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Review Article

Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) and the Future of Its State: The Case for Zimbabwe

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Abstract

There are technical and financial shortcomings to the current inspiring and well thought philosophy of CAMPFIRE. The paper identifies areas required for a win-win solution to the formidable problems confronting CAMPFIRE and suggests that solutions lie in the adaptation of newest craft and acquisition of new technology to reduce bottlenecks by enhancing precision in data capture in the realms of sustainable management. The marketing aspects of ecosystem products while constrained by regulations, marketing skills and negotiating skills may be exploited to full advantage of local communities to make biodiversity collection sustainable and profitable to uplift livelihoods.

Introduction

There are technical and financial shortcomings to the current inspiring and well thought philosophy of CAMPFIRE in Zimbabwe [1-5] (Figure 1).



Figure 1: Major CAMPFIRE Districts in Zimbabwe (After CAMPFIRE Association, 2007).

The present Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) was a product of a well conceived process that captured the imaginations of those local communities who are the victims and beneficiaries of CAMPFIRE programme. Admittedly, in the implementation of the programme some communities exceeded expectations in deriving benefits and others failed to pass the benchmark test as some local communities faced extreme difficulties with ecosystem benefit flows. This paper attempts to bring the losers of biodiversity stewardship into the mainstream of beneficiaries and to take the philosophy beyond the local communities' expectations. The paper raises the bar in managing the controversial programme by putting to the fore some variables which may bring change.

In the early 1980s, the then Department of National Parks and Wildlife Management Authority and Wildlife Management developed the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) that was aimed at giving full control of wildlife management to rural communities. The theory behind CAMPFIRE was that communities would invest in environmental conservation if they could exploit wildlife resources on a sustainable basis for their own benefit. CAMPFIRE was operational zed through the giving of Appropriate Authority (AA) status to Rural District Councils who were the land holders in communal lands. Although CAMPFIRE pioneered devolution of authority over wildlife to Rural District Councils (RDCs), several limitations for effective devolution were encountered. Despite the best of intentions, there has been so many challenges experienced for the past 20 years or so that the programme has been operating. The programme, as it now stands, struggles to generate benefits for communities and conservation. There is need for remodelling CAMPFIRE in order to enhance community benefits from natural resources, increase the flow of benefits to communities, reduce encroachment into wildlife areas and improve the sustainability of the wildlife resources. But what went wrong in the pursuit of CAMPFIRE?

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The governance structures of CAMPFIRE have received little attention in literature [6]. Little regard has been given to local community voices which ideally form the basis of community governance [5]. Governance in all its endeavours seeks to pin the truth in community feelings and aspirations with issues regarding community health and well being. Quite often the community voices suffer from systemic shocks in top-down and bottom up approaches and inadequacies s of lateral projection of community issues and ideas because of breaches of trust in ecosystem benefit flow schemes. Freewheeling of community voices at grassroots may be disrupted by greediness from a few who indulge in principles of opaque balance sheets to please bureaucrats and for private benefit. The remedy has been to tenuously examine negative feedback loops by appropriately improving feedback timetables. Private benefit interests scatter community agendas and promote the gravitas of the Tragedy of the commons. Tafangenyasha et al [5] and Scoones [3] have elucidated the scaffolds of local community voices.

Poachers fall into three distinct groups namely: subsistence, trophy and commercial. Subsistence poachers normally kill game for meat (consumption), this is normally referred to as 'killing for the pot'. Trophy poachers are not a serious threat in Southern Africa; they usually kill animals for sport trophies. The commercial poachers pose a serious threat to African wildlife; they are also seriously interconnected with subsistence poachers for ivory, rhino horn and hide. This makes subsistence poachers kill for more than mere consumption for uplifting of their welfare or living standards.

There is leeway for the researcher to either observe conditions, behaviours, events, people and processes or communicate with people about various topics, attitudes, motivations, intentions and expectations. This implied textual criticism, discourse analysis, content analysis and historical cases lend credible direction. Can cross-sectional or longitudinal tools be the panacea towards the desired state of CAMPFIRE? Cross-sectional surveys are those surveys that intend to gather data from a single point in time [7]. Longitudinal surveys gather data over a period of time, the researcher may analyse changes in the population and attempt to describe or explain them. To pacify opponents to the change in status quo of CAMPFIRE suggest using both cross-sectional and longitudinal surveys. According to Beam [8], surveys are an indirect way of assessing satisfaction levels, baselines for future objectives, to determine if objectives are met and to analyse trends over time. This should help in understanding the effectiveness of policies, measure success or failure.

KAZA Trans Frontier Conservation Area (TFCA) formed in 2006 - was signed by Zimbabwe, Botswana, Namibia, Zambia and Angola. Like many other TFCAs it was hoped to increase efficient management of wildlife in the area and increase the bargaining power of member countries in tourism as well as fulfil SADC's goal on increased economic cooperation, region all integration and environmental sustainability.

The rise of the price of ivory and rhino horn on the black market in Asia and Middle East made it easy to establish syndicates of illicit dealings in this forbidden business. The dealers would take advantage of the high poverty levels in Africa to connive and recruit even former security and army servicemen in poaching activities. The objective of CITES is to remove commercial trade as a factor contributing to endangered species. For the reason that many species of both flora and fauna were declining CITES established a world-wide system of international trade control for threatened wildlife and their products by stipulating that government permits are required for such trade. It seems that CAMPFIRE needs tweaking. CAMPFIRE may have served local communities well but now seeks relevance to the dynamic environmental stimuli. This arena needs relevance to the needs of local communities. CAMPFIRE is the future of the economy among impoverished communities.

Private benefit interests disrupt local community interests [3]. Often ecosystems benefit sharing schemes are truncated by bureaucrats privileged with markets, biodiversity assets, policies, instruments and aid sinks. Mainstream conservation agenda use local community voices to identify unification and clarification of ideas. Local community voice should ensure congruency in decision making systems. Mukamuri [9] dwelt on the genesis of environmental awareness in Karanga culture and came to the conclusion that its storyline value has relevancy in contemporary environmental protection. Environmental education and awareness of biodiversity data assets is central to CAMPFIRE goals [5]. In the foregoing, it is pertinent to adopt continuous improvement index in environmental reporting which is presently a non issue.

Star field et al [10] suggests use of frame analyses in environmental monitoring. An integrated frame analysis that uses upgraded Information Technology (IT) infrastructure and high speed networks can be a solution in complex environmental problems. Integrated IT infrastructure should embody hardware and operating software and end to end user experience. It includes use of Artificial Intelligence (AI) in climate studies, remote sensing, Global Positioning mapping solutions, radar technology for air quality, water quality, wildfire assessments, soil restoration and rehabilitation studies, rangeland studies, wildlife assessments and geo-botanical solutions and trans boundary pollutants. Drone technology is part of technology engaging all or part in frame analysis. The burden in the solutions of access to environmental data can employ integrated artificial intelligence infrastructure. The IT infrastructure and its user experience would define the industry standard. The aim is to incorporate data capture, analytical configurations, analysis, mapping tools and reporting formats which eases

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the drudgery from a field operative. IT can reduce uncertainty in scenario environmental planning. Furuta [11] suggests use of the Heisenberg's principle in decision making systems.

Environmental issues may be rapidly grasped using upgraded systemic software. This alone needs upgraded hard ware infrastructure. Seamless connectivity has often been elevated because of its simplicity. Integrate internal and external feedback loops may be the basis outputs. Local communities have often been left at the tail end of policy issues guidelines and understanding. Incentives and disincentives and forms of penalties should be accessible to the wider public. In addition hot spots of countercultures will be monitored, mapped and tracked. There is need to use community voice to upgrade benefit sharing platforms in order to understand first hand policy guidelines. By this approach leakages in loss of data in the supply chains of information may be dramatically reduced.

Local communities pin their hopes on the accountability of local traditional leaders. Local political leaders can screw grassroots agendas by advocating political expediency. How can local community voices help in reducing discord and noise in conservation agendas and counterculture problems? As in water issues, geological nature of occurrences of water, the physical attributes of water and chemical properties of water have been extensively covered and well understood but the attitudes controlling availability and quality have received little attention. Poverty levels in some of the CAMPFIRE areas became endemic, physical and emotional and life changing [5].There is little time left for debating local community voice as the scion and vehicle for community development and up liftmen.

The debate is still raging in academic corridors on how to adequately manage hunts during the wet season wherein small crop raiding animals are rejected by trophy hunters. Some hunters do not even show up claiming that the non trophy animals do not allow a profitable living. Because records of incident problem animals' are not kept in diaries hunters fail to comprehend appropriate response time. Until the problem of response time is resolved for crop and livestock raiding animals the true business picture of problem animal control will be an endemic problem with local communities, this follows the need to keep phenol phases of crops and natural vegetation known better to the hunter. Finally, the disposal of quotas need re-examination for maximization of ecosystem products e.g. tender processes, negotiated settlement or auctions. The marketing aspects of ecosystem products while constrained by regulations, marketing skills and negotiating skills may be exploited to full advantage of local communities [12].

Conclusion

The technical and financial shortcomings to the current inspiring and well thought philosophy of CAMPFIRE can be overcome if there is a bottom line to break-even and sustainable conservation of biodiversity. New technology should be harnessed to reduce operational costs and predictability of operations. The marketing aspects of ecosystem products while constrained by regulations, marketing skills and negotiating skills may be exploited to full advantage of local communities' to make biodiversity collection sustainable and profitable to uplift livelihoods.

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