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CAMPFIRE through the Lens of the 'Commons' Literature: Nyaminyami Rural District in Post-2000 Zimbabwe

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During its early years, Zimbabwe's CAMPFIRE programme was a highly regarded and influential national effort to promote community-based natural resource management. Despite the programme's early promise, however, outcomes in the field over the longer term have often been disappointing. Researchers offer various explanations for the uneven results. In this article we explore the idea that CAMPFIRE could benefit from emulating more closely the spontaneously emerging, community-level collective actions described in the 'commons' literature. Scholars of the commons identify several conditions necessary for successful community self-organisation for natural resource management. We examine discrepancies between the conditions identified as critical in the commons literature and the underlying conditions found in CAMPFIRE communities. These discrepancies both clarify the obstacles local CAMPFIRE projects face and suggest that the successful community efforts described in the commons literature are unlikely to provide a useful model in the CAMPFIRE context. We illustrate the discussion with references to findings from our recent case study of the CAMPFIRE project in Nyaminyami Rural District.

Introduction

In a recent assessment of 15 years of experience with Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) and its offshoots elsewhere in southern Africa, Marshall Murphree poses the question, 'Can a project for conservation, externally defined and executed in a project mode, be married to a communal approach?'¹ His answer, to paraphrase, is: Possibly, but only with difficulty, and only if the conventional oversimplifications of community-based natural resource management (CBNRM) and project implementation practice are overturned. He writes, 'Doing what we are doing in communal approaches better is not enough. We need to do it differently, and in a new configuration of learning'.²

The conventional logic of CBNRM programmes, of which CAMPFIRE was an early and influential example, assumes that devolved authority and restructured economic incentives can improve local outcomes for both natural resource management and community development.³ For southern African CBNRM, wildlife is generally the resource of primary value. In a typical situation, without CBNRM, the state's assertion of wildlife ownership denies local residents customary access to the resource and engenders conflict with game management authorities.⁴ In contrast, with CBNRM in place, communities have opportunities to earn revenue from sustainable use of the wildlife, most often through regulated safari hunting on communal lands. In principle, if the resulting economic benefits outweigh the costs of living with wild animals—

¹ M. Murphree, 'Communal Approaches to Natural Resource Management in Africa: From Whence and to Where?', *Journal of International Wildlife Law and Policy*, 7, 3-4 (2004), p. 204.

² *Ibid.*, p. 216.

³ B. Child, 'The Practice and Principles of Community-Based Wildlife Management in Zimbabwe: The CAMPFIRE Programme', *Biodiversity and Conservation*, 5, 3 (1996), pp. 369-398; J. D. Hackel, 'Community Conservation and the Future of Africa's Wildlife', *Conservation Biology*, 13, 4 (1999), pp. 726-734; D. Hulme and M. Murphree (eds), *African Wildlife and Livelihoods: The Promise and Performance of Community Conservation* (Oxford, James Currey, 2001).

⁴ V. Dzingirai, "'CAMPFIRE Is Not for Ndebele Migrants': The Impact of Excluding Outsiders from CAMPFIRE in the Zambezi Valley, Zimbabwe', *Journal of Southern African Studies*, 29, 2 (2003), pp. 445-459.

typically manifested in threats to life and agricultural livelihoods—local residents will have incentives to cooperate with rather than sabotage conservation efforts.

The logic of CBNRM incorporates devolution of authority as an essential complement to these restructured incentives. Participatory local governance institutions for project management that facilitate community engagement and promote accountability to the community are considered necessary to ensure that revenues actually benefit residents, and thus that the economic incentives have the desired impact.⁵

In the first several years following CAMPFIRE's initiation in the late 1980s, scholars and practitioners were optimistic about the programme's potential. Many saw it as an opportunity to replace what were perceived as failed state-centred conservation plans with communal efforts that would simultaneously improve local socioeconomic conditions and reduce pressures on wildlife and habitat. CAMPFIRE garnered widespread positive reviews, attracted substantial funding from international donors, and served as a model for similar efforts elsewhere in the region and beyond.⁶

Yet evidence from the field now indicates that over the longer term local projects often fail to meet expectations.⁷ One factor frequently cited as contributing to these disappointing results in Zimbabwe is CAMPFIRE's truncated devolution. Under the programme's enabling statutes, authority passes to the rural district councils (RDCs) rather than to the communities,

⁵ S. Metcalfe, 'The Zimbabwe Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)', in D. Western and R. M. Wright (eds), *Natural Connections: Perspectives in Community-Based Conservation* (Washington DC, Island Press, 1994), pp. 161-192.

⁶ G. Child, *Wildlife and People: The Zimbabwean Success* (Harare, Wisdom Foundation, 1995); M. Murphree, 'The Lesson from Mahenye: Rural Poverty, Democracy and Wildlife Conservation', *Wildlife and Development Series* No. 1 (London, IIED, 1995); B. I. Logan and W. G. Moseley, 'The Political Ecology of Poverty Alleviation in Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE)', *Geoforum*, 33, 1 (2002), pp. 1-14.

⁷ J. Alexander and J. McGregor, 'Wildlife and Politics: CAMPFIRE in Zimbabwe', *Development and Change*, 31, 3 (2000), pp. 605-627; I. Bond, 'CAMPFIRE and the Incentives for Institutional Change', in Hulme and Murphree (eds), *African Wildlife and Livelihoods*, pp. 227-243; R. Hasler, 'An Overview of the Social, Ecological and Economic Achievements and Challenges of Zimbabwe's CAMPFIRE Programme', *Evaluating Eden Discussion Paper* No. 3 (London, IIED, 1999).

which hold land in common and thus lack the legal standing that comes with private property rights. Many observers argue that this remaining layer of bureaucracy separates local residents from direct engagement in project management and allows the RDCs to co-opt benefits, thus undermining the logic of CBNRM.⁸

Other problems appear to follow not from violations of CBNRM's principles but rather from the approach's inherent oversimplifications. For example, outcomes in the field raise doubts about the approach's economic assumptions.⁹ First, because few communal areas have the populations of valuable wild animals necessary to support viable projects, revenues are rarely sufficient to achieve the stated aims. While CAMPFIRE spread rapidly in the early 1990s to over half of Zimbabwe's 55 rural districts, only seven—all directly adjacent to major national parks that serve as reservoirs for wildlife—consistently earn significant income.¹⁰ Yet even in these sites progress in community development has been incremental at best, leading only to marginal gains in areas suffering from profound and entrenched poverty.¹¹

Second, the simple arithmetic of whether community revenues exceed the costs of living with wildlife grossly underestimates the range of motivations influencing the attitudes and behaviours of local residents. Communities are both internally heterogeneous and diverse in their

⁸ K. A. Hill, 'Zimbabwe's Wildlife Utilization Programmes: Grassroots Democracy or an Extension of State Power', *African Studies Review*, 39, 1 (1996), pp. 103-121; J. Murombedzi, 'Devolution and Stewardship in Zimbabwe's CAMPFIRE Programme', *Journal of International Development*, 11, 2 (1999), pp. 287-293; Murphree, 'Communal Approaches'.

⁹ L. Emerton, 'The Nature of Benefits and the Benefits of Nature: Why Wildlife Conservation Has Not Economically Benefited Communities in Africa', in Hulme and Murphree (eds), *African Wildlife and Livelihoods*, pp. 208-226; M. Norton-Griffiths and C. Southey, 'The Opportunity Costs of Biodiversity Conservation in Kenya', *Ecological Economics*, 12, 2 (1995), pp. 125-139.

¹⁰ CAMPFIRE Association, *Annual Report 2004-2005* (Harare, CAMPFIRE Association, 2005); K. Muir-Leresche, I. Bond, W. Chambati, and A. Khumalo, *An Analysis of CAMPFIRE Revenue Generation and Distribution: The First Decade, 1989-2000* (Harare, WWF-SARPO, 2003).

¹¹ P. J. Balint, 'Improving Conservation near Protected Areas: The Importance of Development Variables', *Environmental Management*, 38, 1 (2006), pp. 137-148.

histories, current status, and aspirations.¹² Many have considerable momentum towards expanding human settlements, clearing additional land for cultivation, and increasing livestock holdings, all of which conflict with CAMPFIRE.¹³

Beyond economics, the assumptions underlying the devolution component of CBNRM also appear to be based on oversimplifications. In the CAMPFIRE model, democratically elected local committees are responsible for ensuring community participation in project management; negotiating with nongovernmental organisations (NGOs), safari hunting firms, and other external actors; receiving and disbursing revenue; prioritising community development initiatives; and promoting local cooperation with efforts to protect habitat and limit poaching. In practice, however, these committees rarely develop and sustain what Murphree calls ‘consensual legitimacy’.¹⁴ Without sufficient internal capacity for project management, the committees remain dependent on outside support and vulnerable to the vagaries of donor funding cycles. Without deep roots in the community or experience in democratic processes, they are subject to co-optation by traditional and political elites at the village or district level.¹⁵ The ideals of institutional resilience, adaptability, self-sufficiency, and local legitimacy typically remain out of reach.

These difficulties expose the limitations of the conventions of project implementation practice in this context. As Murphree disparagingly describes them, these conventions, no matter how well intentioned, reflect the following unrealistic or self-defeating assumptions and attributes:

¹² A. Agrawal and C. C. Gibson, ‘Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation’, *World Development*, 27, 4 (1999), pp. 629-649.

¹³ Alexander and McGregor, ‘Wildlife and Politics’; Dzingirai, ‘Ndebele Migrants’.

¹⁴ Murphree, ‘Communal Approaches’, p. 211.

¹⁵ P. J. Balint and J. Mashinya, ‘The Decline of a Model Community-Based Conservation Project: Governance, Capacity, and Devolution in Mahenye, Zimbabwe’, *Geoforum*, 37, 5 (2006), pp. 805-815.

... designs emanate from external agents whose knowledge and norms are transcendent; designs can be engineered to produce predictable outcomes; designs are implemented through a time and resource-bound project mode; [and] projects are produced by external agents on behalf of third parties, the communal actors who are its dependent subjects.¹⁶

As Murphree's description suggests, expectations that externally devised, expert-driven, ahistorical governance processes and institutions can be implanted in rural communities and emerge at the end of short funding cycles with the required capabilities and durable, broad-based local support are internally inconsistent and naïve.

If the conventional approaches to design and implementation of CBNRM programmes are unlikely to succeed, what is the better way that Murphree envisions? He asserts that the presence of resilient local institutions is 'the pivotal variable'¹⁷ determining whether communal approaches succeed or fail. 'Such institutions are not designed,' he argues, 'they emerge when enabling conditions are present'¹⁸; that is, 'where the necessary social capital provides for the emergence of natural resource regimes with consensual legitimacy'.¹⁹ 'Indeed,' he continues, 'it can be argued that the principle role of external agents is to protect and enhance the conditions of emergence'.²⁰

These references to emergent local institutions suggest an analogy between CBNRM and the community-level norms and institutions of environmental governance described in the literature on the management of the commons. Researchers in the management of common-pool resources have examined cases in which communities worldwide have organised themselves to

¹⁶ Murphree, 'Communal Approaches', p. 215.

¹⁷ *Ibid.*, p. 211.

¹⁸ *Ibid.*, p. 216.

¹⁹ *Ibid.*, p. 211. See also J. Pretty, 'Social Capital and the Collective Management of Resources', in D. Kennedy (ed), *State of the Planet 2006-2007* (Washington DC, Island Press, 2006), pp. 142-148.

²⁰ Murphree, 'Communal Approaches', p. 215.

establish locally grounded regimes for promoting long-term sustainable use of their natural resources, such as grazing land, forests, fisheries, and water supplies, without external intervention.²¹ This line of inquiry, now more than 20 years old, aims to identify the factors that support or constrain the spontaneous emergence of self-organised community institutions with enduring local legitimacy for natural resource management.²² In a recent comprehensive review of the commons literature, Stern and colleagues highlight three fundamental conditions that appear ‘necessary, but not sufficient, for emergence of self-organised institutions’. They write:

Research ... identifies three basic conditions as necessary for resource appropriators to create and sustain effective resource management institutions. First, the resource must be salient enough to the users that they are willing to invest time and energy to create new institutions. Second, users must have the autonomy to devise and change rules (that is, the external institutional environment must give or allow them this autonomy). Third, at least a subset of users must be able to engage in direct communication with each other, including the opportunity to bargain.²³

In the present article, to explore the suggestion that the way forward for externally devised CBNRM programmes in southern Africa is to emulate more closely these spontaneously emerging community-level institutions and practices, we consider the implications for CAMPFIRE of findings from the commons literature. To make the discussion concrete, we use the CAMPFIRE project in Nyaminyami, Zimbabwe, as a case study. In the sections that follow, we first justify our focus on CAMPFIRE in general and Nyaminyami in particular. Next we

²¹ E. Ostrom, T. Dietz, N. Dolšak, P. C. Stern, S. Stonich, and E. U. Weber (eds), *The Drama of the Commons* (Washington DC: National Academy Press, 2002).

²² A. Agrawal, ‘Common Property Institutions and Sustainable Governance of Resources’, *World Development*, 29, 10 (2001), pp. 1649-1672; E. Ostrom, ‘Self-Governance and Forest Resources’, Occasional Paper No. 20 (Jakarta, CIFOR, 1999).

²³ P. Stern, T. Dietz, N. Dolšak, E. Ostrom and S. Stonich, ‘Knowledge and Questions After 15 Years of Research’, in Ostrom *et al.* (eds), *Drama of the Commons*, p. 457.

review the Nyaminyami project's history and current status in some detail. We then consider ways in which the Nyaminyami project matches and diverges from the model of self-organised natural resource management regimes, taking into account the profound changes in Zimbabwe since 2000. We conclude by discussing the implications of our findings for Murphree's question as to whether CBNRM projects and communal approaches can be married successfully; that is, whether external interventions are likely to be able to simulate or foster the conditions necessary for spontaneous emergence of effective, enduring community-level norms and institutions.

Nyaminyami Case Study

The CAMPFIRE project in Nyaminyami and the CAMPFIRE programme more broadly provide a useful context for investigating these questions. Nyaminyami Rural District, located in the Zambezi Valley of northern Zimbabwe, has two characteristics that make it an appropriate site for studying the strengths and limitations of CAMPFIRE and the similarities and differences between CBNRM projects and the self-organised community-level institutions and practices described in the commons literature. First, with rich wildlife resources, severe local poverty, and an extended history of conflicts between local residents and state wildlife authorities, Nyaminyami satisfies the central criteria assumed to be necessary for successful implementation of CBNRM. Second, because the Nyaminyami RDC established strong district-level control from the outset, the project exemplifies the constraints to devolution built into CAMPFIRE. These two characteristics present opportunities both to assess the performance of CAMPFIRE given underlying conditions expected to support successful implementation and to observe the effects of incomplete devolution, which critics posit will undermine gains.²⁴

²⁴ Metcalfe, 'Zimbabwe Communal Areas'.

The CAMPFIRE programme more generally also has important attributes that facilitate testing the ideas discussed in the introduction. First, as an early and influential national CBNRM programme, CAMPFIRE was studied closely up through 2000, both in donor-funded programme evaluations and by independent researchers.²⁵ Consequently, CAMPFIRE has a well-documented track record over its first decade. Second, after 2000, two substantial changes in the broader policy environment in Zimbabwe created conditions of duress for local CBNRM institutions. These two adverse external changes were the end of international donor funding for CAMPFIRE and the beginning of Zimbabwe's severe and ongoing political and economic crisis.²⁶

From 1989 to 2000, the United States Agency for International Development (USAID), CAMPFIRE's primary donor, provided approximately US\$30 million for programmatic support.²⁷ These funds allowed NGOs to offer capacity building, monitoring, financial auditing, and other services to local projects. After the major funding cycle ended in 2000, however, the NGOs, which then received only limited contracts for final programme evaluations through 2001, discontinued the services they had been providing to the districts.

At the same time, Zimbabwe entered its current period of hardening politics and deteriorating economic conditions. Following signs of electoral weakness in 2000 polls, President Mugabe and his ruling ZANU-PF party embarked on an uncompromising, increasingly authoritarian, and often brutal effort to retain power. Punitive policies have left the general

²⁵ Hulme and Murphree (eds), *African Wildlife and Livelihoods*; Muir-Leresche *et al.*, *Analysis*; S. Matanhire, *Process Oriented Monitoring System (POMS) Evaluation of Select Sub-District CAMPFIRE Institutions* (Harare, Zimbabwe Trust, 2003); G. Matzke and N. Nabane, 'Outcomes of a Community Controlled Wildlife Utilization Programme in a Zambezi Valley Community', *Human Ecology*, 24, 1 (1996), pp. 65-86.

²⁶ USAID funding was previously scheduled to end in 2000; thus the two events are only coincidentally linked.

²⁷ Muir-Leresche *et al.*, *Analysis*.

population demoralised, weighed down by political intimidation, and the economy in crisis, with unremitting hyperinflation and severe shortages of essential goods.²⁸

The end of donor funding for CAMPFIRE and the worsening of Zimbabwe's national crisis combined to limit field research after 2000. Consequently, more recent studies can help clarify the status of local projects and allow comparison of current performance with the track record up through 2000. Moreover, the stressful conditions created by the damaging post-2000 changes present opportunities to examine Murphree's contention that institutional resilience is both a necessity for success in CBNRM and a likely weak point. His argument suggests that local institutions established as part of project implementation will have difficulty withstanding external pressures and that their weakness under duress will undermine performance. The current situation in Zimbabwe allows these predictions to be tested.

We conducted our fieldwork for the Nyaminyami case study in February-March 2006. During our research, we interviewed key informants in Harare, in the town of Siakobvu where the Nyaminyami RDC headquarters is located, and in the district's outlying rural areas. We spoke to outside experts, representatives of NGOs and government agencies, elected and appointed local officials, project staff, traditional leaders in the wards, and members of the broader general community with no leadership role and no direct affiliation with the CAMPFIRE project.²⁹ Our respondents with professional positions also gave us valuable access to documents

²⁸ Zimbabwe's crisis has been widely analysed. See for example, B. Raftopoulos, 'The State in Crisis: Authoritarian Nationalism, Selective Citizenship and Distortions of Democracy in Zimbabwe', in A. Hammar, B. Raftopoulos, and S. Jensen (eds), *Zimbabwe's Unfinished Business: Rethinking Land, State and Nation in the Context of Crisis* (Harare, Weaver Press, 2003), pp. 217-241; T. Scarnecchia, 'The "Fascist Cycle" in Zimbabwe: 2000-2005', *Journal of Southern African Studies*, 32, 2 (2006), pp. 221-237; J. McGregor, 'The Politics of Disruption: War Veterans and the Local State in Zimbabwe', *African Affairs*, 101, 402 (2002), pp. 9-37.

²⁹ As one of the authors, Mashinya, is Shona, we were able to communicate as appropriate either in English or in a national language familiar to all respondents. Mashinya is also responsible for the translations to English of the statements from our interviewees in the rural areas reported in this article.

relevant to the project's history and recent performance. All interviews reported below occurred during February-March 2006 in Harare or in Nyaminyami Rural District.

Given current conditions in Zimbabwe, in which persecution by authorities is a real risk, we are careful not to provide information that could identify our interviewees. We note, however, that despite the ongoing crisis, we experienced fewer problems in completing our fieldwork than we had anticipated. Our most persistent challenge was securing sufficient fuel for extended trips to the rural areas. In conducting interviews, once we explained that our purpose was to understand the current state of Nyaminyami's CAMPFIRE project and that we had no connection to the government, aid agencies, or other NGOs, our respondents were generally willing to speak openly and frankly. Rural villagers in particular were often eager to voice their complaints, even when their comments reflected badly on their local, district, or national leaders.³⁰ We encountered some initial reticence in the case of several lower-level RDC employees, but even these constraints generally eased as conversations continued and other bystanders joined in.

Political and Ecological Context

Nyaminyami, named for the resident Tonga people's protective ancestral spirit, is the least developed and poorest of Zimbabwe's 55 rural districts.³¹ The district, made up of 12 wards, reached its current configuration in 1960 after the newly completed dam on the Zambezi River at Kariba inundated the valley and drove humans and wildlife onto dryer and less productive higher ground.³² The formation of Lake Kariba separated the Tonga to the south from the larger Tonga

³⁰ Alexander and McGregor ('Wildlife and Politics', pp. 618-619) report similar research experiences.

³¹ United Nations Development Programme, *Zimbabwe Human Development Report, 2000* (Harare, UNDP, 2000).

³² Soil quality in Nyaminyami is described as 'unsuitable for meaningful agricultural activities': Save the Children, *Household Economy Assessments, Binga & Nyaminyami (Kariba Rural) Districts, Matabeleland North &*

population centres and traditional trade routes on the northern side, in what would become Zambia. Since then, Nyaminyami has remained isolated and relatively sparsely populated.³³

The early political evolution of Nyaminyami's RDC followed patterns seen across Zimbabwe's rural areas through the 1980s. After Independence in 1980, restructured district councils in the previously neglected communal territories faced several common challenges. These included conflicting portfolios, shifting relations with existing local institutions, and severe funding shortfalls.³⁴ In principle, the RDCs were meant to promote community participation and engagement. In practice, however, they often served the purpose of extending government control from the centre to the periphery.³⁵ Elected councillors representing the wards were typically subservient to appointed civil servants accountable to external authorities, and relations between the councillors and the chiefs were unsettled. Although the councils formally superseded the traditional leaders in political authority, the national ruling party on occasion restored or strengthened the chiefs' powers and perquisites when it needed them to deliver votes. Perhaps more damaging, the councils had severely limited independent taxing or fund-raising abilities, and government grants to the districts were not sufficient to support the provision of promised services.

While Nyaminyami's RDC faced early institutional problems similar to those experienced in many rural areas, the district's historical, political, and economic conditions differ to some degree from neighbouring regions. The population of Nyaminyami is divided about equally between Tonga and Shangwe ethnic groups, the latter a subgroup of Shona. Three-

Mashonaland West Provinces, Zimbabwe: April-May 2004 (Harare, Save the Children UK, 2004), p. 14. Rainfall is generally both insufficient for agriculture and unreliable: A. Khumalo, *CAMPFIRE Monitoring and Evaluation Data, 2001* (Harare, WWF-SARPO, 2003).

³³ According to the 2002 national census, Nyaminyami has a population of about 35,000 people in 7,500 households in an area of 3,300 km². This population density is one-third the national average.

³⁴ A. Hammar, 'The Making and Unmaking of Local Government in Zimbabwe', in Hammar, Raftopoulos, and Jensen (eds), *Unfinished Business*, pp. 119-154; McGregor, 'Politics of Disruption'.

³⁵ Hammar, 'Local Government'; McGregor, 'Politics of Disruption'.

quarters of Zimbabwe's Tonga minority reside in Binga district, to the west of Nyaminyami, and some are also found in Gokwe North, bordering Nyaminyami to the south. Since Independence, the Tonga in Binga and Gokwe North have frequently been caught between competing Ndebele and Shona interests.³⁶ More recently, many have supported the national opposition party, Movement for Democratic Change (MDC).³⁷ Nyaminyami district, in contrast, votes solidly for ZANU-PF. In describing the difference, Metcalfe observes that the Tonga in Nyaminyami 'fall more clearly under a Shona cultural and political "mind set"'.³⁸ While there is no certain geographic overlap of Shona ethnicity and support for ZANU-PF—indeed, urban areas in all regions have given the MDC significant majorities—the link remains stronger in the communal areas.³⁹

Nyaminyami has also seen less immigration than neighbouring regions. In Gokwe North, a tarred road constructed after Independence made that district's outlying areas accessible to outsiders. The wave of immigration that followed substantially shifted the social and economic dynamics and undermined habitat protection efforts linked to CAMPFIRE.⁴⁰ Similarly in Binga during the 1990s, tensions emerged between locals, who by rule could benefit from the district's CAMPFIRE project, and Ndebele migrants, who were excluded from CAMPFIRE and saw conservation as hindering their ambitions to develop commercial agriculture.⁴¹ In Nyaminyami, there was some initial immigration following control of the tsetse fly, and local chiefs often encouraged these new settlers, hoping that a larger population would foster development. The

³⁶ S. Metcalfe, 'CAMPFIRE: Zimbabwe's Communal Areas Management Programme for Indigenous Resources', Paper prepared for the Liz Claiborne & Art Ortenberg Foundation Workshop on Community-Based Conservation (Harare, CASS, 1993).

³⁷ E. Mapedza and I. Bond, 'Political Deadlock and Devolved Wildlife Management in Zimbabwe: The Case of Nenyunga Ward', *Journal of Environment and Development*, 15, 4 (2006), pp. 407-427.

³⁸ Metcalfe, 'CAMPFIRE', p. 5.

³⁹ D. Potts, "'Restoring Order"? Operation Murambatsvina and the Urban Crisis in Zimbabwe', *Journal of Southern African Studies*, 32, 2 (2006), pp. 273-291.

⁴⁰ Mapedza and Bond, 'Political Deadlock'.

⁴¹ Dzingirai, 'Ndebele Migrants'.

RDC, however, overruled the traditional leadership and has since enforced regulations limiting the influx of outsiders.⁴²

From the outset, the Nyaminyami RDC had strong incentives to limit immigration and protect habitat to assure the continued flow of income from the district's exceptionally rich wildlife resources. By the mid 1980s, well before implementation of CAMPFIRE, proceeds from game already constituted half of the RDC's total revenue stream.⁴³ As CAMPFIRE was being developed in the late 1980s, wildlife rich districts such as Nyaminyami looked to the nascent programme as an important potential step on a path to greater fiscal independence.

The details of CAMPFIRE design and implementation at this early stage were tied up with broader turf battles at the ministerial level.⁴⁴ The Department of National Parks and Wildlife Management, within the Ministry of Natural Resources, aligned itself with development experts from Zimbabwe Trust, conservationists from World Wildlife Fund, and academics from the University of Zimbabwe's Centre for Applied Social Sciences to advocate for direct community control of local CAMPFIRE projects. The Ministry of Local Government, in contrast, insisted that bypassing the RDCs would undercut these newly established and still fragile institutions. Much of the negotiation over these issues centred on Nyaminyami, which in 1989 became the first district granted formal authority to institute CBNRM. Under the compromise formulation of CAMPFIRE that ultimately emerged, participating RDCs received statutory authority for CAMPFIRE projects in their districts, but the councils were required to disburse at least 50 per cent of CAMPFIRE revenue to the wards and to involve the communities in decision making regarding how these funds were to be spent. This second component was an

⁴² Interview with a senior RDC administrator, Siakobvu, March 2006.

⁴³ J. Murombedzi, 'Decentralising Common Property Resources Management: A Case Study of the Nyaminyami District Council of Zimbabwe's Wildlife Management Programme', Dryland Networks Programme Paper No. 30 (London, IIED, 1991).

⁴⁴ Metcalfe, 'Zimbabwe Communal Areas'; Metcalfe, 'CAMPFIRE'; Murombedzi, 'Decentralising'.

attempt, following the logic of CBNRM, to encourage locals to cooperate with conservation efforts by compensating them for the costs of living with wild animals.

Elephants are the most valuable trophy animals in southern Africa and also often the most disruptive to small-scale agriculture. Consequently, elephant populations serve as a useful indicator of both potential human-animal conflicts and potential economic gains from CAMPFIRE. While elephants are threatened in many parts of Africa, populations in Zimbabwe have been growing for the past 20 years.⁴⁵ Indeed, the present total appears to exceed the carrying capacity of available habitat,⁴⁶ leading to overgrazing and other ecological stresses.⁴⁷

Over 90 per cent of the elephants in Zimbabwe are found in national parks and other reserves. Nyaminyami has about one-third of the total number found outside the protected areas. Moreover, the density of the elephant population in Nyaminyami is about double the average density on communal lands with elephants nationwide.⁴⁸

Similar differences in animal population densities between Nyaminyami and other communal areas exist also for leopards, hippopotamuses, hyenas, and other species. This significant presence of wildlife makes the lives of local residents difficult in several ways. Elephants and buffaloes damage or destroy crops, and lions and other predators attack domestic livestock. People's lives also are at risk. The Nyaminyami RDC reports 54 residents killed by

⁴⁵ A 2001 aerial survey estimated Zimbabwe's total elephant population at about 90,000 animals, representing a doubling since 1980: K. M. Dunham and C. S. Mackie, 'National Summary of Aerial Census Results for Elephant in Zimbabwe: 2001', Occasional Paper No. 1 (Harare, WWF-SARPO, 2002). Under the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), elephants in Zimbabwe, Namibia, and Botswana are listed in Appendix II, instead of the stricter Appendix I that applies elsewhere.

⁴⁶ Zimbabwe has set aside 14.7 per cent of its territory in national parks and other nature reserves. The average for nations worldwide is 10.8 per cent.

⁴⁷ G. Child, 'Elephant Culling in Zimbabwe', *ZimConservation* (August 2004), pp. 1-6.

⁴⁸ About 7,300 elephants are found outside the protected areas; of these, about 2,400 are resident in Nyaminyami, representing a density of 0.74 per km²; the national average density for communal lands with elephants nationwide is 0.38 per km²: Dunham and Mackie, 'Aerial Census Results'.

wild animals from 1997 to 2005.⁴⁹ Zimbabwe's success in protecting its wildlife despite the costs imposed on locals stems in part from assertive enforcement of game laws. Neumann has described application of shoot-on-sight policies toward suspected poachers during the 1980s in the Zambezi valley and elsewhere.⁵⁰

CBNRM is designed to generate revenue for community development from wildlife, mitigate the adverse effects of the presence of wild animals on locals, and give communities some authority for managing the resource and allocating the proceeds. Yet the Nyaminyami RDC has never lived up to CAMPFIRE's promise to promote community engagement. Despite the rhetoric of participation, the district's interest in CAMPFIRE, even during its initial application, was primarily financial. As Murombedzi describes it, 'The motivation at this stage was not to institute participatory local management and utilisation of resources but rather to capture wildlife utilisation funds at the local level to finance district level recurrent expenditure'.⁵¹ As we discuss in presenting our case study findings below, the Nyaminyami CAMPFIRE project has continued to demonstrate a lack of community participation up to the present.

Thus, during the first decade after Independence, Nyaminyami's RDC faced problems common in many rural districts. With CAMPFIRE implementation, however, it was able to draw on a source of funding unavailable to most other districts. Moreover, in the post-2000 era, Nyaminyami's geographic isolation and political history have shielded it from the turmoil that has affected rural institutions in other parts of the country. Since 2000, RDCs in many areas, particularly Matebeleland and the Midlands, have been subject to violent harassment by war

⁴⁹ 23 by elephants, 12 by hippopotamuses, 10 by crocodiles, and 9 by buffaloes.

⁵⁰ R. Neumann, 'Moral and Discursive Geographies in the War for Biodiversity in Africa', *Political Geography*, 23, 7 (2004), pp. 813-837.

⁵¹ Murombedzi, 'Decentralising', p. 10.

veterans as a component of what McGregor identifies as the ruling party's 'strategic deployment of disorder'.⁵² In these provinces, war veterans have invaded district offices, chased away administrators, beaten teachers, demanded frequent public expressions of allegiance to the President, and otherwise disrupted the capacity to govern. While often dressed as a populist response to local grievances, these assaults generally target districts that have provided electoral support to the opposition.

Nyaminyami, however, is a reliable source of votes for ZANU-PF. On policy matters, the councillors, all members of the ruling party, follow the lead of the RDC's Chief Executive Officer, who at the time of our research was a former ZANU-PF Member of Parliament for Mashonaland West. While Nyaminyami suffers from the effects of the national economic crisis, it has not directly experienced 'the tragedy of government by war veterans'.⁵³

CAMPFIRE in Nyaminyami

The Nyaminyami RDC centralised control of its CAMPFIRE project from the outset.⁵⁴ The district council negotiates contracts with safari hunting firms and determines the allocation of receipts among the wards with little input from local residents. Reinforcing the top-down management structure, the councillors, who owe allegiance to the ruling party rather than to the nominal electorate, chair the ward committees, leaving little political space for community-level power sharing or deliberation.

On several occasions over the first decade of the Nyaminyami project, external evaluators expressed concern about this lack of grassroots involvement. Metcalfe, discussing conditions district-wide in 1993, noted that 'the communities are not actively participating in the planning

⁵² McGregor, 'Politics of Disruption', p. 9.

⁵³ Hammar, 'Local Government', p. 120.

⁵⁴ Metcalfe, 'CAMPFIRE'; Murombedzi, 'Decentralising'.

and management process and appear alienated', from both the CAMPFIRE institutions and the wildlife.⁵⁵ Similarly Matanhire, summarising results of a ward-level assessment conducted in 2001, at the end of the USAID funding cycle, described 'adverse relations between the ward councillor, traditional leaders, and the community'.⁵⁶ Derman and Murombedzi have emphasised the limitations of councillors as community representatives in CAMPFIRE more generally.⁵⁷

Nevertheless, on three important components of CAMPFIRE, revenue generation, wildlife conservation, and community development, reviewers consistently gave favourable overall assessments of performance through 2001. On the ecological side, wildlife populations in Nyaminyami have been stable or growing, with poaching by locals judged a minor rather than a major problem.⁵⁸ The most significant concern noted for conservation has been haphazard development of new settlements that encroach on wildlife corridors and exacerbate human-animal conflicts.

In terms of revenue generation, Nyaminyami has consistently been the most successful CAMPFIRE district, both in the aggregate and per capita. In 2001, for example, the last year assessed under donor-funded programme evaluations, the district earned US\$675,000, or about 30 per cent of total national CAMPFIRE earnings that year. Given its high income and relatively low population, the district's gross revenues on a per household basis have typically been about ten times the national median.⁵⁹

⁵⁵ Metcalfe, 'CAMPFIRE', p. 176.

⁵⁶ Matanhire, *Evaluation*, p. 11.

⁵⁷ B. Derman and J. Murombedzi, 'Democracy, Development and Human Rights in Zimbabwe: A Contradictory Terrain', *African Rural and Urban Studies*, 1, 2 (1994), pp. 119-145.

⁵⁸ C. S. Mackie, 'Aerial Census of Elephants and Other Large Herbivores in the Sebungwe Region, Zimbabwe: 2001', Occasional Paper No. 3 (Harare, WWF-SARPO, 2002); CAMPFIRE Association, *Annual Report*. RDC staff reported that commercial poachers from Zambia were a more significant concern than local poachers.

⁵⁹ Khumalo, *CAMPFIRE Data*. In 2001, CAMPFIRE projects nationwide earned US\$2.3 million. The median gross revenue per household for participating districts was about US\$9. In contrast, gross income divided by number of households in Nyaminyami equalled about US\$90. Benefits differ among wards in Nyaminyami, however, because revenues are disbursed proportionally based on hunting revenues generated within their borders.

CAMPFIRE proceeds are meant to provide community benefits and support district governments. National guidelines require participating RDCs to transfer a minimum of 50 per cent of project income to the wards for community development.⁶⁰ The district council in Nyaminyami, however, has on average passed along only about 40 per cent of its earnings.⁶¹ Also in Nyaminyami, as in many CAMPFIRE districts, ward revenues have generally been used for community infrastructure improvements rather than for direct payments to individual households.

In our examination of RDC documents and discussions with local administrators, we learned that the district's gross CAMPFIRE earnings have remained strong since 2000, indicating steady interest in Zimbabwe among international sport hunters despite the country's growing political and economic crisis. In 2005, the last full year before our study, Nyaminyami generated US\$760,000 from safari concessions and trophy fees, an increase of more than 10 per cent over 2001.

On the development side, however, we found a pattern of early successes followed by more recent failures. While frequently noting the lack of community participation, many of our respondents in the villages indicated satisfaction with improvements related to CAMPFIRE up through 2001. The community projects most frequently cited included grinding mills, school buildings, and tractors for shared use during planting. Many villagers, both male and female, first

⁶⁰ Guidelines allow districts to hold 12 per cent as a council levy, 35 per cent for wildlife management, and 2-4 per cent to cover dues to the national CAMPFIRE Association.

⁶¹ The RDC has strong incentives to capture as much of the earnings as possible because CAMPFIRE supports more than half of its budget. Most of the remainder comes from grants from the increasingly strapped central government. In comparison, non-CAMPFIRE rural districts typically rely on the central government for 85 per cent of their revenue, suggesting that CAMPFIRE subsidises rather than supplements central government spending on local development: Muir-Leresche *et al.*, *Analysis*.

mentioned the grinding mills. Without mechanised mills to convert maize to flour, women must spend hours each day in the arduous task of pounding grain by hand.⁶²

When asked about the recent performance of CAMPFIRE, however, our respondents in the outlying areas indicated that over the past several years the programme has lost all credibility. While it is not surprising to find some critics of any project, our respondents unaffiliated with CAMPFIRE, regardless of age, gender, or social status, were unanimous in their dissatisfaction with the current situation. Other than the district councillors and some RDC staff members, none of our interviewees expressed a favourable view of CAMPFIRE's current community development efforts. Complaints fell into three categories: an unaccountable power structure, a lack of concrete benefits, and an ineffective response to human-animal conflicts.

Regarding accountability, a man at a fishing camp on Lake Kariba scoffed that the ward committees are rubber stamps for the councillors and that 'committee elections are not real—the same people always get re-elected'. Another fisherman said that 'only the elders are heard; the concerns of others are disregarded'. Despite the reported privileged position of the elders, however, members of the traditional elite also offered criticisms. The adult son of a kraal head, for example, told us that the committees are controlled by those with 'political muscle', referring to the influence of the ruling ZANU-PF party, and that it would be risky for others to challenge them. The kraal head himself spoke dismissively of ward councillors and other committee leaders, criticising their competence and integrity. A school teacher made specific allegations of misappropriation of funds, telling us that Nyaminyami councillors use ward-level CAMPFIRE

⁶² On the importance of grinding mills, a report by the US National Research Council states: Pounding grain is 'a hot and disagreeable task [that] has to be done day after day, in fair weather and foul, and regardless of sickness or other indisposition. Probably no single development could help rural Africa more than relief from this never-ending drudgery': US National Research Council, *Lost Crops of Africa. Volume I: Grains* (Washington DC: National Academy Press, 1996), p. 285.

disbursements for personal perquisites, including cellular telephones, fences to protect their fields from wildlife, and trips to Kariba town and Harare.

Regarding the current lack of broadly valuable community benefits, our respondents indicated that for the past several years there have been no new investments in development projects. Moreover, most of the earlier efforts have not been maintained and consequently no longer provide useful service. In the wards we visited during our research, for example, none of the CAMPFIRE-financed grinding mills was in working order. The mills had broken down and not been repaired, were missing critical parts, or had no fuel. A man and woman took us to see a grinding mill sitting abandoned in a field near a village shop. They told us that the mill had been installed in 2000 and that it had functioned until 2003, at which time the councillor came and removed the diesel engine, ostensibly for repairs.⁶³ They told us that after several months passed and the motor had still not been returned, the councillor came back and took away the posts and roofing that had protected the mill from the weather. Residents elsewhere showed us another grinding mill that was not working. The motor and roof were in place, but they told us there had been no fuel for over a year. They explained that the ward leaders told them no diesel fuel was available. In Siakobvu, however, we observed directly that the RDC had plenty of government-subsidised fuel on hand.⁶⁴

School construction and maintenance have also suffered in recent years. A teacher in one ward told us that no new CAMPFIRE funding had been allocated for the schools since 2001. He showed us that his school building remains an incomplete shell and that it is already noticeably deteriorating along the foundations. He reported that the bidding process for construction had been corrupt and that the builder had used inferior materials and kept the difference for himself.

⁶³ The couple reported that the councillor was using the motor in his own household.

⁶⁴ District employees were offering fuel for private sale.

As we visited a class in session, students stood or sat on the floor without desks or other supplies. Villagers commonly told us that at a minimum CAMPFIRE funds should be used to provide desks and books, arguing that even if the wards could not afford to buy desks and books for every child, each school should at least have a few to share.

Residents in another community showed us what they described as a symbol of CAMPFIRE's recent problems—a new, well-constructed butcher shop built with project revenue that sits in the village centre. In recounting its history, our respondents noted that the national government has a programme independent of CAMPFIRE to cull impala and other prevalent species and provide the meat to poor communities in the rural areas at below-market prices.⁶⁵ The ward councillor, however, had developed a plan to purchase large quantities of this meat at the subsidised rate and then sell it to locals at market prices using the CAMPFIRE-funded shop as a distribution point. Outrage over this plan caused the councillor to abandon the idea, and the building now stands empty.

The third recent failure of CAMPFIRE raised repeatedly by our respondents was ineffective problem animal control. The RDC keeps 35 per cent of sport hunting revenue for wildlife management. Among other objectives, these funds are intended to mitigate human-animal conflict. Residents are dissatisfied, however. In one ward, a group of men described a running problem they had the previous year with a group of eight lions that raided livestock over a period of months. The men told us that after district authorities failed to respond to repeated complaints, they poisoned the lions on their own initiative.⁶⁶ Many other villagers independently described severe crop damage from elephants and complained that district officials do not

⁶⁵ Operation Nyama.

⁶⁶ Replicating findings reported by Dzingirai ('Ndebele Migrants') in the neighbouring Binga district, however, the Tonga we spoke to in Nyaminyami generally reported continued willingness to help protect wildlife despite the poor performance of their CAMPFIRE project's community development component.

respond to reported losses. In one ward, residents noted that the councillor maintains a solar-powered electric fence around his fields, paid for with CAMPFIRE funds, while the plots of other community members are unprotected.

To follow up on the lack of effective problem animal control, we interviewed CAMPFIRE game scouts at a rural field station. The scouts told us that they were unable to perform their duties. Their two-way radio had been broken for over a year, leaving them with no means of communication with headquarters, and they had recently been required to turn in their rifles. They told us that, without weapons for protection and without a working radio to call in confirmed problems, it was neither safe nor useful for them to investigate villagers' reports of problem animals. They also noted that their salaries had not been adjusted for inflation. At the time of our visit, their monthly pay had dropped in value to the equivalent of US\$2 per month at the official exchange rate, or about US\$1 at the black market rate, giving them little incentive to undertake dangerous work.

While the councillors and some of the RDC staff maintained that the CAMPFIRE project continues to be successful and that residents' complaints are exaggerated, a senior RDC administrator was candid in discussing its problems. He acknowledged that the council and the RDC staff lacked the capacity—the administrative skills, incentives, equipment, and access to information—necessary to manage the project effectively. Prior to the end of donor funding, NGOs such as the World Wildlife Fund and Zimbabwe Trust provided critical management support, including auditing, oversight, aid in negotiations with external actors, and so on. While the development of local capacity was an important stated aim of USAID funding, experience since the withdrawal of the NGOs after 2000 suggests that this goal was not achieved.

The senior RDC administrator we spoke to told us, for example, that the district was missing opportunities to increase revenue because of its weak position in bargaining with safari operators. He said the councillors and staff have little knowledge of international trophy hunting markets. Moreover, the councillors, being risk-averse and eager to maintain the personal perquisites they receive, favour long-term contracts with safari firms and routinely extend these contracts before they expire. The RDC administrator also criticised the councillors' lack of accountability at the ward level. He noted that, in the absence of NGO support, the RDC lacks the capacity to audit the ward committees. He said he knew that CAMPFIRE funds at the ward level were being misappropriated. He also criticised the national government's requirement that hard currency earnings be exchanged through the central bank at the official rate, arguing that the policy of overvaluing the Zimbabwe dollar shrinks the district's real income. Thus local failures of governance in the post-2000 period are a function of both a continuing lack of internal capacity and increased opportunities for corruption.

During our fieldwork, we noted two separate comments from individual respondents in Nyaminyami that captured the general view of community residents regarding CAMPFIRE. A fisherman on the lakeshore, while making grasping motions with his fingertips, said, 'There are too many little fingers'. A man at a canteen in Siakobvu said, 'There are too many snakes in the anthill'. While the metaphors in the vernacular differ, the point is the same: that the project's poor performance on the community development side is tied to failures of governance and elite capture of benefits. The failures are local, in that district and ward leaders lack capacity, competence, transparency, and accountability; and national, in that NGOs no longer provide essential support and the central government's policies promote corruption.

Discussion

The history and recent performance of Nyaminyami's CAMPFIRE project shed light on the questions regarding CBNRM and project implementation practice raised in the introduction. They also help clarify the possibilities and obstacles for CAMPFIRE that follow from lessons reported in the commons literature concerning the conditions necessary for the emergence of self-organised, enduring community-level regimes for natural resource management.

Despite successes reported in earlier studies, the Nyaminyami project is no longer achieving the central promise of CBNRM: the integration of conservation and development. Yet the failures are not symmetrical. Gross revenues in Nyaminyami have remained strong, and the district's wildlife conservation efforts have not suffered unduly. It is the project's community development component that has collapsed. Local residents no longer receive useful benefits, and they appear deeply alienated from the project's institutions and leadership.

Institutional and political failures after 2000 at various levels of government contributed to this decline. First, even though earnings from safari hunting have been stable or growing, the district and the wards have both seen a drop in net income. At the national level, the central bank now commonly overvalues the Zimbabwe dollar in setting the official exchange rate. This policy, while notably ineffective in controlling inflation, continues at least in part because it allows government officials to capture the difference between the official rate and the black market rate. For 2005, last full year before our study, the Nyaminyami RDC received from the central bank about 42 per cent of the true value of the US\$760,000 its CAMPFIRE project generated.⁶⁷

⁶⁷ According to the RDC administrator we spoke to, the central bank discounted the US dollar earnings by about 50 per cent in the official exchange rate and then deducted an additional 7.5 per cent in calculating the 'interbank' rate used for payments to the districts. The administrator also told us that the RDC was lobbying the central government, unsuccessfully to that point, for the right to hold assets in hard currency.

Nevertheless, opportunities for useful community benefits remained. Gross annual earnings have increased during the post-2000 period, reflecting healthy populations of trophy animals and a global expansion in demand for safari opportunities.⁶⁸ Thus even after accounting for exchange rate losses, the wards were still in line to receive 45 to 50 per cent of their 2001 disbursements. While this represents a substantial drop, it is still unexpectedly strong given conditions in Zimbabwe. If used appropriately, this revenue would have been sufficient at a minimum to install and maintain grinding mills, provide basic shared schools supplies, and adequately fund game scouts for problem animal control. In other words, if local leaders had acted in the interest of their constituents, community members would have continued to receive valuable, though reduced, development benefits despite the national crisis. Instead, at the time of our research, the CAMPFIRE proceeds reaching the wards benefited only the local political elite.

The performance of international donors and NGOs constitutes a second layer of institutional failure.⁶⁹ Following the end of external funding in 2000, the NGOs were no longer able to provide local projects with capacity building, monitoring, and other administrative services. Officials at the Nyaminyami RDC acknowledged that without this aid, they lacked the skills and incentives to oversee the ward committees. Similarly, staff members at the CAMPFIRE Association in Harare conceded that without financial support from USAID they could no longer meaningfully assist or monitor the RDCs.

Thus recent outcomes in Nyaminyami indicate that the combination of restructured economic incentives and local control is not sufficient to ensure win-win conservation and development gains, even when projects are consistently successful in generating revenue. Concerning the claim that lack of full devolution in CAMPFIRE is a major contributor to the

⁶⁸ Muir-Leresche *et al.*, *Analysis*.

⁶⁹ B. Derman, 'Environmental NGOs, Dispossession, and the African State: the Ideology and Praxis of African Nature and Development', *Human Ecology*, 23, 2 (1995), pp. 199-215.

observed failures, however, the results are less clear. In Nyaminyami, the RDC centralised control from the outset and has continued that policy to the present time. Yet our respondents in the rural areas reported that they received valuable development gains up through 2000, but that benefits have since declined to zero. This trend suggests that the external changes in the policy environment played a greater role in the collapse of the project's community development component than the locus of authority, which remained stable throughout the period. Moreover, the post-2000 decline in the quality of governance in Nyaminyami was greater at the ward level than at the district level. Once the NGOs withdrew their support and oversight, the ward committees lost all accountability. We found little evidence to suggest that if the ward committees had full authority they would be able to demonstrate the necessary capacity, transparency, accountability, and community participation to deliver on CBNRM's promises.

These findings reinforce Murphree's assessments of the limitations of CBNRM theory and project implementation practice. They also support his emphasis on the importance of local institutional resilience. In Nyaminyami, ten years of NGO engagement failed to develop adaptive, self-sustaining local institutions with enduring consensual legitimacy.

Regarding the implied second stage of Murphree's argument—that the best hope for CAMPFIRE is to foster conditions that support the emergence of self-organised, locally grounded natural resource management regimes—a comparison of conditions in Nyaminyami with findings from the commons literature suggests that this approach is unlikely to succeed. As mentioned in the introduction, scholars of the commons identify three general conditions as necessary for the emergence of enduring and effective institutions for management of common-pool resources: salience of the resource, autonomy in management, and opportunities for

bargaining.⁷⁰ Yet several fundamental obstacles to reproducing these conditions in CAMPFIRE communities are apparent.

First, wildlife is not salient for locals in Nyaminyami in the sense adopted in the commons literature for describing ways in which rural communities depend for their livelihoods on forests, fisheries, pastures, water supplies, or other natural resources. Decades of government policy both in colonial times and after Independence have strictly limited local use of wildlife in Zimbabwe and elsewhere in the region. Consequently, villagers have come to rely increasingly on agriculture and livestock, activities which typically conflict with wildlife conservation. In this light, CAMPFIRE, instead of being a means to promote sustainable use of a resource of direct importance to locals, is rather an attempt to pay locals to preserve a resource of value to distant constituencies, including the safari hunting and game-viewing tourism industries and global conservation interests. International treaties and national and international economic pressures do not permit the national government to allow local institutions full autonomy for wildlife management. In all plausible policy scenarios, national agencies will retain authority to set and monitor quotas for major species.

Opportunities in Nyaminyami for community members to bargain effectively, either among themselves or with external actors, are also severely limited. The district's poverty, its relatively low population density, its large size, the poor state of its roads and public transportation, and the lack of any broadly accessible long-distance communication infrastructure all militate against effective collective action. Moreover, the entrenched corruption of political institutions at all levels has weakened the sense of trust and reciprocity identified in the commons literature as essential. The recent collapse of the district CAMPFIRE project's development component has further depleted reserves of social capital.

⁷⁰ Stern *et al.*, 'Knowledge and Questions'.

Challenges to nurturing the emergence of locally legitimate and resilient CAMPIRE institutions extend beyond these three central conditions of salience, autonomy, and opportunities to bargain. Scholars of the commons have also identified various second-level attributes that influence the probability of successful self-organisation. Stern and colleagues note that in cases where the three central conditions are satisfied, ‘whether appropriators will organize, which institutional design they will choose, and the performance and survival of that design depend on specific characteristics of the resource, the resource users, and the repertoire of institutional rules considered’.⁷¹ Agrawal has developed an expanded list incorporating these additional, more specific enabling conditions.⁷² Table 1 presents these conditions and summarises the extent to which they obtain in Nyaminyami.

[Table 1 about here.]

At this secondary level, additional obstacles appear. In Nyaminyami, for example, the communities have few youthful, educated leaders; local poverty is severe; higher-level institutions are often predatory and destabilising rather than supportive; and complex, distant international markets play a dominant role in valuing the resource. The expanded list of enabling conditions also emphasises again the problems discussed earlier linked to the lack of both local salience of wildlife and local autonomy for wildlife management.

Conclusion

An implied two-way link exists between research on self-organised community-level natural resource management regimes and on CBNRM programmes developed by outsiders. Recent discussions of CBNRM programmes, including Murphree’s call for a focus on facilitating the

⁷¹ Stern *et al.*, ‘Knowledge and Questions’, p. 457.

⁷² Agrawal, ‘Common Property Institutions’, p. 1659; A. Agrawal, ‘Common Resources and Sustainability’, in Ostrom *et al.* (eds), *Drama of the Commons*, pp. 62-63.

emergence of consensually legitimate local institutions, incorporate lessons from the commons literature. Conversely, the commons literature's systematic efforts to explain the dynamics of spontaneously emerging community institutions and draw general inferences from findings suggest that the attributes correlated with success can be transplanted.

Yet a comparison of necessary enabling conditions identified in commons scholarship and conditions found in our case study of an initially promising CAMPFIRE project indicates that the two may be irreconcilable. The observed differences help explain why self-organised institutions for wildlife management did not emerge (or re-emerge) spontaneously in CAMPFIRE communities before project implementation. They also illustrate the obstacles facing efforts to reconfigure CAMPFIRE to create and nurture the conditions for emergence. These obstacles include the largely non-negotiable national and international controls on wildlife utilisation, the severe logistical and socioeconomic constraints to local collective action that characterise many rural areas of Zimbabwe and elsewhere in the region, and the tendencies toward elite capture of benefits that we observed in Nyaminyami. Given these constraints, both the primary and secondary critical enabling conditions identified in the commons literature will be difficult to simulate effectively in the CAMPFIRE context. Ultimately, lessons from the commons literature help explain some of CAMPFIRE's observed limitations but do not provide a clear recipe for improving outcomes. Similar challenges seem likely to apply in southern African CBNRM more broadly.

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Table 1. Expanded list of enabling conditions for successful self-organisation

Enabling conditions	<i>Whether the conditions obtain in Nyaminyami</i>
1. Characteristics of the resource system	
Small geographical area.	No.
Clear boundaries.	Generally no; varies by species.
Low resource mobility.	Generally no; varies by species.
Storable benefits.	Generally no.
Predictable flow of benefits.	Yes in the short term; no in the long term.
2. Characteristics of the community of users	
Small size.	No.
Clear membership and geographical boundaries.	To some degree, depending on whether the group is defined by clan, geography, or political jurisdiction.
Shared norms.	Decreases with scale from village to district level.
Social capital.	Decreases with scale from village to district level.
Youthful, educated leaders.	No.
Interdependence.	Decreases with scale from village to district level.
Diverse endowments, but similar interests.	To some degree.
Low levels of poverty.	No.
3. Relationship between resource system characteristics and user characteristics	
Geographical overlap.	Generally no; varies by species.
High dependence on resource.	No (this is the 'salience' question).
Fair allocation of benefits.	No.
Low demand.	Yes, in the sense that off-take is controlled by quotas.
Demand changes only gradually.	Yes, in the sense that off-take is controlled by quotas.
4. Institutional arrangements	
Clear and simple rules.	N/A; currently locals have no say in rules for use of wildlife.
Rules locally devised and managed.	No.
Rules easily enforced.	N/A; currently locals have no say in rules for use of wildlife.
Graduated sanctions.	N/A; currently locals have no say in rules for use of wildlife.
Low-cost adjudication.	N/A; currently locals have no say in rules for use of wildlife.
Accountability to users.	N/A; locals are not the 'users' as conventionally understood.
5. Relationship between resource system and institutional arrangements	
Restrictions match harvests.	Yes, in the sense that off-take is controlled by quotas.
6. External environment	
6 a. Markets	
Limited links to external markets.	No; external markets set the price of the resource (the hunt and the trophy).
Links to external markets change only gradually.	Yes.
6 b. State	
Local authority recognised.	Nominal recognition only.
Locals compensated for conservation efforts.	Yes (to some degree) through 2001; no in recent years.
Nested levels of governance.	Yes, but higher-level behaviours often undermine local collective action.

N/A = not applicable.

Source: List of conditions adapted from Agrawal, 'Common Property Institutions', p. 1659; and Agrawal, 'Common Resources', pp. 62-63.