, March

Garforth, C.J., Malla, Y.B., Neopane, R.P., and Pandit, B.H., 1999, 'Socioeconomic factors and agro-forestry improvements in the hills of Nepal', *Mountain Research and Development* Vol. 19, No. 3, pp 273-278.

Geheb, K. and Binns, T., 1997, "Fishing farmers" or "farming fishermen"? The quest for household income and nutritional security on the Kenyan shores of Lake Victoria', *African Affairs*, Vol 96, pp 73-93.

Hazell, P. and S. Haggblade, 1993, 'Farm-Nonfarm Growth Linkages and the Welfare of the Poor', Ch.8 in Lipton, M. and J. van der Gaag (eds), *Including the Poor*, Proceedings of a Symposium Organized by the World Bank and the International Food Policy Research Institute, Washington D.C.: World Bank, pp.190-204

International Fund for Agricultural Development (IFAD), 2001, *Rural Poverty Report 2001: The Challenge of Ending Rural Poverty*, Oxford: Oxford University Press for IFAD

Jul-Larsen, E., Kolding, J., Overå, R., Raakjær Nielsen, J. and van Zwieten, P.A.M., 2003, 'Management, co-management or no management? Major dilemmas in southern African freshwater fisheries', 1. Synthesis, *FAO Fisheries Technical Report* 426/1, Rome: FAO.

Kellert, S.R., Mehta, J.N., Ebbin, S.A., and Lichtenfeld L.L., 2000, 'Community natural resource management: promise, rhetoric and realitiy. *Society and Natural Resources* vol 13, 705-715.

Kothari, U., 2003, (ed), Policy Arena: Migration, Staying Put and Livelihoods, *Journal of International Development*, Vol.15, No.5

Kumar, S., 2002, 'Does "participation" in common pool resource management help the poor? A social cost-benefit analysis of joint forest management in Jharkhand, India. *World Development* 30(5): 763-782

Leach, M., Mearns, R. and Scoones, I., 1999, 'Environmental entitlements: dynamics and institutions in community-based natural resource management', World Development Vol. 27, No. 2, pp 225-247.

Lipton, M., 2001, 'Reviving Global Poverty Reduction: What Role for Genetically Modified Plants', *Journal of International Development*, Vol.13, No.7, pp.823-846

Manor, J., 1999, *The Political Economy of Democratic Decentralisation*, Washington DC: World Bank

Mellor, J.W., 1966, *The Economics of Agricultural Development*, New York: Cornell University Press

Moser, C. O. N., 1998, 'The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies', *World Development*, Vol.26, No.1, pp. 1-19.

Myrdal, G, 1968, Asian Drama: An Inquiry into the Poverty of Nations,

North, D.C., 1990, *Institutions, Institutional Change and Economic Performance*, Cambridge University Press

Nyberg-Sorensen, N., N. Van Hear and P. Engberg-Pedersen, 2002, 'The Migration-Development Nexus Evidence and Policy Options: State-of-the-Art Overview', *International Migration*, Vol.40, No.5, pp.3-46

Ostrom, E., 1990, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press

Place, F. and P. Hazell, 1993, 'Productivity Effects of Indigenous Land Tenure Systems in Sub-Saharan Africa', *American Journal of Agricultural Economics*, Vol.75, pp.10-19

Platteau, J-P., 1996, 'The Evolutionary Theory of Land Rights as Applied to Sub-Saharan Africa: A Critical Assessment', *Development and Change*, Vol.27, pp.29-86

Platteau, J-P and F. Gaspart, 2003, 'The Risk of Misappropriation in Community-Driven Development', *World Development*, Vol.31, No.10, pp.1687-1703 Reardon, T., 1997, 'Using Evidence of Household Income Diversification to Inform Study of the Rural Nonfarm Labor Market in Africa', *World Development*, Vol.25, No. 5, pp.735-747

Reardon, T., J. Berdegue and G. Escobar, 2001, 'Rural Nonfarm Employment and Incomes in Latin America: Overview and Policy Implications', *World Development*, Vol.29, No.3, pp.395-409

Ribot, J.C., 1999, 'Decentralisation, participation and accountability in Sahelian forestry: legal instruments of political-administrative control', *Africa* 69(1): 23-65.

Salafsky, N. & E. Wollenberg, 2000. Linking livelihoods and conservation: A conceptual framework and scale for assessing the integration of human needs and biodiversity. *World Development*, Vol. 28, pp 1421-1438.

Sarch, M-T., and Birkett, C.M., 2000, 'Fishing and farming at Lake Chad: responses to lake level fluctuations', *The Geographical Journal*, Vol 163, No. 2, pp 1-17.

Scoones, I., 1998, 'Sustainable Rural Livelihoods: A Framework for Analysis', *IDS Working Paper*, No.72, Brighton: Institute of Development Studies.

Shipton, P. and M. Goheen, 1992, 'Understanding African Landholding: Power, Wealth and Meaning', *Africa*, Vol.62, No.3, 1992, pp.307-326

Skeldon, R., 2002, 'Migration and Poverty', Asia-Pacific Population Journal, December

Songorwa., A.N., 1999, 'Community-Based Wildlife Management (CWM) in Tanzania: Are the Communities Interested?', *World Development*, Vol.27, No.12, pp.2061-2079

Springate-Baginsky, O., Dev, O.P., Yadav, N.P. and Soussan, J., 2003, 'Community forest management in the middle hills of Nepal: the changing context', *Journal of Forest and Livelihood* Vol 3, No. 1, pp 5-20.

Swift, J., 1989, 'Why Are Rural People Vulnerable to Famine?', *IDS Bulletin*, Vol.20, No.2, pp.8-15

Tiffen, M., M. Mortimore and F. Gichuki, 1994, *More People, Less Erosion: Environmental Recovery in Kenya*, Chichester: John Wiley

Toulmin, C. and J. Quan (eds), 2000, *Evolving Land Rights, Policy and Tenure in Africa*, London: DFID/IIED/NRI

Wade, R., 1987, 'The Management of Common Property Resources: Collective Action as an Alternative to Privatization or State Regulation', *Cambridge Journal of Economics*, Vol.11, No.2

Wade, R., 1998, 'Village Republics: Economic Conditions for Collective Action in South India', Cambridge: Cambridge University Press.

Western, D., and Wright, M., (Eds), 1994, 'Natural Connections: Perspectives in Community-Based Conservation', Island Press, Washington, D.C.

Wilson, D.C., 2003, 'Conflict and scale: A defence of community approaches in fisheries management', In, D.C. Wilson, J. Raajkær Nielsen and P. Degnbol, eds, '*The Fisheries Co-management Experience: Accomplishments, Challenges and Prospects*', Kluwer, Boston, Mass., pp 193-212.

Further information about the LSP

The Livelihood Support Programme (LSP) works through the following sub-programmes:

Improving people's access to natural resources

Access of the poor to natural assets is essential for sustainable poverty reduction. The livelihoods of rural people with limited or no access to natural resources are vulnerable because they have difficulty in obtaining food, accumulating assets, and recuperating after shocks or misfortunes.

Participation, Policy and Local Governance

Local people, especially the poor, often have weak or indirect influence on policies that affect their livelihoods. Policies developed at the central level are often not responsive to local needs and may not enable access of the rural poor to needed assets and services.

Livelihoods diversification and enterprise development

Diversification can assist households to insulate themselves from environmental and economic shocks, trends and seasonality – in effect, to be less vulnerable. Livelihoods diversification is complex, and strategies can include enterprise development.

Natural resource conflict management

Resource conflicts are often about access to and control over natural assets that are fundamental to the livelihoods of many poor people. Therefore, the shocks caused by these conflicts can increase the vulnerability of the poor.

Institutional learning

The institutional learning sub-programme has been set up to ensure that lessons learned from cross-departmental, cross-sectoral team work, and the application of sustainable livelihoods approaches, are identified, analysed and evaluated for feedback into the programme.

Capacity building

The capacity building sub-programme functions as a service-provider to the overall programme, by building a training programme that responds to the emerging needs and priorities identified through the work of the other sub-programmes.

People-centred approaches in different cultural contexts

A critical review and comparison of different recent development approaches used in different development contexts is being conducted, drawing on experience at the strategic and field levels in different sectors and regions.

Mainstreaming sustainable livelihoods approaches in the field

FAO designs resource management projects worth more than US\$1.5 billion per year. Since smallholder agriculture continues to be the main livelihood source for most of the world's poor, if some of these projects could be improved, the potential impact could be substantial.

Sustainable Livelihoods Referral and Response Facility

A Referral and Response Facility has been established to respond to the increasing number of requests from within FAO for assistance on integrating sustainable livelihood and people-centred approaches into both new and existing programmes and activities.

For further information on the Livelihood Support Programme, contact the programme coordinator: Email: LSP@fao.org

LSP WORKING PAPERS to June 2004

- Baumann P., (July 2002) Improving Access to Natural Resources for the Rural Poor: A critical analysis of central concepts and emerging trends from a sustainable livelihoods perspective. FAO, LSP WP 1, Access to Natural Resources Sub-Programme.
- Cotula L., (August 2002) Improving Access to Natural Resources for the Rural Poor: The experience of FAO and of other key organisations from a sustainable livelihoods perspective. FAO, LSP WP 2, Access to Natural Resources Sub-Programme.
- Karl M., (August 2002) Participatory Policy Reform from a Sustainable Livelihoods Perspective: Review of concepts and practical experiences. FAO, LSP WP 3, Participation, Policy and Local Governance Sub-Programme. Also available in Spanish and French.
- Warren P., (December 2002) Livelihoods Diversification and Enterprise Development: An initial exploration of Concepts and Issues. FAO, LSP WP 4, Livelihoods Diversification and Enterprise Development Sub-Programme.
- Cleary D., with contributions from Pari Baumann, Marta Bruno, Ximena Flores and Patrizio Warren (September 2003) **People-Centred Approaches: A brief literature review and comparison of types.** FAO, LSP WP 5, People-Centered Approaches in Different Cultural Contexts Sub-Programme. Also available in Spanish and French.
- Seshia S. with Scoones I., Environment Group, Institute of Development Studies, University of Sussex, UK (November 2003) **Understanding Access to Seeds and Plant Genetic Resources. What Can a Livelihoods Perspective Offer?** FAO, LSP WP 6, Access to Natural Resources Sub-Programme.
- Biggs S. D., and Messerschmidt D., (December 2003) **The Culture of Access to Mountain Natural Resources: Policy, Processes and Practices**. FAO, LSP WP 7, Access to Natural Resources Sub-Programme.
- Evrard O., (Janvier 2004) La mise en oeuvre de la réforme foncière au Laos : Impacts sociaux et effets sur les conditions de vie en milieu rural (with summary in English). FAO, LSP WP 8, Access to Natural Resources Sub-Programme.
- Ellis F., Allison E., Overseas Development Group, University of Anglia, UK (January 2004) Livelihood Diversification and Natural Resource Access. FAO, LSP WP 9, Access to Natural Resources Sub-Programme, Livelihood Diversification and Enterprise Development Sub-Programme.
- Hodgson S., (March 2004) Land and Water the rights interface. FAO, LSP WP 10, Access to Natural Resources Sub-Programme.
- Mitchell R. and Hanstad T., Rural Development Institue (RDI), USA, (March 2004) **Small** homegarden plots and sustainable livelihoods for the poor. FAO LSP WP 11, Access to Natural Resources Sub-Programme.
- Hanstad T., Nielsen R., Brown J., Rural Development Institute (RDI), USA, (May 2004) Land and Livelihoods: Making land rights real for India's rural poor. FAO LSP WP 12, Access to Natural Resources Sub-Programme.
- Fisher R.J., Schmidt K., Steenhof B. and Akenshaev N., (May 2004) **Poverty and forestry : A case** study of Kyrgyzstan with reference to other countries in West and Central Asia. FAO LSP WP 13, Access to Natural Resources Sub-Programme.