

Centre for
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RESEARCH ON THE INSTITUTIONAL CONTEXTS
OF WILDLIFE UTILIZATION IN COMMUNAL AREAS
OF EASTERN AND SOUTHERN AFRICA

by

Professor Marshall W. Murphree, Director
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Workshop Area: Policy development, planning and implementation

1. Current Status/Data Base/Relevance.

This paper is largely based on experience gained by the Centre over the past five years in its research programme on natural resource management in the communal lands of Zimbabwe. In its wildlife utilization component this programme has been carried out in collaboration with an implementing NGO, ZimTrust, the WWF Multispecies Animal Production Systems Project, the Department of National Parks and Wildlife Management and districts councils. Supplementary data drawn by the author from consultancies in Zambia and Botswana are also incorporated. This data base relates specifically to wildlife utilization under common property regimes and the paper does not therefore take up institutional issues relating to utilization on commercial, alienated or national estate lands. The paper's analysis of common property contexts (referred to in this paper as communal lands), although drawn from Southern Africa should be of general relevance throughout Eastern and Southern Africa since this type of land category is widespread and exhibits certain common characteristics across national boundaries.

2. Research Strategies: Objectives and Perspectives

This paper, based on socio-economic research on the topic, posits the particular importance of the following points:

- 2.1 The topic of the Conference places an explicit focus on the use of wildlife for economic and developmental concerns. We are therefore primarily concerned here with wildlife as an economic and developmental resource, not with preservationist or conservationist concerns, important as these may be. Research and programmes on the economic use of wildlife should be seen as components in rational land use planning for environments best suited to this purpose, and beyond this as contributing to localized capacities for management by those who ultimately control the environments concerned.
- 2.2 Policies and practice on wildlife utilization in Africa are rapidly evolving and the research target is a moving one. Research strategies should therefore be consistent with adaptive management and adopt a stochastic approach incorporating, where possible, longitudinal or diachronic methodologies.

- 2.3 The topic demands a multidisciplinary approach, integrating analyses from both the natural and social sciences. The best social science research on the topic incorporates natural science inputs and vice versa; research programming should seek to ensure this.
- 2.4 Research of this kind should incorporate a training component at two levels: a) community-level self management capacities, and b) high-level professional training in the socio-economic dimensions of resource management. The first level implies a participatory action research strategy in which local input reflexively benefit the research. The second is necessary since research is largely sterile unless it contributes to Africa's long-term requirements for professional environmental management.
- 2.5 The links between research, policy and implementation are often ignored, and there is a tendency to regard the three as compartmentalized activities linked as a sequence of research>policy>implementation. In Africa this rarely occurs; research follows policy and implementation and becomes retrospective rather than proactive. Our experience in Zimbabwe suggests that one of the best mechanisms to overcome this defect is close collaboration between policy, research and implementation agencies, institutionalized in a manner requiring continuous interaction and contextualized in an adaptive management approach promoting an on-going dialectic between the three components. The CASS/WWF/ZimTrust document referenced is illustrative.

3. Demographic and Socio-Economic Community Surveys

This type of research, essentially descriptive and quantitative, is exacting and can be tedious. It is nevertheless important for two reasons: a)It provides information on the size, composition and characteristics of the population of a project area or management unit essential for implementation, and b)methodologically it is valuable since it provides base-line data for subsequent sampling, monitoring and longitudinal analysis. The following points are made:

- 3.1 Techniques and instruments for this kind of exercise exist, all of which have their strengths and weaknesses. For natural scientists, the articles by Moran (1986) and Murphree (1990) may be of use.
- 3.2 Surveys and questionnaire approaches are best suited for the acquisition of quantitative and descriptive data on the composition and organization of local human populations and for a base-line understanding of community and household economies. The latter is critical, since such economies are central to the dynamics of decision-making at local levels. They are less suited to the investigation of attitudes and perspectives although they can be an adjunct to knowledge and attitude research.
- 3.3 Initial demographic and socio-economic surveys should be conducted jointly with base-line ecological resource surveys.

This reinforces interdisciplinarity and together they inventory the data necessary for base-line community profiles. The two are complementary; roughly speaking the ecological survey is a community resource survey and the socio-economic survey is a demand survey, although the former will include management demands and the latter human resources.

4. Research on Motivational and Institutional Issues

It is emphasized that the socio-economic surveys approaches discussed above, often seen by natural scientists and project planners as a convenient package of techniques to satisfy the social concerns of donor agencies or government, are a necessary but not sufficient component in any comprehensive research programme on wildlife utilization in communal contexts. Essentially quantitative and descriptive, they are part of the inventory functions discussed by Bell (1984). To these must be added research on management systems and the analysis of the motivational institutional dynamics which shape them. Research in the arena requires a more qualitative and synoptic approach. Two basic, although over-lapping, foci are suggested below for research attention.

4.1 Politics and Policy. An understanding of the political economy of wildlife use is fundamental, although often avoided in research strategies (Abel and Blaikie, 1986). The following points are relevant:

a) The politics of wildlife use are embedded in wider political debates related to land use, tenure and proprietorship, the accumulation or devolution of power by the state and competition between interest groups. A useful conceptual approach for research planning is to see this debate as an arena of competing claims by a variety of interest groups, often hierarchically structured and characterized by differential power bases (Murombedzi, 1989). Among these groups are those representing the state, regional and sub-regional authorities, wildlife producing communities, intra-communal sectional interests, commercial enterprises, international interests, managers and bureaucrats and the research establishment itself.

b) Time-frames are important, and the issue of whether the political climate encourages short- or long-term perspectives should be addressed,

c) It should be recognized that the systems examined are dynamic, fueled by political shifts and economic trends. Regarding the latter, it is useful to recognize that there has been a general trend in Africa over the past 30 years towards an emphasis on exchange rather than use valuation of wildlife.

d) Policy on wildlife utilization at any given point in time usually represents an attempted compromise by political and bureaucratic establishments between competing claims, often skewed by the differentially empowered constituencies representing various interests. A fundamental problem for wildlife management in Africa's communal areas is that producer communities tend to be under-represented in the political

process while policy tends to be biased towards an exogenous management which marginalizes the authority of those best placed to manage the resource and who ultimately are the final arbiters of its existence and exploitation.

4.2 **Legal and Administrative Structures.** Just as policy tends to flow from the dynamics of the political economy, so legal and administrative structures tend to distill and implement policy. It is important to recognize that there is usually a considerable time-lag between policy formulation>legislation>administrative arrangements; thus legislation and administrative structures tend to constantly be obsolete in the context of current political and economic dynamics. The following points are relevant for research programming on this topic.

a) Legislative instruments on wildlife use in Africa frequently betray their colonial antecedents, reflecting international and elite interests rather than those of wildlife-producing communities. At the same time they often provide room for manoeuvre which can be used for interim purposes while policy and legislation are revised to meet current imperatives.

b) Laws relating to wildlife are rarely the only relevant legislation; local government legislation, legislation regarding tenure and land use, law enforcement, etc. are usually significant and must be considered in research. Frequently these laws are inconsistent or are in conflict with each other in respect to environmental management and research needs to provide findings suggesting solutions to such conflict.

c) Administrative structures and procedures, located in different ministries and at different levels in bureaucratic hierarchies, often exhibit similar dissonances and can at community levels impact with different messages. Administrative bureaucracies require special attention for programmes involving the devolution of proprietorship to local levels, since there is an in-built tendency at any level in bureaucratic hierarchies to seek increased authority from levels above and resist its devolution to levels below.

d) Studies of legislation (i.e. enacted legislative and statutory instruments) and administrative bureaucracies on their own provide only a partial view of the more important picture, which is that of the profile of management structures and dynamics at community levels. At these levels research must consider traditional environmental management regimes. These regimes have the advantage of having evolved from long indigenous experience with local micro-environments and commanding local loyalties through internalized, culturally-reinforced conformity. Although "traditional" these regimes are also dynamic, having been modified by pre- and post-colonial experience, including economic change, formal education, migration, etc. The overlapping and sometimes competing jurisdictions of different management authorities at community levels provide an equation determining local practice and the differences between local practice and national policy provide an important research

indicator of the dynamics involved. They are also important signposts for programme shifts, since viable local management regimes must have sufficient jurisdiction to define both access to and exclusion from community wildlife and other resources, even if this jurisdiction is contextualized within larger regional or national structures of custodianship.

5. Implementational Issues and Set-up Mechanisms

- 5.1** This section assumes a typical sequence as follows: policy>programme (broad objectives and strategies, agency organization, acquisition of required fiscal and skill requirements) > projects (locale- or institution-specific objectives and strategies) > sub-projects. Research should ideally impact on each phase in the sequence, and programme planning which does not incorporate a general insight into the issues discussed in the previous section will be deficient. For reasons of parsimony, the rest of this section deals only with the project implementation phase.
- 5.2** Tactical considerations may well determine locale-specific project implementation and dictate phased strategies. The programme objective may be community-based regimes of wildlife utilization and management; current legislation may require an initial phase of devolved proprietorship to higher levels at district or provincial level, a tactic which has both strengths and danger.
- 5.3** Locale-specific projects within a programme may well vary depending on a number of factors, including the type of utilization programme envisaged, the nature of the resource base, resource/demand ratios and the disposition of prevailing administrative structures.
- 5.4** Detailed locale-specific project planning should be preceded by the base-line socio-economic and resource surveys discussed earlier, coupled with an initial analysis of the "fit" between programme objectives and community perspectives. Research at this stage has an obligation to report a negative evaluation if appropriate, and sponsors (government or otherwise) must accept this possibility. There should be no sponsor-generated imperative for project implementation if research indicators are contrary.
- 5.5** Even when initial research findings are positive, detailed project planning for the mid- and long-terms must be flexible, recognizing that the evolution of each project will depend on a complex interaction of a wide range of factors impossible to predict with a high specificity. This is likely to result in project diversity within programmes, which should be seen as a strength rather than a weakness, to be encouraged as healthy experimentation rather than restricted by programme requirements. For research this has a positive methodological implication, allowing comparative evaluations over time.

- 5.6 Consistent with the adaptive management approach, programme implementation must be seen as a learning experience which stochastically advances national and community capacities for the management and exploitation of wildlife resources. At community levels this implies a progressive competence in dealing with a plethora of issues such as: a) whether wildlife resources should be managed separately from other community authority structures; b) local regulatory structures and procedures; c) access and exclusion from wildlife benefits; d) crop/livestock protection, compensation for losses; e) sustainable management of wildlife stocks; f) offtake quotas and modes of exploitation, including non-consumptive and tourism options; g) negotiating skills in marketing wildlife resources with commercial operators or government agencies; h) collaboration with other wildlife producer communities; i) recording, monitoring, accounting and budgeting functions; j) policy on the use and distribution of benefits, whether at community, household or individual levels; k) land use planning, decisions on allocations of the commonage to tillage, livestock production, wildlife production or appropriate mixes; l) extension of communal wildlife management regimes. This brief and non-comprehensive inventory is indicative of the way in which wildlife utilization cannot only be economically productive for communities but also serve as a fulcrum for broader local resource planning and as an instrument for augmenting community self-governance. No community at project inception can be expected to fully grasp the full content detail or implications of these issues, nor can project planners predict the detailed evolution they require in specific community contexts. This implies a phased progression in project implementation in which a momentum towards general objectives is maintained while scope for flexibility in detail is maintained.
- 5.7 Researchers have a role in the evolutionary process discussed above, not as didactic teachers but as the providers, on a continual basis, of considered options with an analysis of their costs and benefits to the community. Researchers are thus part of the implementing process, just as implementing agencies should be a part of the research process. This implies that the older formulation of the sequence research>implementation should be abandoned in favour of a continuous dialectic between the two.
- 5.8 Communication and information flows are issues outside the scope of this paper but deserve mention as critical in the implementation process. Researchers and implementation agencies have the advantage of possessing information on a wider range of experiences than local communities; they have a responsibility to facilitate contact and communication between communities so that individual community experiments become part of a larger shared body of knowledge.

6. Future Directions in Research Strategy

This section summarizes implications for future directions in research, together with comment on its organization and location.

- 6.1 The paper has argued, for sound methodological reasons, that research should be longitudinal or diachronic, incorporating rigorously derived base-line and monitoring data and also more qualitative analyses of process. This implies research time-frames of at least five years, if we wish to avoid the danger of one-off, synchronic studies which are essentially retrospective and descriptive and contain little predictive validity.
- 6.2 A cognate methodological approach is that research programmes should include a comparative dimension. This implies a carefully constructed sample selection across a spectrum of relevant variables, both intra-country and cross-national.
- 6.3 The methodological approaches advocated above should be implemented by: a) a choice of community or locale-specific project case histories conducted over time and selected for comparative purposes; b) selected thematic studies covering the range of issues raised in Section 4 and incorporating longitudinal and comparative components.
- 6.4 Both the case studies and the thematic studies should incorporate the dialectic interaction between implementation and research advocated in 2.2, 2.4 and 5.6.
- 6.5 The organization of research programmes should reinforce multi-disciplinarity, as emphasized in section 2.3 and 3.3. Coordination between policy, research and implementation agencies is critical and the suggestions contained in section 2.5 should receive serious consideration.
- 6.6 The importance of high-level professional training as a component in research programmes is emphasized. Africa's professional and academic needs in the field of environmental management require shifting the focus for the definition, initiation and conduct of research and training programmes to local institutions and away from the current situation where much of the agenda for research activities is set by funding agencies and these communities elsewhere.
- 6.7 Research funding agencies should be aware of the points made in sections 5.5 and 6.1 on flexibility in project planning and project duration. Currently funding is usually provided on a short-term (1 - 2 year) basis and with rigid projections on project detail. This paper puts forward both methodological and adaptive management arguments for longer-term project frames and flexibility in project detail. Concomitantly African research organizations must demonstrate the ability to execute methodologically exacting research and provide efficient research management structures.

6.8 The importance of regional African collaboration in research is clearly implied in section 5.8 and 6.2. Attention must be given to the costs and benefits of various bilateral and multi-lateral stratagems and a cautionary note must be raised. The primary constituencies of African research organizations are the governments and peoples they are created to serve, and in the field of community-based wildlife utilization this means in particular activities at local levels. A programme balance must thus be sought which ensures that international collaborative activities do not unduly distract researchers from their main focus of responsibility, which is to work collaboratively with wildlife-producing communities to achieve sustainable and effective regimes of environmental management.

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References

- Abel, N. and P. Blaikie (1986) "Elephants, People, Parks and Development: The Case of the Luangwa Valley, Zambia." Environmental Management 10(b), pp. 735-751.
- Bell, R.H.V. (1984) "Research Priorities: What does Management need to know?" in Conservation and Wildlife Management in Africa, eds. R.H.V Bell and E McShane-Caluzi. Washington: U.S. Peace Corps, pp. 79-91.
- CASS, WWF, ZimTrust (1989) Wildlife Utilization in Zimbabwe's Communal Lands: Collaborative Programme Activities. Harare: CASS/WWF/ZimTrust, 29 pp.
- Moran, E.F. (1986) "Socio-economic Aspects of Research on Tropical Soil Biology and Fertility." Biology International, Special Issue No 13, pp. 53-64.
- Murombedzi J. (1989) "The Political Economy of Natural Resource Utilization in Zimbabwe's Communal Lands." Paper for the Conference on Conflict and Conflict Resolution in Africa. Stanford-Berkeley, Joint Centre for African Studies. Stanford University. April 22.
- Murphree, M.W. (1989) "Socio-economic Research Components in Tropical Soil Biology and Fertility Studies." Biology International, Special Issue No. 20, pp. 31-40.



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