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Why Mami Wata Matter: Local Considerations for Sustainable Waterpower Development Policy in Central Africa

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ABSTRACT This paper is based on the author's fieldwork on the incorporation of local cultural understandings in the design of rural sustainability projects in the Democratic Republic of Congo. It explores several narratives about Mami Wata, mythological aquatic figures widely known in West and Central Africa, and their meanings for small-scale waterpower development projects, or micro-hydros. Careful examination of such narratives represents one way in which local conceptions and understandings can inform rural development policy, especially with regard to the social distribution of the benefits such projects aim to bring. When designing policies, development agents and agencies would do well to take these mythological and spiritual dimensions of local people's reality seriously rather than dismiss them as irrelevant, or simply as non-empirical phenomena and therefore without effects. The paper concludes with some concrete suggestions for policy action, paying special attention to how researchers and policymakers can work together to integrate local understandings more effectively into rural development strategies.

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1354-9839 Print/1469-6711 Online/06/010109-17 © 2006 Taylor & Francis
DOI: 10.1080/13549830500396289

Introduction

How can input from the local level more effectively and constructively shape the environmental policy process? This vital question must be addressed at many different levels, for policymaking is always complex. This paper focuses on the grassroots level of environmental policymaking in the Democratic Republic of Congo (DRC). It examines small-scale waterpower development projects, or micro-hydros, and the ecological, social, cultural and metaphysical worlds in which they are situated. Not mere background, these worlds present active players in the development and conservation process. A key player is the Mami Wata, a mythological aquatic figure widely known in West and Central Africa (Drewal, 1988; Frank, 1995). The Mami Wata's interactions with micro-hydros provide much of the drama of this paper. Those interactions also are the arena where local perspectives may contribute important understandings to improve waterpower development policy.

I first discuss several Mami Wata narratives told to me while doing field-work on the incorporation of local cultural understandings into the design of rural sustainability projects in the DRC's Equateur province (Peterson, 2000).¹ The discussion identifies a number of problems and issues facing current micro-hydro projects undertaken in places where nature is charged with meaning; where water, soil, forests and minerals are far more than physical entities to be exploited for human betterment. I then explore various contributions to solving those problems and end with some concrete suggestions for policy action, paying special attention to effecting better collaboration between researchers and policymakers in the incorporation of local understandings in policy formation and change.

'Mami Wata, Could I Just Get Your Address?'

One hundred and forty-seven kilometres northeast of Kisangani on Congo's Route d'Ituri lies the Transit Hotel. Checking in, one is given a choice of rooms ranging from the spartan *chambre ordinaire* to the prestigious *chambre d'honneur*, reserved for the higher-paying clientele who want a bit more than a place to rest their head. The bit more they get includes a wall-sized mural of a voluptuous Mami Wata, the half-fish, half bare-breasted woman, depicted as being, as is usual for this area, of mixed African and Caucasian ancestry (Figure 1). Whatever the added comforts she might bestow upon the sojourner, resting in her presence at the Transit Hotel requires extra cash, something in short supply to many of the passengers aboard the private lorries that serve as the Ituri's only form of public transportation. But the Mami Wata can demand much more than a few extra Congolese francs. Indeed, just as her cousins did to Odysseus and his men, this syncretic siren can entice one with promises of wealth and good fortune—to be enjoyed only after a price has been paid, a price that goes far beyond the monetary and which affects far more people than the one who has been enticed.

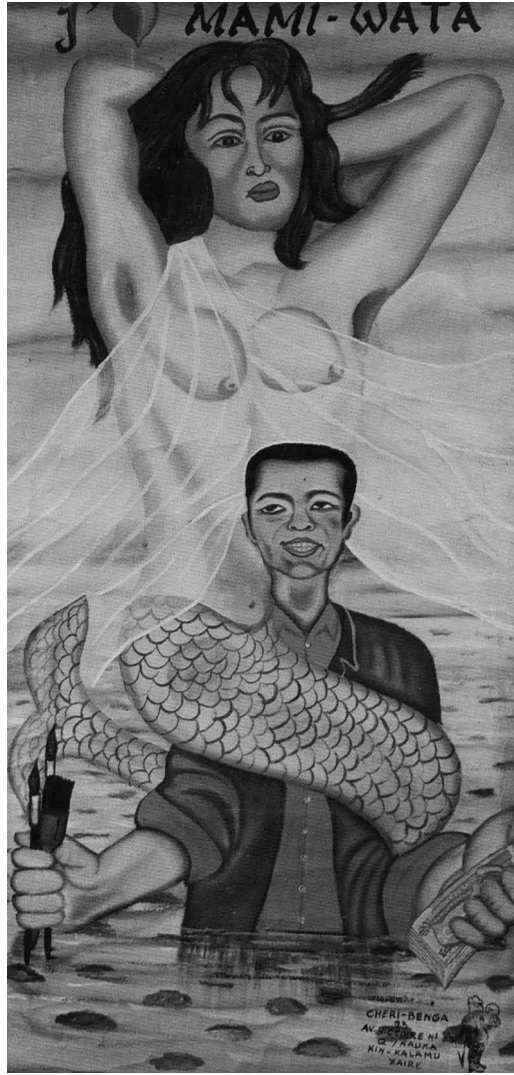


Figure 1. *I Love Mami Wata*. By Chéri-Benga. Oil on fabric. 91 × 42 cm. Museum for African Art, B. Jewsiewicki Collection, New York

Anyone who has ever searched for Mami Wata (plural as well as singular) knows that they are elusive figures. Finding out where they live is not easy. Generally, the first place to look is in or near water, but not just any water. They seem to prefer places where water is acting up, doing something other than flowing smoothly from here to there, places like Anga Wene near the village of Boyangana in the northwest of the Democratic Republic of Congo. In the local language, *anga wene* refers to the action of pushing up and out to the surface, and that is exactly what the water does here. In a crystal clear pool, numerous jets of water bubble up through the streambed

sands. As I was walking the stream one day, my legs quickly disappeared in the quicksand-like propulsions generated by Anga Wene's remarkable artesian springs. I struggled to firmer ground, only to land in another of the stupefying pits with the next step. It soon became a game, as I checked each one for depth and felt the strange sensation of shooting water and sinking sand along my legs.

I later learned that for a local young girl the place was not so playful. The father of one of the villagers remembered playing and swimming in the spot when he was a child. One of the young girls in the group suddenly disappeared, buried, drowned in the sand, never to be found again. For a long time no one swam there, and today many still fear Anga Wene, especially in the early morning. A fisherman, one of the workers on the micro-hydro I was visiting in the area, told of passing by the spot one time at four in the morning. Sitting with her back to him was the Mami Wata. Although she failed to see him, he left straight away and has not gone back since. Another story I was told dates from the 1970s when a person came from a nearby city and found lots of diamonds at Anga Wene. But, before prospecting, he built an altar (*ndaba*) next to the site and laid on it a cob of red corn, a feather from a white chicken and all his prospecting tools. He then waited until early morning to begin his work. This was all necessary as payment to the *nkolo ya mai*, or 'owner of the water'.

In further conversations, it became clear that villagers in Boyangana believe, beyond a doubt, that that 'owner' is indeed the Mami Wata and that Anga Wene is her home. But knowing her home is not enough; a person who wants to benefit from what she has to offer must also find out her address. For Mami Wata are not really spirits, villagers told me, but people dressed from waist down as fish, people with addresses. If you can find out a Mami Wata's address from someone who really knows their ways, you can set up a meeting with her by writing her a letter. During the meeting, payment is arranged, a sum required by the Mami Wata in exchange for the special medicine or powers (*nkisi*) and/or natural wealth she can bestow. The *nkisi* can be of many types: for good hunting, for commercial success, for good livelihood or for success in reaping the natural wealth also often to be found in the environments where the Mami Wata lives. Mami Wata can purvey many blessings, but always at a price. In many cases, the price is cold cash, given over at the arranged meeting, or at times simply thrown out on the water. However, if the money is unpaid, the Mami Wata will go further, demanding the life, not just of anyone, but of a family member of the person who benefited from her intercession.

It is in such natural, social and symbolic worlds, charged with spiritual and material potency, that various water-based development projects intervene. Their goal, not unlike the goal of negotiating with the Mami Wata, is to improve people's livelihood. The two pursuits are, in a sense, different means to the same end. However, in their pursuit of that end, these two means, encompassing both physical and metaphysical dimensions, often collide, complicating the realization of the improvements both seek. A deeper understanding and appreciation for the world of the Mami Wata,

gleaned from listening to ‘the local’, may help improve the policies governing these projects in order to help them better realize their goal.

Fish Ponds, Micro-hydros and Mami Wata

Much of the rural development work taking place in the region surrounding Boyangana has been spearheaded by church-based organizations, Protestant and Catholic. The organization I had most interaction with, the Association pour le Développement Rural (ADR), has been active in the areas of health, education and technical and agricultural development for many years. But it is their work pertaining to water resources that most directly intersects with the world of the Mami Wata. Through two of their centres they have initiated programmes in aquaculture and hydro-power generation. Since the early 1980s, they have constructed several thousand fishponds in the region to raise and harvest fish (primarily various species of tilapia) as a nutritional supplement and a means of income generation. The hydro-power programme consists of building small, locally constructed water-powered turbines and water wheels to run various machines, including pumps, small generators, flour mills, and coffee hullers (Figure 2). More than the fishponds, it is the



Figure 2. Interior of turbine house with flour mill. Photograph by author, near Boyangana, 1995

micro-hydros that have provoked much controversy and challenge for the group's development work. In part, this is due to the fact that they enter directly into the world of the Mami Wata.

The micro-hydros epitomize E. F. Schumacher's maxim of 'small is beautiful' and are good examples of what has been called 'appropriate technology' (Schumacher, 1975; Hazeltine & Bull, 2003). Many of the streams flowing across the land provide adequate head to turn a turbine or water wheel fast enough to generate the small amounts of power needed for small-scale rural development projects. Once such sites are located, the challenge is simply securing the labour and technical materials to build the coffer dam and holding pond, run a penstock from the head gate into the turbine house, build and mount the turbine or water wheel and connect the desired machines with appropriate belts and shafts (Figure 3). Certainly, this construction requires engineering skills, but in comparison with the grand development schemes of larger scale institutions, the micro-hydros are relatively simple, more labour than capital intensive, and appropriately scaled to the materials and resources available locally.

Nevertheless they are not without problems. Small may be beautiful but small remains situated within local social and metaphysical contexts that inevitably affect a project's outcomes. No development intervention, no matter how small or appropriately scaled, can escape those contexts, as another Mami Wata narrative makes clear.



Figure 3. Cofferdam, head gate and penstock leading into turbine house. Photograph by author, near Boyangana, 1995

The Tale of the Micro-hydro and the Mami Wata

Tata Fulani is in his early sixties. He is an enterprising man with lots of ingenuity, characteristics that have helped him ply his trades of farming and mechanics throughout the region. He recently returned to his home village to focus his energy on his farm and the micro-hydro project he'd built at a small waterfall on the Ebale river. He has faced many difficulties stemming not only from the technical challenge of converting falling water to mill power, but, more significantly, from the repercussions such actions hold when one undertakes them within the context of natural and social worlds charged with spiritual power, expectations, prohibitions and dangers. Several weeks after seeing Anga Wene, I visited him at his farm. After sharing some tea, he began to recount his own experiences with micro-hydros and Mami Wata:

Now with regard to micro-hydros, people will tell you how important it is to realize that the Mami Wata also lives in the river, and that you must first give her a person in order that she agree for your turbine to be built and succeed. Mine, my micro-hydro, when we were building this site, we brought my father here. It came time to mount the waterwheel. We finished the task and upon my return, I learned that my father was dying. It was a horrible coincidence and I was so discouraged. Here was my father, and people began to say that I had killed him for this work here, the micro-hydro. And my father, I love him, and he loves me. And in the way he died in my arms ... now I am without a father, a father who had given me good advice ... And people when they hear of it, they show me no sympathy, no grief, they see me as a bad person because I have killed my father ...

I think it stems partly from jealousy but it's also because people are afraid, they are afraid of death ... You see, it is very complicated. Some people run away from taking any action in order that others not kill them. Others are full of fear in that they see someone doing something and say he or she wants to kill people. You see ... it is not a good thing. But people believe in it ...

These days it's hard for someone to start a project like this. Take the experience of Olomi ... The local chief died and the people said he died because Olomi had built a micro-hydro. It is not good.²

Tata Fulani went on to tell me how he is now seen throughout the region as someone who kills people. Indeed, his case was well known by those with whom I had spoken back in Boyangana. Besides being adjacent to Anga Wene, Boyangana is the site of another micro-hydro project whose current construction began well after Tata Fulani's project had been completed. While in Boyangana, I had spoken with the project's foreman. He, like Tata Fulani, was clearly troubled in part because of the fear the project was generating within the community. When I asked him why people fear these projects, he

first replied it is because they involve dangerous machinery; but then he admitted that the fear lies deeper—they risk disturbing the Mami Wata, who may get angry and take someone's life. Or there is the fear that the Mami Wata will demand payment from the owner of the project and that if the payment is not made, the turbine will not run well. Only after the owner has given the Mami Wata a family member will the project succeed.³ Such fear was all the more palpable due to the deaths that happened to occur while Tata Fulani's and Olomi's micro-hydros were being built, deaths that many took as indication that the Mami Wata is not only present but active, and that one would do well to think twice before beginning such a project.

Identifying the Problems

Clearly these narratives reveal some significant problems facing waterpower development projects aimed to improve people's lives. Many of the development agents, both Congolese and expatriate, with whom I spoke tended to characterize these problems as follows:

- local people's reluctance and fear to engage in projects to improve their quality of life;
- jealousy and envy fuelling accusations of murder against those who do engage in projects;
- adherence to 'traditional' ideas that keep those who possess some ambition, ingenuity and entrepreneurship from succeeding;
- the power of Satan working against Christian development efforts.

Such understandings of the problems make sense considering the objectives and positions of the actors who voice them. From their perspectives, solutions lie primarily in 'enlightening' people who hold beliefs such as those surrounding Mami Wata, while continuing to work with those who have the capacities to succeed with such projects in order to show the entire community the benefits that accrue. Some have called this an approach of 'betting on the strong', targeting development toward those individuals who provide the surest chance of success, and then counting on the benefits to spread throughout the community once this toehold has been gained.

But are these understandings and solutions sufficient, or is there more going on here? Do situations like these present an opportunity for local conceptions and understandings to help inform the policy process so as to enhance both justice and sustainability? Might local conceptions, such as belief in Mami Wata, or, perhaps more accurately, manipulation of belief in Mami Wata, also act as impediments to sustainability? How do we best gain a full understanding of both the benefits and impediments 'the local' plays in the quest for sustainable development?

Local Contributions to an Understanding of Problems

In further conversations with both local people and development staff, I was struck by the fact that aquaculture projects tended to generate much less fear

and involve fewer social and metaphysical complexities than did micro-hydros. When I asked the foreman of one micro-hydro project why, he offered several reasons: no one has died during the construction of a fishpond; people don't associate Mami Wata with fishponds as much as they do with the environments necessary for micro-hydros; and, finally, fish are really needed.⁴

Perhaps this last explanation, that fish are seen as fulfilling real needs, provides some inroads toward a fuller understanding of why micro-hydro projects generate so many problems in these rural communities. But before discussing how a more in-depth understanding of local conceptions can shape the policy process, it is important to start by situating local belief in Mami Wata within a broader historical, cultural and ecological framework.

In many places in Africa, belief in water spirits, from which the more recent belief in Mami Wata has sprung, served, and may continue to serve, an important role within African environments, both social and natural. Many African cultures believe that water spirits inhabit natural areas that hold communal importance, places such as springs or other water sources that provide good clean drinking water for the entire community. The ecological integrity of such places depends on sustained forest cover, undisturbed soils and limited use by humans. Thus, for many years it has been taboo to cut gardens in forested areas surrounding water sources in order that the source not be damaged, a form of conservation based on sustainable use of a very needed natural resource, drinking water.

More effective than trying to regulate and enforce this sanction through the political realm of governance has been to depend on the symbolic realm, on the belief that potentially dangerous water spirits live in such areas and can cause harm to the community if their abode is damaged. Furthermore, although garden tenure in much of Africa is very different from the Western sense of private property, land clearing often bequeaths usufruct to the clearer. Thus, were such places to be gardened, not only would they be damaged ecologically but also their usufruct would become dominantly held by the one who had laboured to clear the forest. The belief in and fear of water spirits have thus protected such areas ecologically and precluded them from purely individualized use. Such beliefs have served as critical checks on individualistic aggrandizement and promoted communal well-being.

But how might contemporary belief in Mami Wata be linked to these ancestral ideas, if at all? I asked Tata Fulani whether such phenomena as Mami Wata had existed during the time of his ancestors. He emphatically replied no, that 'Mami Wata only came later'. He went on to explain that the ancestors had totemic animals, specific animals such as leopards, lions or chimpanzees who embodied people's spirits. When I asked if crocodiles, a common aquatic inhabitant of the area, were totemic, he said no, but that there was another aquatic creature, known simply as *nyama na mai* (water animal), who was totemic.⁵

Based on continuing discussions with Tata Fulani and others, I came to understand that Mami Wata appear to be relatively recent phenomena in

this region, arising with exposure to the mythologies of other cultures, including those of the West. However, within these amalgamated mythological worlds, Mami Wata remain linked to earlier ancestral beliefs that persist today—belief in water spirits, but also belief in the *nyama na mai*, a water animal, not a crocodile, who can grab a person who ventures too close. Unlike crocodiles, who do not embody people's spirits as totemic animals, *nyama na mai* do have this potential. It is believed that if someone whose spirit inhabits a *nyama na mai* dies, it will rain. In the same way, it is believed that if someone whose spirit inhabits a leopard dies, a leopard will kill many of the village animals. *Nyama na mai* are thus clearly considered both physical and spiritual entities. They are real animals but they are also habitations for people's spirits.

This simultaneously spiritual and physical ontological makeup appears to be shared by the *nyama na mai*'s more recent cousin, the Mami Wata. They too are both animal and spirit, though in this case the animal is not only a fish but also a human being. The people I spoke with insisted Mami Wata are people. The human dimensions of their identity are revealed by their participation in social phenomena—they receive mail, have addresses and converse with those who know their ways. The spiritual dimensions of their identity are connected with their particular abode in nature, in places of unique natural phenomena—springs, waterfalls, places where nature shows power. Here they are linked with the ancestral belief in water spirits who are commonly associated with such places in many African cultures, as described above.

But why would such human/spiritual entities raise their heads so prominently when it comes to micro-hydro projects? These projects are not taking place near sources of drinking water but in areas of rapidly flowing or falling water. Though also traditionally associated with water spirits, such places serve no direct communal need. One would think that, aside from fear of being grabbed by the Mami Wata, or the *nyama na mai*, one could engage in such a project without much consequence.

Local Contributions to the Shaping of Policy

The fact that micro-hydros have generated so much fear and talk of Mami Wata, not to mention accusations of murder, spurs one to look for explanation within three interlocking realms, all of which hold important policy implications: Who owns such projects? What needs do such projects serve? How are the benefits of such projects distributed within the community?

One clear implication to be drawn from the Mami Wata narratives I gathered regards the dimension of 'ownership' of the natural areas Mami Wata inhabit. It is the Mami Wata, not people, who are referred to as the 'owner of the water' (*nkolo ya mai*) and the rightful heir to whatever wealth may be found there, as witnessed by the narrative of the diamond prospector above. Micro-hydro projects are not as direct a means to wealth as diamond prospecting, but they can generate significant benefits by providing power to run agricultural micro-enterprises. In both circumstances, wealth to

be gained is drawn directly from the natural world, ownership of which is extremely complex in many African cultures, certainly not easily settled by purchase or title. When one attempts to gain access to nature's wealth or harness nature's power, one must deal necessarily with the perceived rightful *nkolo ya mai*. If you don't believe in the Mami Wata's ownership of such places, others within the society will be quick to remind you of it in one way or another.

Yet, despite these cultural beliefs that tend to discourage private ownership of aquatic environments, many of the micro-hydro projects are, if not owned outright, at least affiliated with individual proprietors, often chosen by the ADR's development committees, and usually people who show promise of leadership within the realm of village development. In other cases, they are individuals who have taken a keen interest in the programme, have a stream with adequate head on their family's land or on land they have purchased, and who then approach the development committees requesting their help in starting such a project. In either case, others within the village or region perceive the projects as being 'owned' by individuals rather than by the community. Usually, if not always, these individuals are men, and commonly they hold higher than average socioeconomic status within the village. Given that such proprietary arrangements appear to favour the few over the many, one may intuit why narratives of Mami Wata as the rightful owners of such sites may have arisen and begun circulating widely.

The ADR has, however, made it clear that unlike diamond prospecting, which primarily benefits the individual prospector, micro-hydro projects—the above policies and perceptions notwithstanding—are to serve the needs of entire communities. The degree to which they actually do provide communal benefits, or are perceived to benefit the community, is the critical hinge upon which both the ultimate success of the projects and an explanation for the heightened Mami Wata talk rest. Perhaps the abundance of Mami Wata narratives surrounding the projects is an indication that the hinge is a bit squeaky and needs some adjustment.

In theory, the micro-hydro projects are meant to improve the quality of life not just of individual proprietors but of the entire village community. The plan is that they can do this in several ways. Water-powered flour mills can lessen women's labour of pounding corn and manioc into flour with mortar and pestle. Water-powered coffee hullers can allow smallholder coffee growers to capture added value by selling their hulled beans for double or even triple what they can get for unhulled beans. Small amounts of electricity generated by the projects can provide lighting for schools and refrigeration for village health clinics. Water-powered pumps can pump potable water to the village rather than women and children having to carry it up steep ravines in large basins balanced on their heads.

In theory, the projects hold great potential for serving communal needs and improving the well-being of all. In practice, I found such communal service rarely realized. In one case, women were at first paying the micro-hydro proprietor with part of their corn harvest to have the remainder milled into flour.

Later this changed to payment by weeding the proprietor's garden: so many metres by so many metres weeded for so many basins of corn milled. In such cases, women's work has not been lessened but rather one form of work has been exchanged for another. Whether women find that an improvement or a favourable trade-off is important for the ADR's development committees to know.

In regard to coffee hulling, another part of the ADR's development plan is to encourage smallholders who have hulled their coffee at the micro-hydro mills to collectively market their hulled beans in Kinshasa, over 800 km away. Such distance means waiting a long time to see any return, even though the return could be significantly higher than what smallholders could obtain in local markets. Given the exigencies of daily needs and the instability of their own and the country's economic conditions, many smallholders felt they simply did not have the luxury to wait that long. Things were made worse by one of the largest coffee-buying enterprises in the country at the time pressuring smallholders to sell their beans unhulled for quick returns, albeit at low prices. Many smallholders felt they must do this and were hesitant, therefore, to bring their beans to be hulled at the micro-hydro mills. In short, many smallholders didn't have, or didn't think they had, enough flexibility and cushion in their yearly budgets to make use of the micro-hydros that were designed in theory to help them improve their lives.

So who did use the micro-hydros to hull their coffee? Who did they seem to benefit most? One major user group appeared to be mid-scale entrepreneurs, those without the capital to purchase their own hullers, but who, unlike smallholders, may have owned a truck and/or a small plantation. By hulling at the micro-hydros, they reaped the benefit of added value, and by buying up lower-priced unhulled beans from smaller-scale growers to hull along with their own, they clearly showed little interest in helping those at a lower economic echelon. Again, what was planned in theory as progressive and a means of greater economic justice ends up, in reality, being rather regressive due to numerous unforeseen pressures often outside local control.

Perhaps it is squeaks like these in the hinges of perceived project ownership, the perceived importance of the needs being served and the perceived distribution of project benefits that have provoked the many Mami Wata narratives surrounding the projects. As the projects reshape power relations within village communities, discussions about benefits, ownership, profit—in short, discussions about power—are carried out, as they are in other parts of Africa, through discourses about the spirit world (Comaroff & Comaroff, 1993; Geschiere, 1999). If micro-hydros can be considered a form of 'modernity', then conceivably discourses about Mami Wata speak for the 'malcontents', those for whom '[Western] technologies remain auguries of otherness, increasingly intrusive signs against which to assert a defiant, ritually marked identity' (Comaroff & Comaroff, 1993, p. xxiv). For them, Mami Wata—transformed older spirits that have been given new attributes bearing explicit reference to modernity—represent a way of negotiating the new experiences micro-hydros bring. To say they serve a purpose may presume too much, but, as important signifiers, they represent a medium

through which people contest, affirm, sanction and/or simply make more familiar the novel changes affecting their lives. I would argue that, in the same way that the belief in water spirits limited individualized 'ownership' of water sources in the past, belief in the Mami Wata's ownership of micro-hydro sites may act as a modern sanction against reaping nature's wealth for primarily individual benefit. The price she demands for use of the sites—the death of a family member—is high and its payment, whether actual or perceived, has lasting social repercussions.⁶

In sum, local beliefs and narratives surrounding Mami Wata can serve as both detriment and asset in helping to ease the very real economic and ecological crises of people's lives. As a detriment, they can at times be manipulated to cause deliberate suffering and fear. In this regard, it is important to remember that they have emerged from the confluence, and often the clashes, between indigenous and external ideas, and within a context in which social disparities have been markedly heightened. Under circumstances of great social disparity, local mythology can sometimes be appropriated by individuals for personal gain and exist far outside the boundaries of communal sanction. Indeed, these processes of ritualistic reaction to social change

are politically complex, sometimes revelatory and resistant, sometimes accommodating, sometimes positively reactionary. Typically, however, they express ambivalent and ambiguous motives, seeking at once to contest and affirm aspects of the dominant order(s). Indeed, the historical significance of local ritual practice always requires careful and situated reading. (Comaroff & Comaroff, 1993, p. xxiii)

Careful reading of Mami Wata narratives can help development practitioners locate the 'squeaky hinges' in the implementation of waterpower development projects and policies. Their serious investigation can lead to a different and perhaps more effective identification of what the problems are, and thereby keep policy solutions from 'oiling the wrong hinge'. Approaches that more rigorously examine and incorporate local knowledge and belief can encourage development agents to investigate:

- Who owns and who should own micro-hydro projects? Is working with individual proprietors the most effective way to proceed?
- What needs and whose needs are micro-hydros truly meeting? Are those needs considered 'really needed' by the members of a community? How are the services rendered by micro-hydros, such as milling, being paid for? Do they truly lessen women's work or simply exchange one type of work for another?
- How are the benefits of micro-hydros being distributed within the community? Do they tend to benefit individuals or certain classes within the community over others? Do the benefits of coffee hulling, for instance, accrue to those most in need, or are they being claimed by wealthier farmers? How can the power micro-hydros generate be geared more

directly to projects yielding communal benefits, such as lighting for schools and refrigeration for health clinics?

By oiling the 'squeaky hinges' such questions point to, development agencies may be able to avoid situations in which people fear to take any action at all to improve their lives. They may also better orient projects towards serving needs that are 'really needed' (recall the explanation of why fish ponds are less problematic). More generally, Tata Fulani's story is a stark reminder that rural development projects aimed at meeting human needs must be preceded by serious and sensitive investigation and understanding of local people's beliefs about the environment and about spiritual forces that affect their relationship to the environment. Without understanding these symbolic realms, agents of rural development often miss important realities that affect whether their work fails or succeeds. As projects make adjustments based on these understandings, very likely, new narratives will emerge that will in turn bear listening to, for, as Comaroff and Comaroff note,

From the precolonial epoch, through the colonial era, and into the advanced capitalist age, the ongoing revaluation of signs has always been palpable feature of African creativity. Everyday experience is ever recasting prior meanings as it confronts new signifiers, themselves variously empowered . . . Ritual innovators have long redeployed these . . . to craft novel forms of practice and to offer critical commentaries on African history as it unfolds. (1993, p. xxii)

Although addressing markets not micro-hydros, Masquelier's argument applies here as well: 'Overplaying the economic dimension of this cultural enterprise at the expense of the immaterial and the symbolic has only obscured what the market has come to stand for and signify for those . . . who feel cast out from the poles of economic and political activity (1993, p. 8). In the same way, ignorance or dismissal of such non-empirical realities as Mami Wata can preclude important insights into the local significance of rural development projects, especially with regard to the distribution of project benefits. By yielding foresight into the hard-to-predict distributional impacts of development projects, such investigations into the symbolic realm may help to orient projects away from the danger of abetting rather than assuaging social inequality.

Improving Collaboration between Researchers and Policymakers

Having critically examined rural development policies and development practitioners' approaches to such phenomena as Mami Wata, I conclude with a brief discussion of the ethical quandaries these investigations have prompted, mostly in regard to my own role and responsibility in the policy process. More generally, I ask, 'How can researchers move beyond deconstruction to reconstruction, beyond critique to constructive cooperation?

How can researchers and policymakers more effectively collaborate to bring local considerations more to bear on policy formation?' In keeping with the practical objectives of this special issue, I offer the following comments in response to such questions:

- Researchers need to communicate concerns directly to development (or conservation or environmental management) project personnel. We cannot rely on simply publishing the analysis and hoping that the 'right people' will read it and take it to heart. We need to send each person involved in policymaking—people who hold some power over how a project is implemented—a copy of our analysis and ask to meet with them to discuss our concerns.
- In the same way that policymakers need to better understand local knowledge and belief, researchers need to strive to understand not only 'the local' but also policymakers' points of view, the challenges they face, the biases, values and assumptions underlying their approach, and to appreciate their expertise. In this regard, both researchers and policymakers would do well to share knowledge from their own expertise rather than try to comment on things they know very little about. At the same time, both groups also need to learn as much as possible about concerns that may lie outside their areas of expertise so as to further enhance collaboration.
- Researchers and policymakers need to create opportunities to educate and be educated by each other. One avenue for this might be to conduct interdisciplinary workshops in which researchers and project staff, both local and expatriate, educate each other on such issues as the design of development technologies; the economics of agricultural marketing; local and national policymaking frameworks; the social context and cultural meaning of mythologies; resolving conflicts between varying cultural approaches; and the individual/community dialectic within many African cultures.⁷
- Researchers need to engage with project personnel in creating positive alternatives that improve on existing problematic approaches. In this case, that might mean working with development staff and members of the community to implement real ways in which micro-hydro projects could be built, be used and be owned communally, if that were a desired goal. Or, it could mean helping to create policies that practically apply individual/community dialectics. For example, perhaps micro-hydro projects could still be operated under individual proprietorship, but with the obligation to serve certain communal needs in exchange for communal labour used in building the project. In addition, systems of communal sanction could be formalized in policy (rather than left open to individual abuse, as some have done with Mami Wata narratives) to keep individual proprietors from ignoring communal responsibilities. Finally, researchers need to be aware and honest in regard to our ability to commit to such engagement, knowing it could get very messy. Mami Wata, for example, raise many very sensitive, life-and-death issues within a community in regard to wealth, jealousy, distributive justice, revenge and accusation. If

we are going to take on any sort of role as a mediator or policy shaper, we need to go into it wide-eyed, know what our limitations are and be honest with ourselves and with others about what we can and cannot do.

Conclusion

How easy it is for us as researchers to lose touch with the local communities with whom we have done fieldwork; how easy it is to grow complacent, or simply overly busy, and to relinquish responsibilities to effect policy changes that could make a difference in the conditions those communities face. Amidst such dilemmas, it is heartening for me to remember Tata Fulani's parting words: 'If you all come back here and work, who will speak for us over there? We need people to speak for us, not just for one year, but for the long term.'⁸ Perhaps getting the word out in publications such as this constitutes a viable form of 'speaking for us over there'.

But I would argue that if 'the local' is really going to be a driving force behind policy, we also need to act, to complement speaking with doing, engaging as researchers in the policymaking and policy-changing process in whatever way, big or small, that we can. In that regard, let me close with the words of another of the farmers with whom I worked. On my last day at my research site, Tata Dungu, speaking evenly yet unaccusingly, reminded me that '*koyekola ezali eloko moko, kasi kosalisa ezali eloko mosusu*'—'to learn is one thing but to serve is another'.⁹

Acknowledgements

My field research was supported by a National Science Foundation International Travel Grant. Additional funds were provided by a travel grant and Lawry Fellowship from the University of Wisconsin Institute for Environmental Studies. I would like to thank D. Rothenberg, F. Vavrus and H. Drewal for providing invaluable advice and critical comments on this paper. My deepest debt is to those who shared with me their stories.

Notes

- [1] Names of individuals and organizations, and some place names have been changed to protect anonymity.
- [2] T. Fulani, interview with author, near Boyangana, 1 August 1995.
- [3] B. Madesu, interview with author, Boyangana, 14 July 1995.
- [4] Ibid.
- [5] Fulani, interview.
- [6] I am grateful to an anonymous reviewer for their comments, some of which I have incorporated here, which helped to strengthen this section of the paper.
- [7] Elsewhere, I have argued for an approach to development built on a 'both/and' understanding of the individual/community relationship, common in many African societies. Rather than focus development efforts *either* on individuals who show promise *or*, at the opposite extreme, on totally community-owned and -operated projects, combine both approaches in a single system, a middle way that allows the individual and the communal to coexist. African land tenure systems

and cooperative labour groups (*likilemba*) may in fact provide good models for achieving such a middle path. See Peterson (2000, pp. 106–117; 253–258).

[8] Fulani, interview.

[9] T. Dungu, focus group discussion with author, near Boyangana, 4 August 1995.

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