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RE-VALUING THE COMMUNAL LANDS OF SOUTHERN AFRICA: NEW UNDERSTANDINGS OF RURAL LIVELIHOODS

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This paper reviews recent valuation studies in the communal lands of several southern African countries. The significance of common pool resources and a range of agricultural goods and services for livelihood security and household income, particularly for the most vulnerable segments of rural society, is highlighted. The paper examines reasons for under-valuation of communal lands in the past and challenges the assumption that the creation of labour reserve economies in southern Africa decreased rural people's dependence on the natural resource base and acted as a disincentive for land-based activities.

Policy conclusions

- Public investment in enhancing income from natural resources – including wild resources – in communal lands can be an effective means of promoting local economic development and diversification into non-farm income sources.
- Enhancing land-based livelihoods will require investment in improved infrastructure and government services.
- Redistributive land reforms which expand communal lands and their characteristic livelihood systems do not necessarily create 'poverty traps', and have the potential for significant economic development and poverty reduction.
- Policies enhancing security of land tenure in communal areas will assist in raising the contribution of NR to livelihoods.
- The enhancement of resource productivity in a Sustainable Livelihood context can increase both livelihood security and market participation; to propose a stark 'either/or' choice between 'commercial' and 'subsistence' farming is unrealistic.

Introduction

Communal lands in southern Africa support the majority of the rural population, many of whom live below the poverty line. Recent studies have demonstrated that land and natural resources within these multiple-use communal systems play a significant role in the livelihoods and household economies of rural dwellers (e.g. Shackleton *et al.*, 2000, Cavendish, 1999, Ashley and LaFranchi, 1997). This is despite the labour reserve policies of former colonial and apartheid regimes which concentrated indigenous communities into limited and marginal lands, effectively undermining the agrarian base for rural existence and creating a heavy dependency on migrant remittances and the formal economy.

Few would disagree that communal areas in the region provide land for arable production, fodder for livestock, and an array of biotic and abiotic resources for direct household provisioning and sale. However, data on the contribution these land-based activities make to a diverse and dynamic livelihood base have until recently been limited.

Only recently, with the shift to more integrated, people-centred approaches, the emerging interest in natural resource valuation, and the formulation of new conceptual frameworks for understanding poverty and livelihoods, has there been increased appreciation of land-based livelihood activities and common pool resources. However, much of this new understanding remains within the domain of scholars, donor agencies and NGO practitioners. Little has filtered through to government policy- and decision-makers, planners and extension agents, so that rural development, land reform and agricultural policies and practices often remain focused only on monetised activities. The result is an underestimation of the value of communal lands.

Complexity and diversity in rural livelihoods

The concept of 'livelihoods' has moved analysis away from narrow parameters of production, employment and income to a much more holistic view which embraces social and economic dimensions, reduced vulnerability and environmental sustainability, all within the context of building on local strengths and priorities (see NRP 42). This recognises that households pursue a range of livelihood strategies based on the assets (natural, financial, social, human and physical capital) they have to draw on and the livelihood outcomes they wish to achieve. The ability to access various combinations of assets helps to determine how vulnerable or robust a livelihood may be.

The livelihoods of the poor are complex and dynamic, typified by a diverse portfolio of activities that not only enhance household income but also food security, health, social networks and savings. Most households in southern Africa draw on a range of activities and income sources that bridge the rural-urban divide. These include casual and permanent wage employment, remittances, welfare grants, crop production, animal husbandry, wild resource use, social network transfers and other means of income generation through small enterprises like sewing and brick-making. The contribution of different strategies varies with social identity and is constantly shifting as household members adapt to changes in the internal and external environment. For this reason the concept of 'major livelihood sources' and the classification of households into pre-determined categories can be misleading (McAllister, 2000) and can result in the disregard of less obvious activities.

The under-valuation problem

The neglect of informal activities and non-marketed goods and services in valuing communal lands and their role in livelihoods can be attributed to a number of factors:

- Conventional surveys on household income and expenditure provide few insights into the diversity of rural livelihood strategies and seldom include adequate data on own-consumption of agricultural produce and natural resources (Cavendish, 1999).
- There is a bias in much rural research and development

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towards formally marketed goods and cash income, with a neglect of strategies to reduce risk or diminish cash expenditures.

- Sectoral focuses and the lack of multi-disciplinary research have caused linkages between livelihoods and resource-use systems to be neglected. For example, the extensive research on the use of indigenous resources in southern African has been undertaken outside mainstream rural development debates, with few attempts to quantify the economic value of these resources.
- The social dimensions of communal lands and land-based livelihood activities are rarely considered, such as their safety net function or their role in building social institutions and support systems.

Recognition of these limitations, and the influence of the theoretical and conceptual shifts mentioned above, have resulted in attempts to achieve a more holistic understanding of household livelihoods in communal areas.

Re-valuation of land-based livelihoods

Wild resources

Southern African communal areas provide a diversity of wild resource products. Fuelwood, wood for construction and implements, craft materials, foods and medicines are all utilised by a high percentage of households. Some of these resources are collected for everyday needs (e.g. fuelwood), whilst others are harvested primarily to generate income or as inputs into other production systems. Own use of 'free' resources results in considerable reductions in cash expenditure, a crucial livelihood strategy for poorer households.

There is growing trade in many of the resources utilised. Research in South Africa has shown that in some regions up to 25% of households trade in at least one resource with women playing a particularly strong role. Box 1 provides evidence and examples. However, there are negative impacts associated with commercialisation. Market opportunities may result in increased appropriation by outsider groups and the more wealthy in the community, possibly at the expense of subsistence use and the livelihood security of the poor. Intra-community conflicts are also likely to increase.

Developments in community-private-state partnerships in wildlife conservation and tourism are opening new opportunities for rural livelihoods in communal lands in the region. However, some of these developments may involve trade-offs between one livelihood source and another (e.g. game and livestock, game and cropping). Furthermore, benefits at a household level, especially cash dividends, are often low and may not justify the costs. However, within the framework of livelihood diversification these schemes are important, particularly if community benefits can be increased.

Non-monetised values of wild resources are equally important. Products harvested 'free' from the wild are used in local exchanges for goods or services. Institutionalised harvesting and processing activities and certain products, like marula (*Sclerocarya birrea*) beer, are key to maintaining social security networks. Non-market values such as aesthetics, shade, sacred areas, existence values and ecological services may be as highly regarded as some direct-uses. Thus, inclusion of these additional benefits results in a total economic value markedly higher than the direct-use value.

Livestock

The range of benefits derived through livestock ownership is well documented from several countries in southern Africa, but seldom within a livelihoods framework, or a complete valuation of all goods and services. Contributions of livestock to rural households have been underestimated in economic and livelihood security terms for several reasons, including: a focus on productivity, limited consideration of non-monetised products or services, and a neglect of small stock, such as goats or poultry.

The relative importance of each good or service differs between sites in response to agro-ecological conditions, markets, and income from other sources. In deep rural areas, with adequate rainfall, the use of cattle for draught and transport may contribute the most to total value. This may not apply in areas where cropping plays a lesser role in household livelihood strategies (such as arid areas or where greater opportunities for formal employment exist). In other areas, milk and/or meat are major contributors to value. Irrespective, a clear picture emerges that most households obtain several products and benefits simultaneously.

The multiple benefits to rural livelihoods from the use of livestock goods and services are manifest in several ways, both economic and social. Home use represents a direct cash saving, and trade provides additional cash income. Locally traded goods and services are sold at lower prices than via commercial outlets, providing a saving to the purchaser. Non-

Box 1 Evidence on the use of wild resources.

Over 100 goods derived from woodland resources have been recorded for Shindi Communal Area, Zimbabwe (Cavendish, 1999). In South Africa, Shackleton *et al.,* (1999a) found that communities in three villages were regularly using between18 and 27 wild products and 100 - 300 species (excluding medicinal plants). Across all studies reviewed the most commonly used products and main contributors to value are fuelwood, construction wood, wild fruits and herbs, and fodder. In Caprivi, Namibia, wild foods provide up to 50% of household sustenance during the non-agricultural season (Ashley and LaFranchi, 1997). In Zimbabwe, wild products contribute as much as 35% of average household income, increasing to 40% for poorer households (Cavendish, 1999). Wild resources may provide up to 20% of cash income to poor households against 5% for better-off households.

Direct use-values of wild resources can be high: gross values of US$194 – US$1114 per household per year were estimated across seven studies in South Africa (Shackleton et al., 2000). Cost-benefit analysis revealed that, even for a highly degraded area, the benefits of wild resource harvesting outweighed the costs. In all cases, values of wild resource harvesting have been shown to be within the same range or higher than those contributed by other land-based livelihood activities and state welfare grants.

Cash income from the sale of products is highly variable. Earnings can range from a few dollars for *ad hoc* activities to as much as US$1 846 per year for skilled carvers in Namibia (Ashley and LaFranchi, 1997). Incomes tend to be higher where there is an external market for products. Returns to labour are usually higher than for agricultural production.

Box 2 Evidence on the benefits from livestock keeping.

Several studies across Namibia, Botswana, South Africa and Zimbabwe have indicated that, in terms of annual benefits (excluding asset value and herd growth), meat and cash sales contribute less than 25 % of value, whilst milk, draught power, transport, and manure account for greater than 75 %. A detailed study by Shackleton *et al.*, (1999b) in Bushbuckridge, South Africa, which obtained a net annual value for livestock goods and services of US$765 per household for cattle owing households; US$79 per household for goat owning households; and US$25 for non-owning households. The mean net annual value across all households (owners and non-owners) was in the region of US$220. The net returns per hectare from this and other studies in communal areas are approximately US$69 per year. By contrast, standard valuations of communal livestock systems capture only one quarter of the direct use value, leading to the conclusion that they are unproductive and less efficient than commercial systems.

livestock owners benefit from these lower prices, and are often the recipients of gifts from owners, in the form of meat, milk, or ploughing services free of charge. Most cattle owners allow community members to collect dung freely for use as manure, or as a sealant for floors and walls. Shackleton *et al*., (1999b) found that 7% of the net annual value of all benefits were received by households that did not own any livestock. These gifts between relatives, friends, and neighbours, whilst *ad hoc*, serve to bond kinship and community relations.

The value of livestock as a store of wealth is also widely underestimated. This is especially important for owners of just a few animals as a safety net against misfortune and for use in times of cash need (funerals, school fees, etc.). Many owners may not access all the goods and services available to them, but they rate highly the opportunity to do so at any time. In some cases families that have lost a breadwinner have met their annual cash needs for several years by selling a few livestock each year.

Crop production

It is frequently unclear from the literature reporting on 'arable land' or 'fields cultivated' per household whether only formally designated arable fields are considered, or whether estimates of yields and value also include the homestead plot. In our experience there are few rural households that do not cultivate some land around the homestead, but these are missed out where only the arable fields are reported.

In many instances the production system involves agroforestry and inter-cropping using a diversity of crops, including several varieties of fruit trees, around which the staple cereal crop (maize or sorghum) is planted. Intermixed with the staple crop can be found a number of additional crops including beans, cowpea, groundnuts, pumpkins, melons, sweet potatoes and wild herbs. This mixed system results in lower yields for each individual crop than would be anticipated under commercial, monoculture systems, but total yield across all crops could be comparable. Moreover, recent work suggests that yields are not perhaps as low as previously reported, and that the ratio of output value to input costs indicates an efficient system with returns on investment being comparable to commercial agriculture.

The key issue in underestimates of yields has been the methodology adopted. McAllister, (2000) identified several common reasons for error:

- Plots or fields often have an irregular shape, and often contain small uncultivated areas which are difficult to measure (e.g. grave sites, kraals, pathways);
- Produce from other crops, fruit trees, and wild foods have generally been ignored, but may account for up to half of the value per hectare or per household;
- Several 'rounds' of harvesting may occur, but may not be adequately accounted for. Sequential harvesting may stimulate yields, particularly for pumpkins and some wild foods;
- Yield estimates often do not capture substandard or infected produce that may still be used as animal feed, nor good quality produce that is kept aside as seed;
- Some households cultivate fields – usually in riparian zones – that are not approved by the local authority and therefore seldom mentioned in agricultural surveys.

Taking some of these issues into account McAllister, (2000) found that maize yields from rural households were at least double those obtained from standard interviewing techniques.

The net result of underestimating arable yields is that the contribution of agriculture to rural livelihoods is undervalued. McAllister, (2000) suggests that it is more likely to constitute between a quarter and one half of total food requirements, rather than the 10% (or less) suggested in previous studies. Shackleton *et al*., (2000) found that contributions to total income ranged from 7% - 24% (US $188 to $753 per household, per year) against 16%-50% in other southern African countries. Recent work from Zimbabwe reports incomes of approximately US$467 in resettlement areas (where support is provided) compared to US$102 in communal areas (Kinsey, 1998). Generally, most of the economic value lies in what is consumed and only a small proportion of households sell crops. Access to arable land is important as a rural safety net. It also reinforces community ties through barter and gifts of produce, and cultivation through community or kin work parties. Additionally, a limited number of employment opportunities are created through cropping, official data suggesting that some 13% of communal farming households in South Africa provide jobs to others in the community.

Policy implications

Holistic assessments of the economic value of land-based livelihoods on communal land can yield surprising results. For example, Adams *et al.*, (2000) recently estimated that their aggregate value in South Africa in 1999 was US$2 billion per annum, or around 2.5% of GDP. These findings are in sharp contrast to stereotypes of communal lands as backward, unproductive and degraded.

These data do not contradict research findings which show that poverty is deepest and most widespread in rural areas, but they do allow us to understand better why access to 'natural capital' remains a crucial source of livelihood, and often the safety net of final resort.

One clear implication is that public investment in enhancing income from natural resources in communal lands makes economic sense. Unemployment is a major social problem in southern Africa, and increasing emphasis is being placed on the promotion of small, medium and micro-enterprises (SMMEs). Support for rural enterprises which provide inputs to land-based livelihoods or process agricultural outputs and NR can effectively promote local economic development. This is clearly demonstrated by the successful rural enterprise centres established in South Africa and Lesotho by the Mineworker's Development Agency (Philip, 2000).

The findings reported here suggest that attempts to draw a sharp distinction between 'subsistence' and 'commercial' forms of land-based livelihoods are problematic. While their safety net functions are crucial many people also attempt to derive additional income through sale of crop or livestock surpluses, trade of wild resources, or barter. Enhanced productivity can thus increase livelihood security and market participation; it is not necessarily an 'either/or' choice.

Since so many of the region's poorest people live in the (still poorly served) communal areas, policies and programmes which enhance productivity, output and incomes from natural resources have the potential to attack poverty and inequality while simultaneously promoting growth. Studies show that female-headed households, female members of households and the ultra-poor or 'marginalised' member of rural communities tend to be more reliant on land-based livelihoods. However, effective targeting of policies remains important, given the tendency for powerful local interests to monopolise emerging lucrative livelihood opportunities.

These findings do not contradict recent evidence of the growing diversification of rural livelihoods in Africa (Ellis, NRP 40; Bryceson, NRP 52). Rather, they assist understanding of why diversification often takes the form of a combination of agricultural and non-agricultural activities (including NR based enterprises). For example, wild resources may be gathered in the course of agricultural and livestock activities, some are inputs to agriculture (tools and implements, fodder), and income from the sale of crafts or medicinal plants may

be invested in crop inputs or livestock. The advantage of holistic valuations of land-based livelihoods is thus that they facilitate understanding of the multiple and diverse ways in which 'natural capital' is still crucial for many people within their suite of livelihood strategies. Policies which promote and enhance diversification, for example into 'rural non-farm employment' (RNFE), should nevertheless retain a clear focus on enhancing the output of NR-based activities.

What are the implications of this view for the mobility of labour? Many rural people in southern Africa, when asked what their major need is, will still answer: 'a job'. This is unsurprising given the need of rural households for cash to purchase the basic necessities of life. However, the slow rate at which formal sector jobs are being created within the region, or even lost, together with the important contributions that natural resources make to livelihoods, suggests that many people will continue to practice 'straddling' strategies, and thus that high levels of mobility will continue.

How can higher levels of output from NR in communal lands be achieved? Where the distribution of land is still highly skewed, and where the legacy of overcrowded 'native reserves' remains a problem, increased access to land and NR by the rural poor through redistributive land reforms is clearly needed. The expansion of communal lands and their characteristic livelihood systems does not necessarily create 'poverty traps', as some believe, but rather has the potential for significant economic development and poverty reduction (for Zimbabwe see Kinsey, 1998). A one-sided emphasis on creating opportunities for full-time commercial farming within land reform is clearly inappropriate.

Also needed is a renewed commitment to improving infrastructure and support services for land-based livelihoods. Rural development programmes which provide improved access to physical and financial capital (e.g. through micro-credit), and enhance human capital through skills development (e.g. through extension and training), can assist in making natural capital more productive – if targeted appropriately. Thorough assessment of comparative advantage in different locations is important, since NR endowments vary widely between agro-ecological zones.

It will be crucial to go beyond a narrow focus on agriculture. There are too few government or NGO programmes in the region which focus on wild resources, and those that exist tend to emphasise wildlife rather than the full range of resources and their diverse uses. Community based NR management projects tend to be designed without adequate consideration of complementarities or trade-offs with livestock and cropping. Extension staff are still too narrowly focused on agriculture. This suggests that decentralised development planning must develop 'holistic' or 'integrated' programmes which bring together government departments responsible for environmental management, forestry, water, wildlife and agriculture. NR management planning is necessarily intersectoral. Adopting a sustainable livelihoods-type conceptual framework for such planning would facilitate such planning.

There is renewed interest in land tenure reform in the region. Re-valuing land-based livelihoods suggests that a state-led drive to provide greater levels of tenure security within democratized forms of communal tenure could yield significant economic benefits. At the same time, tenure reform may be a necessary condition for effective resource management. Lack of clarity in respect of rights to common pool resources contributes to inappropriate land use and management practices, and to ineffective rural governance. Lack of legal security can constrain land-based livelihoods, particularly when new forms of enterprise which involve partnerships with the private sector (e.g. ecotourism, community-based wildlife management, or contract farming) are proposed (Adams *et al.*, 2000). But tenure reforms which aim at individualisation, or at the 'transfer of state land to tribes' (and thus effectively give power over land to chiefs, who have a history of corruption and abuse of authority), are likely to undermine the NR-based livelihood activities of the rural poor, and promote the capture of key resources by local elites.

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