

# Institutional Bricolage, Conflict and Cooperation in Usangu, Tanzania

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## 1 Introduction

This article draws on research in Tanzania to explore the socially embedded nature of institutions for common property resource management and collective action. It challenges the 'design principles' common in resource management literature and explores instead the idea of 'institutional bricolage', a process by which people consciously and unconsciously draw on existing social and cultural arrangements to shape institutions in response to changing situations. The resulting institutions are a mix of 'modern' and 'traditional', 'formal' and 'informal'.

Three aspects of institutional bricolage are elaborated here: the multiple identities of the bricoleurs, the frequency of cross-cultural borrowing and of multi-purpose institutions, and the prevalence of arrangements and norms which foster cooperation, respect and non-direct reciprocity over life courses. I suggest that these aspects of institutional formation make cooperation amongst diverse stakeholders possible, even in the face of competition and uncertainty.

## 2 Livelihoods and Uncertainty in the Usangu Basin

The Usangu basin is perceived by planners and policymakers as facing problems of degradation and depletion of its grazing land and water resources. This is a critical concern because the severe drying up of the Ruaha river has potentially deleterious effects on the perennial swamp (the *ihifu*, an area of precious biodiversity), on hydroelectric power generation, on irrigated agriculture and on the wildlife tourism potential of the downstream Ruaha National Park. Ever growing demand for land for agriculture (particularly for irrigated rice and maize) restricts grazing areas and cattle movement routes around villages. To avoid the consequent conflicts, cattle keepers increasingly graze their herds on the seasonally flooded grasslands around the *ihifu*, leading to fears of destruction of this 'fragile resource'. A DFID-funded project (Sustainable Management of the Usangu Wetland and its Catchment – or SMUWC) is investigating the causes of resource depletion in Usangu and developing local capacity to manage the natural environment collectively.

Livelihoods in Usangu are characterised by dynamic ecological, social and economic change resulting in a number of uncertainties. Substantial in-migration (of Baluchis from Iran, Maasai and Sukuma pastoralists from the north and agriculturalists from other parts of Tanzania) has led to social and livelihood changes. Increasing population pressures, climatic variation and fluctuations in resource availability have resulted in substantial intra-district movement and the adoption of risk-minimising strategies such as cultivation and grazing over wide areas. Development interventions in the form of the establishment of large hydroelectric power schemes and irrigated rice farms have resulted in changes in land use as well as intermittent supplies of ever scarcer water. Economic liberalisation has increased livelihood insecurity for many and contributed to cyclical labour migrancy and the commercialisation of natural resource use. There are highly variable perceptions of the capacity, trustworthiness and efficacy of local government institutions. The high incidence of AIDS in the area has added further to livelihood uncertainties, critically affecting labour availability and social relationships.

### 3 Characterisation of Resource Conflicts

In project and policy documents and in the discourse of development at district and regional level the 'problem' of the Usangu basin is primarily defined as one of competing groups of users conflicting over limited 'open access' resources such as water and land (Devitt 1999). Such resources are frequently characterised as 'fragile' and 'depleted' by conflict-ridden overuse. Such an analysis is familiar and compelling but it requires some sceptical scrutiny.

Whilst potentially 'competing groups' of users in the Usangu basin are various, the most common characterisation of this competition is as one between ethnically based groups of sedentary agriculturalists (the 'indigenous' Sangu and in-migrants such as Nyakusa and Hehe) and itinerant pastoralists (predominantly Il Parakuyu Maasai and Sukuma). Notably, 'ethnic' agriculturalists predominate in local political and administrative structures. Often implied in policy discussions is a developmental struggle between entrepreneurial

'modernising' agriculturalists and intransigently 'backward' pastoralists.

Also implied and explicit in documents and debate is the assumption that land and water resources are effectively 'open access', that no arrangements exist to regulate their use and that in the multi-ethnic Usangu basin with a growing population, 'traditional' forms of resource management are non-existent or disappearing. Local formal village institutions are characterised at best as ineffectual (through poor communication, high turnover of officers and lack of resources), at worst as corrupt and rent seeking (SMUWC 1999). There is then a perceived management deficit in terms of the control of natural resources, contributing to greater uncertainties.

### 4 Proposed Solutions

Perhaps surprisingly in view of the 'conflict and corruption' analysis, policy and project documents assert the 'natural' basis of cooperation latent in village life and put great faith in the efficacy of *new* formal institutional arrangements to support collective resource management. The proposed village Land and Natural Resource Management Committees epitomise ideas commonly expressed in common property resource management theory (Ostrom 1990, 1992). They are intended to operate 'in a formal and transparent way if they are to work effectively and to win public confidence'. Their purpose is to assess land and water use trends, introduce land registration, formulate village land-use plans, allocate land and water rights, draft by-laws, and identify and resolve conflicts. The committees are intended to be representative, consisting of 'a reasonably small group' to facilitate consensus on complex issues and to make it easier to provide training. The village committees are to be linked with other layers of resource management arrangements, in particular through interaction with district-level natural resource management teams (SMUWC 1999).

The fit of such prescriptions with New Institutional Economics (NIE)-based theories about the type of 'robust' institution suited to resolving common property resource management dilemmas is startling. A focus on formal public structures with

clear boundaries, transparency, representativeness and the codification of rules through written by-laws, contracts and the specification of property rights is common to the literature on 'design principles' for institutional development. Ideas about the benefits of small and relatively homogeneous groups of decisionmakers (usually representing 'a community') neatly linked or 'nested' within layers of structures (e.g. at district, national or regional level) and the possibility of such groups identifying and implementing an optimum level of resource use are also prevalent (Agarwal 1997; Bromley and Cernea 1989; Ostrom 1990, 1992; Wade 1998).

## **5 The Inadequacy of Common Property Resource Management (CPRM) Theory**

The faith placed in such formalised arrangements can be criticised on a number of grounds (Clever 2000). These include the functionalist and normative approach implied, the assumed primacy of productive and distributional concerns amongst the participants and the relegating of culture and social structure to a static 'resource bank' from which social capital may consciously be drawn to smooth and facilitate the implementation of good resource-management decisions.

Key to both theoretical and policy approaches for natural resource management is the notion that better institutions can be actively 'crafted' by resource users and policymakers (Ostrom 1992: 60). Ostrom sees crafting as a continuous, evolutionary process of developing the optimal institution for the job in hand. Culture and social structure, then, become the raw material to be built upon and improved, the institutional resource bank from which arrangements can be drawn that reduce the 'social overhead costs' of cooperation in resource management. Increasingly, such resources are referred to as 'social capital' but, as Ostrom herself admits, there is generally a lack of understanding about how to 'create, maintain and use social capital' (Ostrom 1992: 23).

Instrumentalist views assume individual actors are political and social entrepreneurs who knowingly and rationally utilise social capital to craft

institutions in pursuit of optimal resource management. It is often claimed that, in order to utilise social capital properly, institutions must be appropriately 'embedded' in the social and cultural milieu from which the norms to support purposive decisionmaking can be drawn (Ostrom 1990). Such concepts of embeddedness tend towards the functional and are static in their conceptualisation of culture and tradition.

In common with these institutional theories, the literature on sustainable rural livelihoods (SRL) conceptualises social relations as a potential store of assets upon which people can draw to construct effective livelihood strategies. SRL literature broadly defines social capital as a resource of reciprocity and trust which can be drawn upon by households in the composition of sustainable livelihoods. Social relations, institutions and organisations are seen as critical mediating mechanisms as they enable and constrain the actions of individuals and households (Scoones 1998; Ellis 2000). Substantial stocks of social capital are seen as necessary in generating wealth, both for households and communities, in ensuring effective collective action and common property resource management and the proper working of local administrative and political structures (Narayan 1997).

These functional views of social embeddedness clearly link with the formalised arrangements preferred by institutionalists but throw little light on processes of institutional evolution. I suggest that these are more ad hoc, approximate and shaped by the prevailing cultural milieu than is implied by concepts of design and crafting.

I will proceed to show how a variety of collective action institutions exist in Usangu in addition to the new formal resource management structures. Institutions of cooperation are embedded in everyday relations, networks of reciprocity and the negotiation of cultural norms rather than on the impositions of contracts, assertion of legal rights or exercise of sanctions. Such socially embedded forms of interaction also strongly reflect prevailing distributions of power. Nevertheless, they may point the way to community relations based on cooperation and compromise rather than public confrontation and formal conflict resolution.

## 6 Institutional Bricolage

The concept of the crafting of institutions suggests that specific institutions are deliberately developed for particular functions. This model can be queried on a number of grounds. Collective action institutions may be multipurpose, management may be both intermittent *and* robust, an integral part of social relations *and* a negotiated result of active assemblage.

An alternative approach to institutions, which allows us to look beyond the formal organisations and to conceptualise social relations as more central than simply context or assets, is needed. Drawing on the work of Douglas (1973, 1987), Peters (1994) and Giddens (1984), as well as my own previous work on resource management in Zimbabwe (Cleaver 2000), I suggest that the concept of 'institutional bricolage' enables us to do this.

Douglas elaborates Levi-Strauss's concept of 'intellectual bricolage' (Douglas 1987: 66) and extends it to institutional thinking to illustrate how the construction of institutions and decisions to act are rarely made on the basis of individual rational choice. Instead 'institutions do the thinking' on behalf of people and institutions are constructed through a process of bricolage – gathering and applying analogies and styles of thought that are already part of existing institutions. Symbolic formulae are used repeatedly in the construction of institutions, thereby economising on cognitive energy by offering easy classification and legitimacy (p. 76). Douglas emphasises the sameness and constraint of this form of institutional development: 'The bricoleur uses everything there is to make transformations within a stock repertoire of furnishings' (p. 66). In earlier work Douglas considers the concept of institutional leakage: 'Sets of rules are metaphorically connected with one another, allow meaning to leak from one context to another along the formal similarities that they show.' (Douglas 1973: 13) This suggests a less conscious and less rational/functional construction of institutions than that proposed by many authors writing of the institutions of common property resource management.

Adapting Douglas's and Levi-Strauss's ideas, I use the term 'institutional bricolage' to suggest how

mechanisms for resource management and collective action are borrowed or constructed from existing institutions, styles of thinking and sanctioned social relationships. However, I differ from Douglas's rather structural position in the extent to which I perceive agency as critical in shaping and reshaping institutions. Following Giddens (1984) we can see the individual as a possessor of agency as well as specific and often multiple social identities, which may change over life courses. Different bricoleurs are thus likely to apply their knowledge, power and agency in respect of social relations, collective action and resource management in differing ways. The result is a rich diversity of pliable institutional arrangements.

Rather than seeing people as rational and essentially economic-resource appropriators, we can reconceptualise them as conscious and unconscious social agents, deeply embedded in their cultural milieu but nonetheless capable of analysing and acting upon the circumstances that confront them. People are highly likely, when acting consciously, to reduce the cognitive effort involved in responding to change by drawing on and adapting existing norms and mechanisms to new purposes. Less consciously, the use and adaptation of pre-existing customs and practices confers new arrangements with the legitimacy of 'tradition', with a sense that this is part of a generally accepted 'right way of doing things'. Many of these institutional arrangements are forged in practice through daily interactions and the constant use of resources.

I do not wish to pose a realm of 'traditional' informal, culturally and socially embedded institutions against a 'modern' domain of rationally designed committees and formal structures, nor to suggest that one is likely to be better than the other at resolving conflicts or managing natural-resource use. Indeed, I suggest that this is false dichotomy and that local resource-use practices and management arrangements are likely to be a complex blend of formal and informal, traditional and modern. The evolution of collective decision-making institutions may not be the process of conscious selection of mechanisms fit for the collective action task (as in Ostrom's model) but rather a messier process of piecing together shaped by individuals

acting within the bounds of circumstantial constraint. Institutions so derived may survive partly due to the legitimacy bestowed by 'tradition', the moral command of what went before over the present (Giddens 1984).

In the rest of this article I will proceed to illustrate three aspects of institutional bricolage: the multiple norms and complex identities of the bricoleurs; the practice of cultural borrowing and adaptation of institutions to multiple purposes; and the prevalence of common social principles which foster cooperation (as well as conflict) between different groups of stakeholders.

## **7 Who are the Bricoleurs?**

Institutional theory is generally deficient in investing resource appropriators with any meaningful social identity. It generally emphasises productive identities (such as 'irrigators', 'pastoralists') and a very limited number of social roles ('leaders', 'women'). People participating or represented in formal institutions are commonly assumed to have overriding productive incentives for so doing, and/or clear social roles that render them fit for the task. In this model there is a key role for community representatives shaping the institutions, mediating the social and cultural norms, producing and interpreting rules and enforcing sanctions. In them are supposedly invested the collective resources of institutional trust and the legitimacy of authority exercised in the common good. The emphasis on such participators is unsatisfactory as formal institutions often reproduce existing patterns of inequity (in the case of Usangu, inequalities of wealth and gender) and may serve to shape and reinforce other differences.

## **8 Complex Identities**

The privileging of single aspects of people's identities for institutional purposes is problematic as it ill reflects complex social and livelihood identities. In Usangu, for example, people's interests do not fit easily into the agriculturalist/pastoralist divide. A large number of the 'pastoralists' are semi-sedentarised and engaged in cultivation, whilst young 'pastoralist' men and families engage in migrant labour and local gold

mining in order to establish themselves economically. Similarly we see that as agriculturalists generate surplus, they may invest in cattle – evidence to support the concept of ethnic and livelihood flexibility over life courses. Neither economic activities nor ethnic identities may adequately reflect the complexity of people's interests or allegiances. For example, one interviewee, 'Karim', is a farmer of rainfed maize and groundnuts. He also engages in business: buying and selling charcoal and buying rice when the price is low, storing and selling when it is high. He is chairman of his hamlet and chairman of the water committee. He is a Sangu by ethnic origin and a traditional healer (herbalist). He follows Sangu traditions and ceremonies, particularly emphasising the worship of ancestors, in order to ensure the well-being of the family and productivity of natural resources. He is also a Muslim, and he and Islamic leaders gather at his home for prayers and the appropriate Islamic traditions and festivals.

In emphasising particular identities and roles, formal institutionalism may not just reproduce but reinforce social divisions. In previous research in Usangu, Maganga (1999) failed to find many cases that would substantiate the discourse of livestock-based ethnic conflict. However, he pointed out that recourse to formal institutions for conflict resolution, shaped by political power relations, can indeed emphasise ethnic differences. For example, Primary Magistrates Courts in each village (to which unresolved conflicts may be referred) and Ward Tribunals take into account prevailing 'customary law' as well as national legislation in resolving conflicts. In many areas Sangu customary law is applied, although Sangu people may be an absolute minority in the village, so leading to perceptions of the unfairness of such formal institutions (Maganga 1999; Maganga and Juma 1999).

## **9 Institutionally Excluded Bricoleurs**

In NIE/CPRM theory, and the translation of this into policy, representatives on committees and in associations directly represent the resource users by codifying community norms and practices into more regularised institutional arrangements.

However, norms and practices, and the relationships of trust and cooperation underlying them, are often generated and negotiated outside formal institutions. Institutional bricolage, then, takes place in a wider arena than that defined by the visible structures of formal resource management institutions. Evidence from Usangu illustrates the diverse location of decision making and the importance of households and wider social networks in the generation of norms and practices of resource use. For example, children and young people play a major role in resource use and management through practice in Usangu, although they have no place in formal institutions. Children as young as three herd small livestock whilst older children and youths make decisions about where to take herds to water or feed. In interviews pastoralist families specify consultation with the oldest children in decision making, particularly over matters of livestock welfare, grazing and the implications for cattle condition. During the dry season children and young people may graze their herds very far from home, staying away in 'camps' at the *ihetu* for months at a time, managing their animals and their use of pasture and water. The key role of children in resource use and their complete lack of inclusion in formal management structures raises questions about the mediating processes between the creation of rules-in-use and their codification into collective arrangements. The concept of institutional bricolage allows us to reflect more adequately the diverse location of the generation of institutional arrangements.

## 10 Negotiable Cultural Norms

The concept of bricolage implies an active assembly of parts and the adaptation of norms, values and arrangements to suit a new purpose. It implies both a conscious scrutiny of some beliefs, and an unconscious acceptance of others in the construction of institutions. The simultaneous acceptance and questioning of traditions can be illustrated by the case of 'Rahel', a Maasai woman who is also a born-again Christian (Pentecostalist) and an elder of the church. She belongs to a Maasai women's choir, which functions as a women's support group, and all members of the household take part in a collective labour group of ethnically mixed neighbours for agricultural work. Her husband has not converted to Christianity and is

the hamlet leader and a leading member of local and national Maasai cultural and political structures. 'Rahel' sees both advantages and disadvantages to the household of their diverse cultural and social networks. Her strong Christian beliefs lead her to question certain manifestations of Maasai culture, such as consumption of alcohol, bad language used at ceremonies and the worshipping of spirits. She approves, however, of the links which her husband has forged through his Maasai leadership activities and the social support provided through marriage arrangements and extended kin networks. It was evident from interviews that cultural norms were heavily debated in this household and that some accommodation between potentially conflicting positions was arrived at.

These examples illustrate the complexity of cultural identities shaping people's lives. They also suggest that people may both unconsciously accept certain traditions and be discursively critical of others. If social norms and ideas about the most appropriate cultural ways of doing things may be contested or negotiated within families, then presumably there is scope for similar negotiation and accommodation within communities. Different cultural inheritance and traditional practice do not lead inevitably to conflict, but may well lead to a richness and diversity of institutional forms.

## 11 Cultural Borrowing and Multipurpose Institutions

'Informal' institutions and decision making about natural resource management are deeply culturally embedded. Livelihoods are not simply technically and economically rational sets of survival strategies in varying contexts, but are clearly linked to ideas about a way of life, to practices in relation to resources, to other people and to aspirations that are heavily loaded with symbolic meaning (Mehta *et al.* 1999). This has been well illustrated in regard to water use (Mosse 1997; Adams 1997). Institutions formed as a result of bricolage in the multi-ethnic Usangu basin may be multicultural in origin, intersecting formal and informal, traditional and modern domains.

An example illustrates how claims on tradition are an integral part of institutional bricolage, whilst the

institutions so formed may be a complex mix of indigenous and modern. Farmers in Usangu commonly refer to 'traditional' smallholder irrigation systems (differentiating these from government-run large schemes) However, this 'tradition' has a relatively recent and exotic provenance, as modern rice irrigation technology was introduced into Usangu by Baluchi immigrants from Iran in the 1940s. 'Traditional' smallholder irrigation management draws on adapted committee structures introduced under government and NGO development projects (now mostly defunct) and on 'indigenous' collective labour arrangements. Whilst water cooperatives and associations were in some cases established in the past in order to claim water rights formally, many of these are non-functional, farmers perceiving them unnecessarily bureaucratic in terms of time and effort (Gillingham 1999). Conflicts over irrigation water are generally resolved between irrigators themselves by reference to 'traditional' elders and (Sangu) customs. Only if irresolvable are they referred to the village government and to ward tribunals. Baluchis resolve disputes through reference to Islamic law or statutory rights (Maganga and Juma 1999).

## 12 The Leakage of Meaning

Although claims on tradition can be seen as legitimising devices, tradition is not automatically accepted by all actors, nor is it necessarily sacrosanct, as we have seen in 'Rahel's questioning of Maasai culture, above. Paradoxically, the potential for questioning tradition on the one hand and the general legitimacy of tradition on the other means that cultural institutions may be 'borrowed' between ethnic groups, a key aspect of bricolage. The leakage of cultural rules and meanings across ethnic divides is well illustrated by the case of Mama N'Giriama, the caretaker of an important Sangu shrine, who conducts the rituals concerning the fertility and well-being of the *ihefu* and the people who live there. In her interpretation of the wishes of the ancestral spirit she emphasises incorporation and accommodation. She claims that there is a place for all on the *ihefu*, as long as people show proper respect and ask permission of the spirit to use it. The rituals she conducts appear to have become a multi-ethnic institution. For example, Sukuma and Maasai pastoralists (whose

own ancestral spirits are based in distant lands of origin) may come and seek the blessing of the N'Giriama spirit so that their cattle do not get lost or stuck in the *ihefu*. Similarly, people of different ethnic origins consult Mama N'Giriama for help in solving personal or health problems.

## 13 Multipurpose Institutions

Contrary to institutional theory, single purpose institutions are not favoured through processes of institutional bricolage. In the multiple processes of institutional evolution through bricolage, existing decisionmaking arrangements and relations of cooperation may be co-opted for new purposes. Such adapted, multipurpose institutions abound in Usangu. For example, evangelical church choirs seem to be some of the most vibrant forms of associational life, with membership crossing ethnic, gender and livelihood divides. Members not only sing in church but may also join together in rotating credit groups, collective labour groups (also working as hired labour gangs on village works) and singers at 'traditional' social ceremonies and functions. Such embedded institutions combine productive and social functions and draw on both traditional and modern forms of interaction.

## 14 Adapting Traditional Arrangements

In processes of borrowing and adaptation the distinction between what is modern and what is traditional becomes blurred. Additionally, the line between 'formal' organisation and socially and culturally embedded networks through which cooperation is forged becomes blurred. In Usangu we find an adaptation of traditional Sukuma militias of young men to replace or supplement official Village Defence Committees. In several villages fear of cattle theft, the need to resolve potential competition over grazing and lack of confidence in government institutions has led to the local establishment of a *Sungusungu* or cattle militia, borrowed from Sukuma customary defence organisations. Such institutions have become cross-ethnic, with Sangu and Maasai, as well as Sukuma, operating as 'commanders'. The *Sungusungu* is made responsible by village consensus for cattle security and keeping order in the grazing lands. It operates on a basis of demarcation of roles between

elders and youth, a practice common to all ethnic groups, with the youth acting as the foot-soldiers and the elders acting as advisors on tactics, bestowers of charms and medicines, and dispensers of justice. This unofficial militia is considered by members to be formally accountable to (modern) village government, whilst the practices of its operation are largely based on socially embedded principles of reconciliation and conflict minimisation. The *Sungusungu*, like many institutions formed through processes of bricolage, is multipurpose. Villagers reported how they call on *Sungusungu* when facing problems requiring collective action, such as searching for a lost child, and use *Sungusungu* communication channels to disseminate messages around the village. One of the *Sungusungu* operating amongst seasonal grazing camps at the *ihetu*, organises the disparate camps of young men (from widely dispersed villages) into units. The commander collects a seasonal subscription of cash from them and this is used as a common welfare fund to pay for a bus or bicycle to transfer a sick herder to his home area.

It is not necessarily the case that the social and cultural embeddedness of institutions economises on transaction costs (Mehta *et al.* 1999), as in processes of institutional bricolage 'the categories of political discourse, the cognitive base of the social order are being constantly negotiated' (Douglas 1987: 29). Drawing on legitimising tradition and existing forms of interaction may indeed economise on cognitive effort, but collective consensus decision making, forging and renegotiating norms, maintaining social networks, reputations and relations of trust are not easy processes, and require considerable time and energy (Clever 2000). This is particularly significant as poor people find such costs a heavy burden. An example of the effortful creation and maintenance of norms is seen in the priority given to avoiding or resolving conflicts, and in constructing institutional mechanisms that emphasise reconciliation, forgiveness and an expectation of future cooperation.

## **15 Conflict Avoidance and Cooperation**

Project and policy approaches tend to see conflict as undesirable, as a breakdown in normal relations, something to be avoided or resolved as quickly as

possible. They optimistically insist on perceiving cooperation as the norm and as 'the basis of village life' (Devitt 1999). Perversely, though, formal institutional arrangements often emphasise the open confrontation of difference and the penalisation of non-conformers. However, evidence of conflict and cooperation suggests a more complex picture than this. Conflict is both an integral part of normal life and something to be avoided or underplayed whenever possible.

A basic psychological dislike of conflict is illustrated by interviews with people who identify the occasional conflicts with neighbours and kin as major (if intermittent) sources of stress in their lives, especially when associated with witchcraft. Additionally, where relations of reciprocity and institutions help to channel access to resources (Berry 1989), then conflict must be avoided to ensure secure access to material livelihood assets. In Usangu, agricultural and pastoral families are networked through labour exchange, the use of draught power and by intermarriage as well as by church and club membership. But an over-emphasis on direct and instrumental reciprocity is misplaced. Relations of cooperation may be indirect and function across life courses and even generations as well as across localities. Additionally, many interviewees, when asked to identify the benefits of belonging to specific groups and associations, emphasised the opportunity for enjoyable social interaction, and of social and psychological support, in addition to functional and productive benefits.

A more cultural view suggests that principles of social respect are deeply embedded and that these link moral behaviour to individual and community well-being (Clever 2000). The role of the supernatural (spirits, the ancestors and God) in securing the well-being of both humans and natural resources is strongly linked in cultural codes to people's behaviour – principles of respect and the desirability of peaceful coexistence being strongly emphasised, as illustrated in the case of Mama N'Giriama cited above.

There is strong evidence that norms of conflict avoidance and conflict minimisation are common to all types of resource users in Usangu. Despite the rhetoric of high levels of conflict in Usangu and



supposed irreconcilability of different cultures, Maganga (1999) found very few cases of conflicts over resources reaching court, reflecting a strong desire amongst people to resolve these at the lowest possible level. Principles of social respect and deference to elders are common to all social groups, and indeed our interviewees suggested that people not only inherit positions as leaders but may also earn them through their ability to resolve conflicts and encourage harmonious relations with communities.

## 16 Celebrating Reconciliation

The imperative towards emphasising cooperation, even where conflict exists, is strong. Evidence of potential conflict being minimised and turned towards cooperation instead is illustrated in accounts from Usangu and elsewhere in Tanzania (Mnzava 2000; Maseruli 2000). These illustrate how communities (often hamlets and villages) may impose fines or penalties on those repeatedly offending against communal rules or failing to cooperate in communal work. Such penalties are only imposed when the social situation and extenuating circumstances of the offender are taken into account, a certain amount of 'social riding' being permitted. In the relatively uncommon event of fines actually being levied, then the proceeds (money, livestock, household goods) are used to fund a celebration (a beer drink or feast) for those who did participate in the communal activity as well as for the offender. According to informants, one of the purposes of this occasion is to 'celebrate forgiveness'. This practice of socially embedding relations of cooperation and reinforcing the positive aspects of communal arrangements is in direct contrast to formal institutional design principles, which emphasise the need for impartial, rigorously enforced sanctions against non-cooperators. Such principles emphasise confrontation and punishment rather than compromise and reconciliation and are likely to erode rather than reinforce the social trust on which institutions depend.

## 17 Conclusions

In this article I have tried to illustrate how the introduction of 'formal' modern institutions or organisational arrangements may not be the most effective strategy for dealing with conflicts over resource management, relying, as they do, on principles derived from abstracted and universalised 'design principles'. These may result in inadequate institutional solutions, as they fail to recognise the depth of social and cultural embeddedness of decision making and cooperative relations. 'Formal' institutional arrangements may be based on principles which bypass or contradict those inherent to local decision making and cooperation, such as the minimisation of conflict. In doing so, formal institutional arrangements may erode rather than build social capital. Finally, new 'formal' institutions are unlikely to have evolved through a process of institutional bricolage and therefore may be perceived by local people as costly, lacking in legitimacy and cumbersome in terms of existing social arrangements and resource-use practices.

It is possible and indeed likely that such new institutions gradually will be subjected to a process of evolution; that over the long term, institutional bricolage will ensure that they either fall into disuse or are adapted and combined with other local mechanisms to create socially embedded resource-use arrangements.

I see greater scope for robust management of natural resources if processes of institutional bricolage are recognised and built upon by policymakers, instead of adhering resolutely to detached and abstracted formal institutional models. There is a need to recognise institutions as the ongoing, temporary products of complex social processes rather than simply emphasising their manifestation as structures and outcomes, deliberately crafted. How far institutions formed through processes of bricolage are likely to meet the developmental aims of social equity and sustainable resource use, however, remains a question for further exploration.

## References

- Adams W. M, E. E. Watson, S. K. Mutiso (1997) 'Water, rules and gender: Water rights in an indigenous irrigation system, Marakwet, Kenya', *Development and Change*, Vol. 28: 707–30.
- Agarwal, A. (1997) 'Community in conservation: Beyond enchantment and disenchantment', *CDF Discussion Paper*, Gainsville, Florida: Conservation and Development Forum.
- Berry, S. (1989) 'Social institutions and access to resources', *Africa*, No. 1: 41–55.
- Bromley, D. W. and M. M. Cernea (1989) 'The management of common property natural resources: Some conceptual and operational fallacies', *World Bank Discussion Papers*, No. 57, Washington, DC: The World Bank.
- Cleaver, F. (2000) 'Moral ecological rationality: Institutions and the management of common property resources', *Development and Change*, Vol. 31, No. 2, March.
- Cleaver, F. (1999) 'Paradoxes of participation: Questioning participatory approaches to development', *Journal of International Development Studies*, No. 11: 597–612.
- Devitt, P. (1999) 'Community engagement programme report, Rujewa, Tanzania: SMUWC.
- Douglas, M. (1987) *How Institutions Think*, London: Routledge and Kegan Paul.
- Douglas, M. (1973) *Rules and Meanings*, Harmondsworth: Penguin.
- Ellis, F. (2000) *Rural Livelihoods and Diversity in Developing Countries*, Oxford: Oxford University Press.
- Giddens, A. (1984) *The Constitution of Society: Outline of the Theory of Structuration*, Cambridge: Polity Press.
- Gillingham, P. (1999) *Community Management of Irrigation in the Usangu Wetlands and their Catchment*, Rujewa, Tanzania: SMUWC, December.
- Maganga, F. (1999) *Resource Conflicts and Conflict Management: Fieldwork Findings from Iringa and Mbarali District*, Copenhagen: SASA.
- Maganga, F. and I. Juma (1999) 'From customary to statutory systems: Changes in land and water management in irrigated areas of Tanzania: A study of local resource management systems in Usangu Plains', a report submitted to ENRECA, Dar es Salaam, September.
- Maseruli, B. (2000) 'Local institutions and the management of natural resources', unpublished field notes, College of African Wildlife Management, Mweka, Tanzania.
- Mehta, L., M. Leach, P. Newell, I. Scoones, K. Sivaramakrishnan, S. A. Wray (1999) 'Exploring understandings of institutions and uncertainty: New directions in natural resource management', *IDS Discussion Paper*, No. 372, Brighton: IDS, University of Sussex, November.
- Mnzava, D. (2000) 'How modern water resources management conflicts with traditional/indigenous management: The case of Arusha Water Project', unpublished paper, University of Bradford, June.
- Mosse, D. (1997) 'The symbolic making of a common property resource: History, ecology and locality in a tank-irrigated landscape in South India', *Development and Change*, Vol. 28: 505–30.
- Mosse, D. (1995) 'Social analysis in participatory rural development', *PLA Notes*, No. 24, *Critical Reflections from Practice*, London: IIED, Sustainable Agriculture Programme.
- Narayan, D. (1997) 'Voices of the poor: Poverty and social capital in Tanzania', *Environmentally and Socially Sustainable Development Studies and Monograph Series 20*, Washington: The World Bank.
- Ostrom, E. (1992) *Crafting Institutions for Self-Governing Irrigation Systems*, San Francisco: ICS Press.
- Ostrom, E. (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press: New York.
- Peters, P. (1994) *Dividing the Commons: Politics, Policy and Culture in Botswana*, Charlottesville: University Press of Virginia.
- Scoones, I. (1998) 'Sustainable rural livelihoods, A framework for analysis', *IDS Working Paper*, No 72, Brighton: IDS, University of Sussex.
- SMUWC (1999) *Management of Village Land and Natural Resources Document*, Rujewa, Tanzania: SMUWC, October.
- Wade, R. (1998) *Village Republics: Economic Conditions for Collective Action in South India*, Cambridge: Cambridge University Press.