

Current reforms and their implications for rural water management in Tanzania

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Tanzania is at an advanced stage of drafting a new legal framework for water resources management, aimed at attaining the objectives of the National Water Policy of 2002. Three separate pieces of legislation will result from the proposed legal framework to cover water resources management, rural water supply and urban water supply and sewerage. This paper discusses the government’s efforts in trying to fix property regimes and formalizing informal arrangements related to the use of water resources. The paper traces historically the process of formalising customary laws, then presents four case studies that display interactions between traditional water management systems and the modern, formal systems. The paper also contains a discussion of the proposed policy and legal changes focusing on the extent to which the proposed legislative dispensation will protect the existing traditional or customary water rights. It is argued that, despite the early initiatives at providing space for the growth of customary law, the legal system pertaining in Tanzania today is tilted more in favour of formal than informal systems.

Keywords: water rights, water tenure, legal pluralism, conflict, integrated water resources management, Tanzania

Introduction

Tanzania is currently at an advanced stage of drafting a new legal framework for water resources management. The new legislation is aimed at attaining the objectives of the National Water Policy of 2002 (URT, 2002). This policy aims to develop a comprehensive framework for sustainable development and management of the nation’s water resources including:

- the introduction of cost sharing and beneficiary participation in planning, construction, operation and maintenance of community-based domestic water supply schemes; and
- a composition of three sub-sectors, one of which is Water Resources Management which would aim to provide a comprehensive framework for promoting optimal, sustainable and equitable development and use of water resources for the benefit of all.

For water resources management the policy envisages that:

- water allocation shall be prioritised for human needs (adequate quantity and acceptable quality) and for environmental protection (environmental flows);
- a sound information and knowledge base including both data on surface and groundwater, social and economic data shall be established;
- fees and government subvention will finance water resources management. The fee system includes a fee for conservation; and
- use of technical, economic, administrative and legal instruments will be enhanced. Proposed economic instruments include water pricing, charges and penalties.

This paper discusses the government’s efforts in trying to fix property regimes and formalizing informal arrangements related to the use of water resources. In Tanzania different customary arrangements for water development, use, and management have been studied and documented in-depth (see Maganga and Juma 2000; Boesen et al 1999). According to these studies, it is possible to distinguish four different ways of conceptualising customary law, as follows:

- ‘tribal’ customary laws of specific ethnic groups;
- ‘formal’ customary law which is recognised in courts of law;
- customary law as it was enforced by traditional authorities (e.g. chiefs, headmen); and (this system was severely undermined by the abolition of chieftaincy in 1962); and

- living customary law - current people's customs and practices presently, and the principles underlying these practices. It is this 'living customary law' that has invariably been described as informal. It includes aspects of customary law, statutory provision and day to day practice of a community concerned.

The paper traces historically the process of formalising customary laws; then presents four case studies that display interactions between traditional water management systems and the modern, formal systems. The paper also contains a discussion of the proposed policy and legal changes, focusing on the extent to which the proposed legislative dispensation will protect the existing traditional, or customary water rights. It is argued that, despite the early initiatives at providing space for the growth of customary law, the legal system pertaining in Tanzania today is tilted more in favour of formal than informal systems. While narrowing down to identification of customary/traditional water laws, the paper looks at other areas where customary laws have come out very clearly. Customary land tenures are examples of areas where customary law has received more coverage by case law, statutory intervention and academic writings. The wider coverage in land matters provides some good insights of problems which are likely to face the articulation of customary water laws. Unlike customary land laws, customary water laws have not under the current legal framework received statutory and judicial recognition. So experience of customary laws over land is used to project the texture of the customary water laws if courts and parliament intervene. Parliament will indeed intervene to define customary water laws if the circulating drafts of the proposed water laws are passed into law. Section 2 of the proposed draft Bill on Water Resources Management defines 'customary water rights' to mean the rights and practices in relation to water resources that have been practised by communities or individuals since time immemorial in the belief that they create binding rights and obligations.

Towards formalisation of customary law

The early years of independence found a number of African countries facing the challenge of trying to define the place and position of customary law, while at the same time building modern nation states. A series of conferences were conducted to chart out the future of customary and Islamic law within the emerging legal systems of these independent African states. The idea was to allow customary law to organically grow within the legal systems of the emerging states, and then for it to be absorbed into mainstream laws (formal). These ground-breaking conferences discussed the contemporary definition and ambit of customary law in Africa; their respective place in the legal systems; the policy that should be adopted regarding uniformity of customary law in newly independent Africa countries; the problems of how to ascertain and record Islamic and customary laws and the conflicts of laws¹. Subsequent to the London Conference another conference was held in Dar es Salaam from 9-19 September 1963² to consider matters touching upon both Islamic law and customary law. In particular the conference considered two main questions: the future of the local courts; and the place of customary law in the modern African legal systems (Rubin and Cotran, 1971).

In 1961, the Legislative Council enacted the Judicature and Application of Laws Ordinance (JALO), to provide for a general framework for the growth and development of customary law in Tanzania. This piece of legislation provides a helpful guide on the extent to which customary law is accepted as one of the sources of applicable laws. The Ordinance is very clear that customary laws and Islamic laws cannot apply over areas covered by written laws. This confirms the predominance of the formal-written over informal unwritten laws, implying that Islamic and customary law do not apply over areas where an Act of Parliament make provisions. The legislation gave customary laws a very general formal recognition, setting strict parameters within which customary law could later grow and develop. According to JALO, customary law may only apply over matters of a civil nature and does not extend to cover criminal matters. Second, in order for customary law to apply it should be between members of a community in which rules of customary law relevant to the matter are established. Hence, statutory law courts could not apply any rule or practice of customary law, which is abolished, prohibited, punishable, declared unlawful or expressly or impliedly superseded by any written law.

Under the statutory scheme provided by the Judicature and Application of Laws Ordinance 1961, customary laws were to grow under the ambit of district councils. Apart from a few District Councils who formalized customary laws of inheritance, custody of children and affiliation, no district council has used this avenue to organically formalize customary water laws. The potential within the district councils to formalize local customary water laws have not been employed.

Interactions between traditional and modern water management systems

The four case studies below illustrate how formal and informal institutions inter-play in water resource use and management.

Box 1. The Taiko clan vs other Landanai villagers

Landanai village is situated in Naberera Ward, Simanjiro District in Manyara Region, in the Pangani Basin. The Maasai clan of Taiko Muna Mamasila applied for a water right to control water from Landanai springs. Development of the springs is traced historically to the German period of rule during the early part of the 20th century. Later a Greek known as George renovated the springs and even later the Roman Catholic Church renovated the scheme on behalf of the community and the village government. Canals had already been built to collect and convey water from the springs to cattle troughs. Over the years the members of the Taiko clan repaired the scheme. Members of the clan claim that payment for the development of the scheme was made by contributing their livestock to pay for the maintenance of the scheme.

However, it was also alleged that the Landanai water scheme has also been maintained frequently by other Landanai villagers, apart from the Taiko clan. The villagers rely upon the scheme for their water needs. Officers of the Pangani Water Basin were of the strong view that it could not in the circumstances allow one clan alone to apply for a water right over the springs. The Basin was wary of possible conflicts likely to result from an exclusive grant of a water right. Already there were claims that some villagers had been beaten for using the water. Therefore, the Simanjiro District Executive Director was advised to block that granting a Water Right to one clan alone since it would exacerbate conflict within the community.

The Pangani Basin Water Office recommended that Landanai village government and village assembly (involving all villagers) should be convened in February 2004 to decide who should apply for water right over Landanai springs. A delegation from the Pangani Basin Water Board and Central Water Board (Dar es Salaam) attended the first village government meeting. The delegation took time to explain the procedure to be followed by those applying for water rights. The meeting recommended to the village assembly held the next day that the village should form a committee of users of Landanai water springs who should apply for the water right. It was recommended that this Committee be made up of: 4 members drawn from Taiko clan; two members from other pastoralist clans, and 4 members drawn from the agricultural communities resident in Landanai village. It was agreed that amongst the committee members there should be at least two women drawn from pastoralists and agricultural communities. Between 200 and 300 villagers attended the village assembly meeting. The assembly agreed with the recommendations of the village government. The Committee was mandated to work under Landanai Village government for three years.

The case study of Landanai village (Box 1) illustrates how Maasai customary water law contended with the mainstream statutory framework. The mainstream package of law and institutions here includes statutory provisions and resulting institutions like the Basin Water Board, village governments and district and regional administrative structures. The Landanai case provides an example of how an application by a clan for water right could not be sustained against the wider interests of the village and other customary water users. A traditional body with partial control over a water source, wanted to use the modern system of water rights to reinforce its hold over the source

Potkanski (1994) contains a succinct description of Maasai traditions related to water management. Traditionally, amongst the Maasai, access to water for domestic use is freely granted to all on request. The need for ownership of water sources only makes sense in the dry season, when there is a relative shortage throughout 'Maasailand'. All water sources in 'Maasailand' are either collectively owned, or are individual property. Neither the collective nor individual categories of ownership have a distinct name in the Maa language. Instead, they are given locality names, and their status is known to all. Water sources with a relatively small output ('standing water') include the wells and small springs with relatively short streams of a few meters which end up at cattle-troughs. These are individually owned. The large water sources ('flowing water') are the longer streams and rivers, which are collectively owned. For the Maasai, this division is ideologically grounded and comes from their model of the world. According to them, flowing water has been created by God for all Maasai, and cannot be owned by an individual person. It is a common resource, governed by the principles of common property management. Sources of standing water are the property of those who dug them if it is a well, or first discovered them if it is a spring. Rights to this water pass to a man's heirs, following the rule of primogeniture. However, the Landanai case shows how the Taiko clan wanted to go beyond these Maasai traditions.

The response by the Pangani Basin Water Office and the government illustrate how application of mainstream laws may facilitate equitable conflict management in communities with multiplicity of customary systems. This intervention helped to avert a possible conflict between the Taiko clan and the rest of the villagers in Landanai.

Box 2. Ndung'u Irrigation Project vs Pare customary law

The village of Ndung'u is situated in the local government Ward of Ndung'u of Same District in Pangani Basin. The village is part of the Same District Council. It is a traditional village of the Wapare people, although there are also other tribes like the Sambia, and Maasai pastoralists. The village enjoys year round irrigation water from a number of rivers and streams which is used by around 2000 villagers. Paddy is grown twice a year. .

Traditionally, land in Ndung'u was owned under customary arrangements, including in the areas covered by the irrigation project. There are several cases of customary owners leasing their irrigated blocks to others. Conflicts over land between owners and outsiders were almost non-existent because ownership was in accordance with customary arrangements which were well established and respected. Conflicts over land were restricted to relatives competing over inherited parcels or tenants failing to comply with applicable agreements. These conflicts were referred to traditional bodies known as kitala.

Following the penetration of statutory laws, projects and other institutions, land disputes are now referred to the irrigation project leadership. If the project leadership fails to resolve an issue, the dispute is taken before the *Baraza la Ardhi la Kijiji* (the Village Land Tribunal). A new hybrid of the customary system with a strong dose of mainstream values is in place. This hybrid came in the form of the subsidiary legislation made by the Same District Council under Local Government (District Authorities) Act, 1982 to regulate irrigation agriculture in Ndung'u area of Same district (Same District Council, 1994) The by-laws cover the Mkomazi river valley area of Ndung'u designated as a project area for purposes of agricultural development. Mkomazi river is a controlled water source under the Water Utilisation (Control and Regulation) Act, 1974.

Ndung'u Irrigation project extracts water from Mkomazi river under a water right issued by the Pangani River Basin. The project has taken over the control over a number of facilities that were constructed over land and water sources occupied and used under customary law of the Wapare people. Existing land and water tenure system were as a result of the project divided into blocks forming (i) main and secondary drains from Mkomazi river and their related structures; (ii) main and secondary irrigation canals, intake weir, water gates and other related structures; (iii) tertiary irrigation canals and drains; (iv) flood dikes, gates and other installations for prevention of flood, (v) water course and their related structures, and (vi) trunk road, main and secondary farm road, warehouse, residential quarters and any utility designated for residential or infrastructural purposes. The irrigation project also spelled the end of traditional water and land management systems. The district council established a project office responsible for the running and maintenance of the irrigation project. It must be observed that the project retained to certain extent traditional system, because each irrigation block elects its own leaders and committees, and these leaders are mostly drawn from those families, which in the past exercised control over water and land management.

There is in place also an Executive Committee of the project assisting the Council. This Committee is composed of District (i) Commissioner or his representative; (ii) District Director or his representative; (iii) Chairman of the Same District Council; (iv) Chairman to the standing committee on economic affairs of the Same District Council; (v) two councillors from the project area; (vi) two prominent farmers nominated by project beneficiaries (defined to mean any person or community holding any agricultural land within the project area). Functions of the executive committee have obviously taken over those which customary organs would exercise. The committee enjoys overall oversight of the project. It discusses, reviews and approves- (i) past performance of the project office and the water user's group operating in tertiary blocks; (ii) annual programmes for the operation and maintenance of the project; (ii) expenditures and budget, on the running of the project office. Other activities of the Committee include approval of the appointment of the project Manager, and determination of the amount of water charges to be imposed on the project beneficiaries. Project beneficiaries have formed two Water Users's assemblies for the Ndung'u and Misufini areas. Each of the two assemblies elects a chairman, a secretary and an accountant. Assemblies meet at least once every year to discuss irrigation plans and methods. The assemblies also meet to supervise, direct or otherwise coordinate activities of Water Users' Groups. Assemblies designate methods of imposition and collection of water charges. Water Users' Groups, operating at the level of tertiary blocks execute orders and instructions flowing from project office. These groups are described as terminal organs of the project office. The groups are ultimately required to ensure proper operation and maintenance of the terminal project facilities. These groups decide on the water distribution plan within their respective tertiary blocks. Water Users' Groups settle disputes arising among members of the group and take care of water distribution within tertiary blocks.

There is no doubt that implementation of the irrigation project as illustrated in Box 2 has completely changed the pre-existing customary tenures in Ndung'u. The limited space for the application of customary water and land laws is closely related to the increasing power of the District Council. The Council is vested with a lot of power over the organization and administration of the project office. The day-to-day activities of the project office are under a Project Manager who remains answerable to the Council.

Despite delegation of powers to the level of Water Users' Assemblies and Water Users' Groups, project beneficiaries are subject to control from both the District Council and the project office. The project office may for instance change or vary the irrigation schedules according to weather conditions. The district council may impose water charges upon beneficiaries in consideration for the use of project facilities and irrigation water. Project beneficiaries are not allowed to alter the form and nature of the agricultural land without written

approval of the district council. Again, the project manager, members of executive committee and any person authorized by the district council may without prior notice enter any land of a project beneficiary for the purpose of surveying and inspecting operations and maintenance of the project facilities and conditions of agricultural land. Project beneficiaries are required to sell to the Primary society allocated in the project the products from their agricultural land. By-laws have also taken over the place of punishments existing under customary laws. By laws prohibit tenant farming within the project areas. All agricultural land is to be cultivated and managed by project beneficiaries only. This prohibition does not cover hiring of temporary labour on parcels of land.

Hence, it can be concluded that unless development projects specifically engage with customary law, they are likely to marginalize and replace it. We have noted how the project Executive Committee has taken over functions which were previously exercised by customary organs. The composition of the Committee, including the 'two prominent farmers nominated by project beneficiaries' may exclude poor farmers and women. The repercussions of this could be negative for marginalized villagers who are not well placed to capture the benefits of the project.

Box 3. Formal water rights vs multiple uses of irrigation water

Festo Magidanga was fishing in a canal to which NAFCO_Mbarali Farm had water rights and he was arrested and charged at the Rujewa Primary Court (NAFCO-Mbarali vs Festo Magidanga Criminal Case No. 162/ 1998). NAFCO-Mbarali State Farm accused Festo Magidanga of Criminal Trespass, contrary to section 299 of the Penal Code, which creates an offence of unlawful entering into or upon property in the possession of another with intent to commit an offence or to intimidate, insult or annoy any person in possession of such property; or having lawfully entered into or upon property unlawfully remains there with intent thereby to intimidate, insult or annoy any such person, or with intent to commit any offence. It was stated in court that Magidanga had blocked the flow of water in order to fish. Luckily for him, the officials of the State Farm failed to appear in court to give evidence against him, and he was released under Section 32 (1) of the Magistrates' Courts Act, 1984. Nevertheless, he had tasted the turmoil of police arrest and harassment by the law-enforcement state apparatus.

The government established the Basin Water Boards and Offices in order to manage water utilisation by different users, i.e. to allocate water rights; legalise, grant, modify and control water abstractions; protect the existing water rights and take to court defaulters of the Water Utilisation (Control and Regulation) Act, 1974. In many cases however, the formal statutory systems ignore multiple water usage of water which is allocated for a specific purpose (e.g. irrigation). The example in Box 3, which was first cited in Maganga and Juma (2000), illustrates a problem which is faced by many villagers who find it unacceptable not to utilise water passing near their premises simply because other people or institutions hold water rights.

In the case in Box 4, which was also reported in Maganga et al (2004), Simon Dangala first uses customary arrangement to obtain water for irrigation. However, he switches to statutory arrangements of applying for Right of Occupancy, when he sees that he could take advantage of this system for personal benefit, even though he ends up creating conflict and tension within the community.

The proposed water law seeks to define and integrate customary water law within the statutory systems. This is to be done through recognition by registration of customary water rights. The case studies provide a number of lessons to law reformers. The cases bring out some of the problems likely to be faced when customary water law is recognised as part of the mainstream Tanzania. We can draw a lesson that prevailing systems of customary water law involves not just utilisation of water but is closely linked to other external factors like markets for local products, injection of external capital (like irrigation), prevailing inheritance, legal system (system of local governance) and availability of mainstream courts operating outside the control of customary law institutions. All these impact on the texture of customary water law. The case studies also illustrate the huge diversity amongst customary water laws even within the same district. Law reformers will have to contend with this diversity and conflicting interests and how it will affect the basin-wide water resources management. Apart from traditional leaders who enjoy local respect law reformers will have to visualise how these will work with local government laws and institutions, all within the water basins.

Box 4. Searching for justice from statutory organs

In 1969 Simon Dangala in collaboration with 5 other villagers started the Manyenga irrigation canal. They invited other villagers to join in, and soon the canal had a membership of 36 villagers, most of them cultivating rice. As the membership grew, tensions started emerging among them, especially regarding maintenance of the canal, and competition over scarce water. All the other villagers who started the canal have since died. In 1997 SD (who actually lives in another village, Mawindi), applied for and got a 33-year Right of Occupancy for 59 acres of land on the upstream of the canal, creating tensions with villagers who depended on the canal downstream. SD did not have the ability to cultivate all the 59 acres, cultivating only about 4-5 acres, and renting the rest for between T. shs 15,000/= and T.shs 20,000/= per acre. The Rufiji Basin Water Board encouraged the villagers to form a Water Users Association in order to benefit from a World Bank-assisted Smallholder Irrigation Project. In 1998 the villagers applied for Water Right for their Association, but SD objected, since the canal passed through his land. He demanded a "compensation" of T. shs 150,000/= for his efforts in maintaining the canal since 1969, before he could allow the canal to pass through "his land".

In 2001, SD filed a civil case before Rujewa Primary Court, alleging that Adriano and Ayubu had encroached and trespassed into his duly registered canal by building bricks (Simon Dangala vs Adriano Tandika and Ayubu Kanyamala Civil Case 38 of 2001, Rujewa Primary Court). The canal in question was registered in Dangala's name and given number RBWO 96. He traced his ownership to the canal to a 1997 letter from the Rufiji Basin Office. The letter urged him to pay for the Water Right before 1st June 1998, and on 14th October 1998 he was given the Water Right, stipulating terms and conditions for his use of water. The complainant claimed that after getting the water Right he built a canal in 1999 by engaging the services of paid casual labourers. On 19th October 2001 while returning from his farms he found the respondents constructing a canal to draw water from the source, through his farms SD denied that he was a member of the Irrigation Association of Manyenga "A". Adriano Tandika told the Primary Court that he farmed at Manyenga, although he was not a resident of the village. He only used the Manyenga "A" by virtue of being a member of the Irrigation Association of Manyenga "A", which he joined in 1997. He alleged that when he joined the canal membership, it was under the leadership of SD. The canal broke down in 1997, and Adriano joined in the canal repair, and he rose to the position of Assistant Secretary in the Irrigation Association. He further testified that, in 1998 misunderstandings arose when SD demanded and was given Tshs 150,000/= for his role in the founding of the canal. Adriano further contended that SD's Water Right was RBWO 96, whereas the canal they were building had 200 registered members, with a Water Right RBWO 102. The Primary Court, comprising of the Primary Court Magistrate and two Court Assessors visited the canal in dispute. The court found that SD had no claim over the registered canal RBWO 102, which the two respondents were building. In addition, the Primary Court noted that SD's Water Right (RBWO 96), had been revoked by the Rufiji Basin Water Office. SD lost his case and was ordered to pay the cost incurred by the two respondents. SD appealed to the District Court (Simon Dangala vs Ayubu Kanyamala and Adrian Tandika, Civil Appeal No. 2/ 2001). The District Court dismissed SD's appeal and noted that (a) The two respondents were given ownership of water registered as RBWO 102 as formal owners of Manyenga "A" Irrigators Association (b) Though it is true SD built the canal of Manyenga "A", he was compensated for the labour and costs he incurred.

Highlights and implications of proposed water reforms

The National Water Policy (2002) has not yet been incorporated into legislation. Water resources management in Tanzania is still governed by the Water Utilisation (Control and Regulation) Act No. 42 of 1974, which relates to the administration of granting of rights to water users. The regulations provide in detail for the granting of water rights, and determine water use fees for various water uses.

The new water policy proposed a number of measures, which may have an impact on prevailing customary water laws including:

Formation of Sub-Catchment/Sub-Basin Boards

The policy recognises that the extensive size of current water basins makes management of water resources at this scale a difficult task. The policy recommends the formation of sub-boards or sub-committees of water boards. These will be made up of representatives of public bodies, institutions and water users' associations in the area of the sub-catchment/committees of the board. Customary and traditional institutions are barely considered or mentioned. Even if traditional water management is incorporated, the functions of the sub-catchment/committees are likely to be more formal to include close management of the preparation and implementation of water use plans and resolution of any local water conflicts.

Involvement of district level water organs

The policy recommends close involvement of district councils and local government authorities in basin water boards and sub-catchment boards. These organs will offer expert advice to water users, protect natural resources of the village and Wards, make water resources management by-laws, and assist in resolution of disputes – hence, the district level organs will be part and parcel of the formal water resources management structure.

Involvement of Water Users' Associations and community level organs

The policy recommends the continuation of the current formal water users' associations. These groups will be formalized to include smallholder or small-scale users such as irrigation or furrow committees. According to URT (2002) these associations are regarded as the lowest levels of water resource management with the following responsibilities:

- management of water use from water rights
- preparation of water utilisation plans
- enforcement of the law
- pollution control and protection of water sources
- resolve local water conflicts
- collect data.

Among many important elements in the proposed water legislation is the charging for water and financing of water management, which has challenged by some recent commentators (van Koppen et al. 2004). The current water fee charges distinguishes between the domestic, economic and institutional users, and the amounts to be paid differ according to whether the application is for:

- water for domestic/livestock/ small scale irrigation/ fish farming;
- water for large-scale irrigation;
- water for economic use for domestic/livestock/ fish farming;
- water for irrigation and an economic activity;
- power royalty fees
- water for industrial uses
- Water for institutional/ regional centre and
- Water for mining activities.

Three separate pieces of legislation will result from the proposed legal framework to cover water resources management (URT 2004a), rural water supply (URT 2004b) and urban water supply and sewerage (URT 2004c). One important question for customary water law is whether the proposed pieces of legislation will enhance the place and position of customary law. This paper contends that new laws will not usher in any shift of the position and place of customary water law. The mainstream policies and laws will continue to regard customary laws as a transient system expected to die out. Because new statutory provisions will not reach out to all areas of the society, customary water laws of the various communities will continue to be resilient and policy makers will continue to contend with these laws where statutory laws have not reached.

We have noted that the proposed draft Bill on Water Resources Management will define 'customary water rights' to mean the rights and practices in relation to water resources that have been practised by communities or individuals since time immemorial in the belief that they create binding rights and obligations. Section 21 will take a step further to provide that customary rights held by any person or community in a watercourse shall be entitled to recognition and shall in every respect be of equal status and effect to a granted water right

When enacted, Water Resources Management will apply over all areas of Tanzania without regard to whether they are rural or urban. Apart from recognition, holders of customary water rights may apply to be recorded by a Basin Water Officer in favour of an individual, a family, a group of two or more individuals whether or not are associated together under any law - Sections 21 and 22 will allow any person, family unit, a group of persons recognised as such under customary law or who have formed themselves together as an association, cooperative society or as any other body recognised by any law which permits that body to be formed, to apply to the Basin Water Officer for grant of a water use permit. Customary water rights will also enjoy the following recognition:

- indefinite duration, although the water officer may set a duration upon the recording of such rights;
- governed by customary law in respect of any dealings, between persons using the water body within the authority or body having jurisdiction over the water resource or facility

Under the proposed changes, customary water rights may be subject to a premium or an annual payment, which may be varied from time to time. The new law will adopt the strategies of registrations and

recognition of associations of individuals under customary water laws. It is only after the operation of the proposed law would we know whether definitions and recognitions of customary water law would remove the tenuous state of customary rights to water. We should bear in mind that formal recognition of customary water rights occurs within the context of the statutory provisions conferring all property over water to the state.

The strategy vesting in the state all property over water in the country will continue to operate under the new pieces of legislation. This strategy can potentially be used to require the formalisation of traditional water abstractions. By legislating that “all property over waters in Tanzania belongs to the Republic” it means that access to various types of water can only be had through the procedures provided for under mainstream laws. Mainstream laws today exert control over customary water abstractions through the strategy of designation of certain rivers, streams, lakes and water sources to be controlled. Declaration is a water use control mechanism that can force customary systems into the mainstream

Customary land tenures have had a longer experience with mainstream attempts at their formalisations than customary water laws. Since the amendment of Land Ordinance of 1923 in 1928, formal land laws have on print recognised the existence of customary tenures. But reality in practice has left the position of these customary land laws tenuous, weak, and fragile and not fully substantiated. Any attempt at formalisation of customary water laws should have regard to the experience of formalisation of customary land tenures.

Insights from customary land tenure

The formalisation process of water rights can draw a number of lessons from the more articulated processes relating to land. Customary tenures have received clearer recognition in land laws than in water laws of Tanzania. Customary land tenures have been recognised by the repealed Land Ordinance of 1920s and also the current Land Act and Village Land Acts of 1999.

The Land Act and Village Land Acts have both made attempts to define customary land tenures away from any ethnic/tribal group. In his recent paper on customary tenure, Fimbo (2004) illustrates some of the strategies that mainstream statutory provisions use to formalize customary tenures. This formalization strategy is described as aimed “to ensure that existing (customary) rights in and recognized long standing occupation or use are clarified and secured by law.” Fimbo points out that the Village Land Act (1999) uses the expressions “customary tenure,” “deemed right of occupancy” and “customary right of occupancy” to secure existing and longstanding use over lands. Recent developments within land law indicate the desire of policy makers (through new statutory organs) to define customary laws away from ethnic traditions and grant formal customary tenures over land. “Customary right of occupancy” is for example under the Village Land Act 1999 granted to an applicant by a village council. Whereas a “deemed right of occupancy” refers to the land title of an indigene, that is to say the title of a Tanzanian citizen of African descent or a community of Tanzanian citizens of African descent using or occupying land under and in accordance with customary law.

Fimbo (2004) can discern from statutory provisions that generally customary tenures apply to all land whenever African communities have settled except in areas specifically excluded by legislation. Thus, though existence of customary tenure is now in terms of the Village Land Act, 1999 firmly rooted in the in game reserves, forest reserves, national parks and preserved areas, relevant formal authorities which retain power to regulate land use in those areas.

In safeguarding existing water rights of poor and marginalized villagers, the water sector could follow the same provisions as those which have guided the protection of customary land rights. However, it seems the policy makers in the water sector have been inspired by the neo-liberal principles that prevailed in the 1990s, which link everything to the individual rather than the community.

Alternatives to formal property rights

The debate about the role of property rights in natural resources management has recently come to the fore, thanks to De Soto's treatise on why capitalism triumphs in the West and fails everywhere else (De Soto 2000). According to him, up to 4 billion people are effectively excluded from participation in the global economy because their property rights are not recognized. They are thus deprived of legal identification, and the forms of business that are necessary to enter the global market place. However, while some people see the legalization of property rights as a vital step in the transformation of the informal economy and reduction of poverty, other scholars have raised doubting voices (e.g. Mathieu 2002; Mwangi, 2003; and Mwangi, 2004).

In the obsession with formalization and privatisation of property rights, it is often forgotten that in most rural areas of Sub-Saharan Africa, common property farmland, water, pastures and other resources often provide social security and substitute for missing insurance markets. People tend to forget that resources under common property can serve vital economic functions that individual property cannot. Not only may common property display lower transaction costs compared to private property under certain circumstances common property resources' role as insurance substitute often depend on secure and easy access to geographically dispersed resources. This is the case for management of resources where yields fluctuate widely across time and space. Herders in the arid and semi-arid tropics thus rely on common property to a very large extent because of the large spatial variability in rainfall, water and pasture, which makes it crucial to have access to very large areas. Thus, scholars such as Heltberg (2001) have argued that, "common property systems deserve respect for their management, equity and insurance functions. Policymakers should refrain from undermining common property systems, and should consider providing them with legal recognition and other forms of support". This paper explores both sides of the debate and recommend where formalization and privatisation may be appropriate, and where common property management may still be maintained. In discussing the process of formalisation of water rights in Tanzania, the following issues may draw immediate interest:

- the performance of private property regimes in relation to other property regimes (state, communal, open-access); and
- the implications of formalization and individualization of property rights for vulnerable groups.

While there is no doubt about the fundamental role played by formal property rights in shaping how people manage natural resources, the literature on legal pluralism has cautioned against static definitions of property rights. As it was noted by Meinzen-Dick and Pradhan (2001), policymakers are often influenced by approaches to property rights which regard these rights as unitary and fixed, rather than diverse and changing. This is the case in countries like Tanzania, where the government, prompted by increasing pressure on land and water resources, has been busy trying to establish formal legal systems, fixing property regimes and formalising informal arrangements through institutions such as River Basin Boards. In spite of governments' over-reliance on statutory arrangements for water resource management, a number of studies have highlighted the different roles played by both 'formal' and 'informal' institutions in water management (e.g. Boesen et al 1999). The inter-play between formal and informal institutions in natural resources management is also well captured by Meinzen-Dick and Pradhan (2001), and Derman and Hellum (2003), who have written about the implications of legal pluralism for water resource management.

Conclusions

This paper has traced the historical process of formalising customary law and related arrangements related to the use and management of water resources in Tanzania; then presented four case studies that display interactions between traditional water management systems and the modern, formal systems. The paper also highlighted the content of the proposed policy and legal changes, focusing on the extent to which the proposed legislative dispensation will protect the existing traditional or customary water rights – showing that, despite the early initiatives at providing space for the growth of customary law, the legal system pertaining in Tanzania today is tilted more in favour of formal than informal systems. The authors conclude that:

- the new water will not usher in any shift of the position and place of customary water law. The mainstream policies and laws will continue to regard customary laws as a transient system expected to die out.
- because new statutory provisions will not reach out to all areas of the society, customary water laws of the various communities will continue to be resilient and policy makers will continue to contend with these laws where statutory laws have not reached.
- the prevailing systems of customary water law involves not just utilisation of water but is closely linked to other external factors like markets for local products, injection of external capital (like irrigation), prevailing inheritance, legal system (system of local governance) and availability of mainstream courts operating outside the control of customary law institutions. Law reformers will have to contend with this diversity and conflicting interests and how it will affect the basin-wide water resources management.
- in order to protect the water rights of vulnerable and poor rural communities the formalisation process of water rights can draw a number of lessons from the more articulated customary land tenures.
- in carrying out water reforms, policy and lawmakers need also to explore alternatives to formal property rights, and in some cases, actually protect common property systems.
- unless development projects specifically engage with customary law, they are likely to marginalize and replace it. The repercussions of this could be negative for marginalized villagers who are not well placed to capture the benefits of the project.

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Notes

1. The London Conference on the Future of Law in Africa (1959-1960) was convened under the auspices of the Commonwealth Relations and the Colonial Office.
2. This conference was held under the auspices of the Faculty of Law, at the University College, and the Ministry of Justice.