

Excerpt (Section 1)

**Developing Institutions for Pro-Poor
Natural Resource Management
- the Current & Potential Approach of JWL**

a report for the JWL project

on the outcome of a 2-week consultation with the project team and others in
Dutse, Hadejia, Nguru and Kano, 2nd - 16th December 2004.

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Section 1

1.1. A changing view of the “*institution*” in natural resource management

The perceived significance and role of the “institution” in NRM and development has undergone an interesting evolution over the last two decades. The theoretical treatment of NRM institutions originally drew from empirical evidence of seemingly successful and resistant arrangements and was subsequently applied to reinforce trends in the approaches of donors, government and NGOs. Recently, however, there has been a reappraisal of the meaning and function of institutions and an acknowledgement that the wider institutional environment profoundly influences management and governance at all levels, effecting prospects for pro-poor NRM and development, in general. As a result, the early focus on prospects for local NRM (and the consolidation of livelihoods at the level of the individual) is being superceded by growing interest in the institutional processes that influence the performance of the State.

Theoretical treatments of institutions for NRM

The analysis of institutions for NRM has been drawn from two predominant theoretical schools; new institutional economics (NIE), particularly the work of North (1990), and the principles and “rules” for sustainable management developed within common property resource (CPR) theory and elaborated by Ostrom (1990), in particular.

New Institutional Economics

The NIE theory is based on the premise that sustainable institutions are minimisers of transaction costs i.e. the costs of successfully reaching and enforcing decisions, requiring time and good information. This view suggests that only those institutional arrangements that work to constrain the costs of policing or enforcing decisions (relative to the potential gains from management) will continue to function. It might be expected, then, that high transaction costs could be accommodated by institutions operating in high-value and productive contexts, while low-value or variable resources might only support institutional arrangements where less time and resources are expended as transaction costs (see, for example, Scoones, 1999).

However, framing the institution in relation to transaction costs is problematic because it risks generating tautologous definitions:-

At the extreme, this results in definitions along the following lines, as paraphrased by Harriss et al (1995:7): “existing institutions minimise transaction costs because transaction cost minimisation is their function”.
(Leach et al, 1999)

In addition, when the perception of the institution later widened to incorporate anthropological or social elements such as norms and “routinised practise” (see below), the application of NIE in the development context became problematic. It was no longer clear that institutions existed to perform economic functions, rather, they

often appeared to perform quite arbitrary repeated processes that met social functions, reinforcing existing power relations or consolidating ethnic identity, for instance.

Perhaps the most significant contribution of NIE has been to differentiate between “organisations”, as structures, from the rules (cultural, social, economic etc.) that shape their performance. North’s (1990) definition of institutions as the “rules of the game in society” was significant because it recognised that the environment in which organisations operate is complex and can itself shape performance and outcomes. Extending the analogy further, North described the organisations as players within a game pre-defined by these “rules”¹. In summary, NIE highlighted the fact that the performance of the organisation, with its formal and pre-defined responsibilities and structures, is itself influenced by a nebulous set of institutions or “ways of getting things done”.

Common Property Resource Theory

In the context of NRM, however, CPR theory has dominated considerations of suitable and sustainable arrangements. CPR theory has been particularly attractive in the field of development where current systems are apparently failing and leading to environmental degradation or inequitable outcomes because it appears to suggest the required changes for success.

The CPR school developed in response to Hardin’s (1968) gloomy prediction of the “tragedy of the commons” and was based on predictive models of the behaviour of individuals and groups as developed within game theory. The CPR approach viewed the institution as a mechanism to constrain irrational or selfish behaviour by preventing individualism, free-riding and chaos and its proponents drew from empirical observations of apparently sustainable arrangements around the world. Particularly attractive were examples of traditional or community-based NRM and tenure arrangements in fisheries which are so often vulnerable to open access and overexploitation (see for example, Dahl (1988) or more generally, Berkes (1989)).

The key impact of CPR theory has been to suggest that appropriate institutions are not only the historic product of some “noble savage” but that new institutions as management structures and “rules” for use can, in fact, be crafted and implemented. Central to this work has been Ostrom’s (1990) “design principles” for robust institutions which have provided a reference point for discussion and analysis and have been adopted by some analysts as a means to evaluate the suitability of existing NRM arrangements and to suggest modifications².

The link between the NIE and CPR approach, then, is that the institution is seen as a mechanism to control undesirable practice and outcomes.

Recent developments in viewing the NRM “institutions”

¹ Leach et al (ibid) contest this definition by highlighting that organisations can continue to function and outline the rules that made them relevant from the outset and initiated their development.

² Ostrom’s design principles are; “clearly defined boundaries”, “site specific appropriation rules”, “active participation”, “effective monitoring”, “graduated sanctions”, “conflict resolution”, “a degree of autonomy” and, in larger systems, “nested organisation”.

Although providing the basis of the analysis and discussion of NRM institutions, the CPR school has started to receive greater criticism as the discussion of the local realities of NRM, its relationship to society and *de facto* outcomes becomes more considered.

A key problem with the CPR approach and its proponents, for instance, has been a tendency to rely on a notion of the “community” as a homogenous and bound entity. This type of geographic definition of the “community” has been criticised for ignoring the impact and role of power structures and the fact that many “communities” do not, in fact, manage local resources particularly well (see Agrawal & Gibson, 1999). The impact of this early, simplistic view of the community has been to shape the way “local” institutions continue to be framed by many NRM researchers. The language of CPR theory has not helped in this regard and several of Ostrom’s design principles (“autonomy”, “site-specific rules” etc.) directly or indirectly infer a prioritised role for the local institution relative to state regulation and management, for instance. The role of the state took greater prominence in the subsequent discussion of co-management during the 1990s, but in attempting to identify arrangements to bridge national and local management objectives the emphasis was still on identifying and introducing the “correct” rules as a tool for management.

Several commentators (notably Campbell *et al* (2001), Metha *et al* (1999), Cleaver & Franks (2002) and Cleaver (2000)) have criticised the treatment of the institution as derived from CPR theory and, in particular, what they see as a rather functionalist and prescriptive focus on “institutional crafting” and “getting the institutions right” for NRM. The problem, as perceived by these authors, is less with the principles of CPR theory than the way they are popularly interpreted and put into practice.

For instance, Campbell *et al* argue that too great an emphasis has been placed on the corrective or regulatory ability of formal rules for resource use when the reality is that multiple forms of control, based on tradition and cultural norms, influence resource use. In essence, the focus has been on bureaucratic or adversarial forms of control rather than “negotiated reconciliation”. The institutional environment is further complicated by the fact that these informal systems are, themselves, continuously contested and individually interpreted. Both the NIE and CPR schools have tended to overlook the impact of pre-existing and informal institutions on new or NRM-specific institutions, in this regard. As Metha *et al* state:

“...their [NIE and CPR] conceptualisation of collective action tends to promote a corporate and homogenous view of “community”, downplaying issues concerning difference, power and politics. These approaches have also presupposed a non-interactive divide between formal and informal institutions, neglecting the “messy middle” where different institutional domains overlap and are beset by ambiguity.”

Probably a consequence of simplistic case study commentaries, rather than the underlying theory, there has been a tendency to view institutions for NRM as discrete sets of rules with discrete functions and objectives. The reality, however, is that several “institutions” impinge on NRM, management decisions and behaviour. Cleaver (2000) argues that it is not enough to focus on introducing structured and NRM institutions with “pure” and “perfect” rules of operation. Pre-existing interests and institutions will interact with these structures and modify them.

Although apparently pessimistic, the contributions of these critics should be viewed as constructive. For instance, the debate has highlighted the prospect of accommodating or proactively incorporating pre-existing institutions in NRM (institutions that may have previously been considered peripheral to NRM). In addition, the debate should remind the analyst of the dangers of superimposing pre-defined and simplistic units for management, such as those based on hydrology and water catchment. Cleaver and Franks discuss how conventional river basin management based on physical boundaries can be sub-optimal because administrative boundaries do not coincide neatly with cultural and social networks and needs, for example. Essentially, the message is that *“imposing rigid resource management boundaries on existing structures runs the risk of ignoring the social realities of resource use”* (Cleaver & Franks, *ibid*).

In the context of rural development project and programmes, the discussion may also help move the debate forward with respect to the purpose of new forms of resource management institutions (RMIs). In the case of community-based NRM, for instance, it is hoped that RMIs can conduct collective management and decision-making for improved NRM in combination with some form of in-built capacity for conflict resolution (Turner, 1999). However, in acknowledging that the “community” is in fact heterogeneous with multiple and often conflicting interests, it is necessary to be aware that introducing new forms of decision-making and dispute resolution can work to reinforce existing power differentials and inequity. Once again, it may be possible to learn from existing decision-making mechanisms that relate to wider livelihoods and social issues. As Cleaver and Franks (*ibid*) state; - *“...there may be social preferences for a convenient opacity in collective arrangements, for non-confrontational and socially supported forms of decision-making and conflict resolution.”* In this case, conventionally valued characteristics (transparency and accountability, for instance) may not be locally desired.

In summary, Cleaver (*ibid*) believes that suitable arrangements are likely to represent some form of assortment, or *“bricolage”*, of pre-existing institutions (in the broadest sense of the word) linking fluidly with new, evolving institutions where rules and structures are flexible and adaptable. Again, due attention to pre-existing institutions, such as local NRM arrangements or informal dispute-resolution platforms (e.g. the role of the *Bulama* and *sarkin ruwa* in fisheries related disputes in Nigeria), may be instructive here. The function of these institutions may be to ensure appropriate local coping strategies and may work to consolidate social capital. The social function of these institutions may result in outcomes that represent *“a compromise between social acceptability and appropriateness and resource management effectiveness”*.

A pragmatic interpretation of these new ways of viewing institutions is well-encapsulated by Metha (*ibid*):

“Institutions emerge as sites of social interaction, negotiation and contestation comprising heterogeneous actors having diverse goals. This suggests a need for interventions that have a processual rather than product-oriented character, encouraging rather than undermining institutional flexibility. Knowledge uncertainties emerge as central to contested areas of natural resource management. This suggests a need both for inclusionary, participatory decision-making processes and for approaches to institutional learning that make best use of a plurality of perspectives. The

reconceptualisation of how, in the context of uncertainty we see resources, their management and their interaction with local livelihoods raises a range of fundamental questions about institutional dynamics. These touch on issues of property rights, legal systems, and governance, as well as broader questions of knowledge, power and control.”

(emphasis added)

In drawing from NIE and CPR theory then, the tendency has been to view NRM institutions purely as regulating structures and to construct rather simplistic representations of the links between people and the environment. Leach *et al* (ibid) have proposed an alternative treatment of the “institution” which is intended to incorporate a rather more sociological and anthropological dimension and draw in social norms and patterns of behaviour. Leach *et al* (ibid) highlight the parallel between the analysis of famine and the analysis of NRM institutions - the latter had been (and generally still are) couched in terms of supply and production of the “resource”, with little consideration of social differentiation with respect to access and control. They propose an approach to NRM institutions based on Sen’s (1981) seminal work on famine and argue that the way in which the individual’s array of assets can be utilised is mediated by his or her level of legitimate control and access to them. In turn, assets and their use (i.e. conversion to livelihoods) are mediated by institutions.

In principal, it is possible to “map” these arrays of assets and rights to them to show how these informal institutions interact with formal institutions. Leach *et al* provide the example of leaf harvesting of *Marantaceae* plants in southern Ghana to demonstrate how different sets of institutions permit or restrict access to this resource and to the benefits from its collection and sale. Their case study demonstrates that the factors that shape access are a combination of formal, macro-level institutions such as law and informal and micro-level institutions such as customary tenure rules and intra-household dynamics as “ways of getting things done”.

Access to local resources, and the ability to utilise them, is governed by a similar array of formal and informal rules (institutions) in rural Nigeria (see Figure 4 below).

In deconstructing NIE, CPR theory and more anthropological approaches, Leach *et al* arrive at a simple definition of the institution which seems to be all embracing and useful. Rather than rules, themselves, they argue that institutions can best be viewed as “regularised patterns of behaviour that emerge from underlying structures or “sets of rules in use”.

Following this, it is quite simple to differentiate between formal and informal institutions:

Formal institutions may be thought of as rules that require exogenous enforcement by a third party organisation. The rule of law is an example, usually upheld by the state through such organisational means as law courts, prison and so on. Informal institutions, however, may be endogenously enforced; they are upheld by mutual agreement among the social actors involved, or by relations of power and authority between them. Recent work on institutions stresses the socially “embedded” nature of informal institutions, or the multiplicity of institutional relations in which people are

engaged at any one time. In short, institutions of various kinds, ranging from the informal (e.g. social norms) to the formal (e.g. the rule of law), interlock to form a matrix within which people live their lives.

Leach *et al* (ibid)

Finally, Leach *et al*'s notion of institutions as:

“regularised patterns of behaviour between individuals and groups in society”

conveniently encapsulates the mosaic of formal (project and government bodies etc.) and informal (social mechanisms) processes that influence NRM.

As such, it is suggested that such a simple but overarching definition should be applied with respect to JWL's institutional objectives. The rest of the report adopts this definition as a reference point for the discussion of institutions in and around JWL.

In practical terms, these definitions also conveniently encapsulate the set of influences that interact to shape livelihoods outcomes (for people operating in the forest-savannah of Ghana or the Hadejia-Jama'are Komadugu Yobe Basin of Nigeria, for instance). In this context, the approach of Leach (ibid) links well to the Sustainable Livelihoods framework, acknowledging an important social and political function of the institution and its role in influencing NRM, access and livelihoods outcomes for individuals and society.

Institutions in the context of livelihoods

One of the most important impacts of the Sustainable Livelihoods approach has been to shift the debate from financial considerations of poverty to a wider, multi-dimensional one that attempts to incorporate the social and political environment of the poor. The early emphasis of researchers and practitioners was to analyse or boost the five forms of capital assets representing the livelihoods pentagon. However, it was obvious that these assets were not situated in a vacuum and that different stakeholders demonstrated varying ability to utilise these assets and to convert them to sustainable livelihoods. As discussion on the wider socio-political environment of the poor developed, the SL terminology moved away from the rather vague notion of “vulnerability context” or “transforming structures” to a more thorough consideration of the political and institutional context.

In grouping policies, institutions and processes (PIPs) together, the Sustainable Livelihoods framework acknowledged that political, social and cultural issues interact and shape one another. Developing this theme, meaningful policy analysis require an understanding of processes (or “ways of getting things done”) and how these interact to shape real outcomes and impacts on the poor. Policy analysis has tended to focus on narratives and statements from government but complex and significant bottlenecks restrict their impact. These obstructions are institutional and may be bureaucratic, political and personal (motivational) factors, for instance.

The Sustainable Livelihoods framework, implicitly touches on these issues in its definition of “process”;

“If structures (organisations etc.) can be thought of as hardware, then processes can be thought of as software”

Sustainable Livelihoods Guidance Sheets (DFID, 2000)

However, Cleaver & Franks (ibid) argue that most discussion of NRM within the Sustainable Livelihoods framework tends to view institutions in terms of corrective or constraining structures. Research and development projects have tended to focus on achieving the “right” structures (rules and roles) and the “right” norms (relations of trust and co-operation) with the assumption that this will necessarily provide desirable outcomes.

By expanding the Sustainable Livelihoods approach and acknowledging the role of PIPs, donors are starting to turn away from viewing NRM in isolation and to consider prospects for change in governance, more generally. In particular, there is now a focus on “access to voice” through existing or new institutions for people’s representation. The new emphasis on consensus building for NRM, for instance, is a reaction to the poor performance of production-oriented interventions and is a recognition of the need to consolidate social capital for sustainable and mutually-beneficial practice. In this respect, access to voice and influence becomes a primary development objective in its own right. In the context of Nigeria, for example, there is little doubt that the ability (or inability) to access political influence plays a central role in shaping people’s options and, ultimately, their livelihoods.

The significance of Drivers of Change

Although Drivers of Change extends beyond the realm of NRM, its development and application mirrors the theoretical and practical constraints to institutionalising pro-poor and sustainable NRM outlined above. The poor performance of development initiatives, generally, required a new approach - especially in systems apparently so resistant to change as the political economy of Nigeria.

In particular, Drivers of Change acknowledges that institutions (“ways of getting things done”) at all levels, from village to government, influence management performance and outcomes, and that development goals are rooted in good governance. In Nigeria’s case, for instance, serious constraints to pro-poor governance operate from local level (e.g. ethnic and resource use conflict, the inability to influence statutory authority and representatives) to Federal level (e.g. the oil economy focus with its accompanying institutionalised corruption and opacity of process). Crucially, however, Drivers of Change proposes that rather than being intractable, problems can be overcome by developing a critical mass of support “from within”.

The terminology and conceptual framework that accompanies the Drivers of Change message is closely related to the three tiers of PIPs developed within the Sustainable Livelihoods framework and is depicted in Figure 1. Conceptually, Drivers of Change moved away from the focus on local and individual contexts (the Sustainable Livelihoods approach was initially reluctant to discuss the role and responsibility of

the State and constraints relating to cultural norms etc.) to target the political economy as a means to deliver pro-poor outcomes.

The greatest emphasis is on *agents* within the system, that is, individuals or agencies

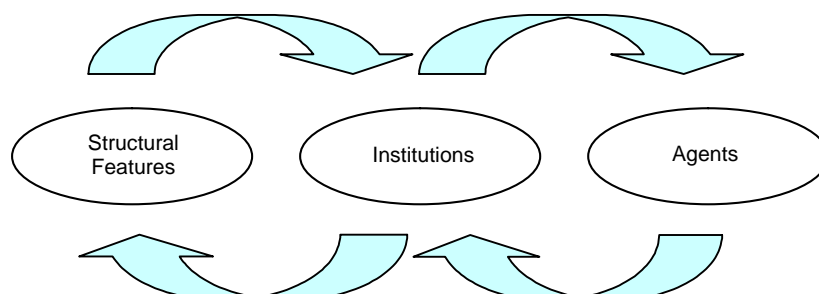


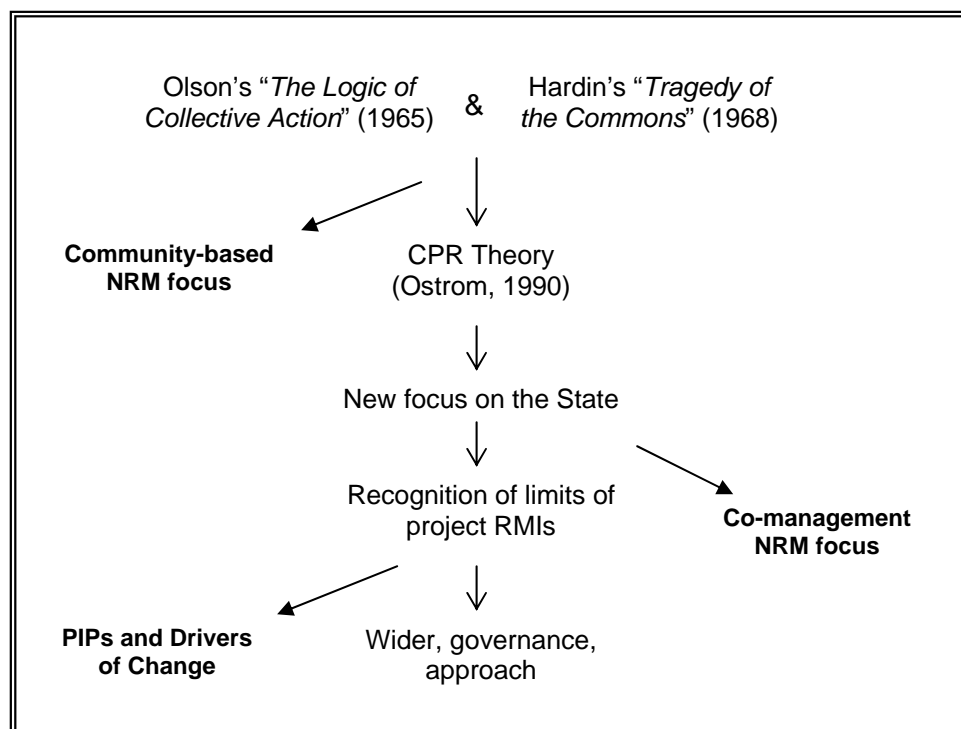
Figure 1. The interaction and feedback between agents, institutions and structures as a mechanism to achieve change.

with the capacity and potential motive for achieving change. This group includes all stakeholders with the capacity to realise change and includes government, donor and private interests in addition to a new, emerging, group of civil society organisations. Given that the political economy of Nigeria is apparently so resistant to change, the emergence of this new group is of particular interest to DFID-Nigeria because it appears to provide an opportunity to promote development based around the publicity of key issues (see later).

Drivers of Change has adopted a definition of *institutions* equivalent to that outlined above i.e. a set of formal and informal rules that govern behaviour. These institutions would include administrative processes and the culture of government and other organisations, for instance. Finally, the *structural features* represent the context in which the political economy sits i.e. the history of the country, the demographic setting and the country's global and economic situation. These structural features are the result of numerous interrelated factors and are slow and difficult to change.

However, as with PIPs within the Sustainable Livelihoods framework, it must be recognised that these agents, institutions and structural features actually merge into one another and that formal and informal institutions cannot be properly analysed in isolation. Informal institutions, such as social networks and culture, obviously shape the reality of politics and policy, for instance. At the local level, the overlap of agents, institutions and structural features can be particularly pronounced. As discussed, policy tends not to produce predictable outcomes or translate simply to the envisioned improvements in local, formal institutions and local practice (informal institutions) and, in part, this relates to the mosaic of existing institutions and interests that influence access to, or denial of, assets and services in the developing world. In the Nigerian context, for instance, it should be recognised that the performance and behaviour of Local Government Authorities is the result of local, informal institutional factors (historical ethnic or personal alliances, business interests etc.) interacting with formally-proscribed roles and rules allocated by government.

In summary then, the sophistication of donor approaches (and the accompanying rhetoric) has increased as the constraints to achieving pro-poor NRM and development have become more apparent. Box 1. demonstrates how the evolution of analytical perspectives of the “institution” ultimately influence trends in development approaches. A similar “map” is provided in Figure 2. to demonstrate how project objectives and approaches in the Hadejia Jama’are Komadugu Yobe Basin (HJKYB) have developed over the last 17 years to reflect wider trends and concerns



Box 1. Key stages in the evolution of the theory and practice of “instituting” sustainable natural resource management.

Timeline	Project	Approach	Donor Objective
1987	Hadejia-Nguru Wetlands Conservation Project (HNWCP) RSPB/ NCF / State government x 3	Habitat conservation for migratory birds	Wildlife conservation
1990	HNWCP transferred to... IUCN	Piloting new resource use strategies	Sustainable practice
	↓	Promoting IWRM via a consultative forum	NRM through consensus
2000	HNWCP ends		

Figure 2. The evolution of project approaches and objectives in the HJKYB. The donor approach gradually embraced institutional issues – moving from conservation activity, to alternative livelihoods activity, to the social and political aspects of sustainable change in IWRM, generally. (This timeline focuses on changes within the Hadejia-Nguru Wetlands. Parallel approaches were applied within the North east Arid Zone Development Project to the east of the wetlands).

Prospects

It is now widely recognised that institutions (especially local “processes”), tend to shape NRM interventions in unpredictable and often undesirable ways. In the project context, initial objectives may be locally re-aligned as obstacles are encountered and new problems arise. In addition, where project objectives have been achieved, unforeseen impacts and externalities may result. Both the resistance to change and the modification of intended structures or practice, are normally the combined effect of pre-existing layers of institutions (i.e. established or preferred ways of doing things) that already have social legitimacy and that override new, “rational”, forms of resource management.

As discussed, Cleaver and Franks (ibid) suggest that where externally-facilitated forms of NRM do take-off successfully, the intended structures and rules are often modified and adapted by the pre-existing institutional environment. In other words, in addition to working to challenge new forms of NRM, these existing institutions can also work to strengthen their performance and local significance.

In the case of new forms of IWRM at the local level, for instance, it could be argued that it is precisely the visible support of local informal institutions that provides legitimacy, gravitas and meaning to project-related activities and committees³.

³ In the case of JWL activities and discussions at the Hadejia-Nguru Wetlands, for instance, it clear that traditional, hierarchical structures have significant control over the pace and direction of change. In this

In the context of achieving pro-poor change, then, there are two key issues that arise;

1. *“If new NRM approaches are to be supported by existing institutions, is there a danger that ingrained inequity, prejudices and control by local elites will be reinforced?”*

The problem of elite capture and cooption of new institutions is well-documented. However, it would appear that it is unrealistic to attempt change that by-passes these groups. Drivers of Change is realistic because it acknowledges this problem *and* includes these groups as agents with the potential to change the system. Although they are firmly established, inequitable or exploitative systems are not fixed and they are best viewed as *structural features* that can change over time, given the right environment⁴.

In addition, there are very real prospects for challenging the *status quo* from within and there are examples of public demands for change in JWL (see Box ...later). Rather, than a symptom of a system that is resistant to change, these public pronouncements and rallying-points suggest that existing institutions are responsive to new challenges and demands. In other words, what has been termed the “*net of power relations*” need not be stifling, and spontaneous forms of lobbying demonstrate that the system can be influenced by public pressure. As mentioned, in the Nigerian context, attention is now turning to the emergence of a new group of Civil Society Organisations comprising motivated and educated professionals with the potential to articulate public concerns to administration levels.

2. *“Given that successful NRM arrangements are often a complex bricolage of new and pre-existing institutions, is it really possible to pre-empt the type of interventions and support that are likely to result in positive change?”*

Although it may be hard to predict the exact character of post-project institutions, it is possible to avoid past approaches that have a poor track-record and that lead to failure or overt manipulation by elites. Generally, interventions are most prone to failure (in the pro-poor context) where the focus is on boosting production without due consideration to the structures that will devise rules for distribution and dispute resolution. In the context of JWL, this issue appears less significant than in many NRM initiatives because management activities are not subsidised but are, on the whole, self-financed.

Interestingly, in the case of JWL, the process that *is*, in a sense, subsidised is that of communication between the various management levels within the system. The factor that appears to be attracting people at community and Wetlands level is the presence of a prototype forum for discussion (basically the Stakeholder Consultative Forum) that bears the transactions costs of arranging meetings and follow-up discussions.

case, the Lawan of Dagona appears to have the authority and respect required to drive the process on behalf of JWL – towards a potentially “win-win” outcome given the financial role of neo-traditional systems in Nigeria (see later).

⁴ Donors struggle with these issues at all scales (to withdraw from, or engage with, nations with appalling human rights records or whether to conduct projects that fail to challenge gender-related constraints to livelihoods at household level, for instance).

1.2 The institutional environment and reality of Nigeria

Whilst it is important to recognise that formal (mandated organisations and structures) and informal institutions (unspoken processes, motives etc.) shape one another, it is possible to list the key institutional factors that operate throughout Nigeria and that will influence prospects for IWRM in the HJKYB. It is helpful to first list the formal institutional structures and organisations that influence management and then to consider how ubiquitous, informal institutional processes then operate to shape their performance. The section on formal institutions draws strongly from Bdiya (IUCN??) but a definitive list of agencies that impact water management outcomes is not provided. The objective is to introduce the basic formal structures and then discuss the constraints and pressures exerted on them by informal institutions.

Formal institutions relating to water management in the HJKYB⁵

There are several national level institutions with water policy and planning, regulation and coordination responsibilities that operate across the Basin. Centrally placed is the Federal Ministry of Water Resources and Rural Development (FMWR&RD) which is responsible for policy formulation and coordination, nationally. Although the principal objective of the FMWR&RD is to reduce the nation's dependence on rain-fed agriculture by developing irrigation, it has recently attempted to establish strategies for optimal use.

The Federal Environmental Protection Agency (FEPA) is the arm of government responsible for overseeing sustainable management of the nation's natural resource base. The obvious social and economic significance of water resources in the area has compelled FEPA to conduct various environmental impact assessments of alternative water use scenarios but it is unclear whether any water management plans have resulted or had any influence. In addition, the Ministry of Environment and the Ministry of Agriculture have the potential to influence water management decisions at national and state scale⁶ while the Federal Department of Fisheries is mandated to develop fisheries production through appropriate management and effort control.

At Basin level, the key formal bodies with water management functions are the Hadejia-Jama'are River Basin Development Authority (HJRBDA) and the Chad Basin Development Authority (CBDA) which manage the west and east of the Basin, respectively. The RBDAs are parastatals responsible to FMWR&RD but, critically, their operational areas correspond to state rather than hydrological boundaries. In addition, both the HJRBDA and the CBDA are mandated to regulate, extract and manage water resources, primarily for irrigation schemes⁷.

⁵ The term "formal" is used here to represent structures. In this regard, they include government/statutory bodies, user associations, unions, civil society organisations etc.

⁶ As such, JWL has ensured their representation at Basin level in the Stakeholder Consultative Forum.

⁷ The strategic significance of this game-keeper-poacher scenario, especially with respect to the HJRBA upstream of the Basin, has not been lost on JWL (see later).

The five State Governments of the Basin directly influence water management and abstraction for municipal and irrigation use via their Water Boards, Departments of Irrigation and the focus of their Agricultural Development Programmes (ADPs).

In addition to Government institutions, donor-led programmes and NGOs may attempt to influence water management directly or indirectly. The North East Arid Zone Development Programme (NEAZDP), for instance has mobilised communities to organise and manage water abstraction while the HNWCP has focussed on a more political process to influence upstream water management through advocacy.

Several interesting CSOs are now operating in the Basin to represent certain interests and to lobby for change. The CSOs tend to be urban-based and include the Nguru Unity and Development Forum, Hadejia Development Circle, Hadejia Emirate Development Association and the Dagona Area Joint Development Association.

In principal, the 29 Local Government Authorities of the Basin provide an interface between the resource users and Federal and State-level agencies, having the power to establish small-scale abstraction and irrigation activities.

An important group of community-based organisations (CBOs) operate at various levels within and between States. These CBOs are generally resource user-specific and include unions within the commercial sector and trade organisations such as Rice Farmer Associations and Fadama Users' Groups representing farmers and the Miyetti Allah organisation representing the interests of pastoralists. In addition, there are a growing number of project-related CBOs in the area which are intended to facilitate local development activities on behalf of local communities. Groups such as the Fadama Community Associations (FDAs) of the FADAMA-2 Project are intended to gain local support and manage inputs of labour and money. Although donors may perceive that these CBOs are an opportunity to instil a collective ethic that might extend beyond resource management issues, there is little evidence they have any political or social meaning outside the project context (i.e. they function to channel funds supplied from outside and carry out only project-specific activities). There is evidence that some LGAs have established quasi-CBOs to attract funding and political support in the area.

Finally, statutory or traditional authority may utilise "committees" of local representatives with quite proscribed responsibilities and structures. With respect to the control of fisheries resources in the Nguru-Gashua Wetlands, for instance, Neiland *et al* (2004) describe how in Bade villages the Bulama convenes a "water management council" comprising both hook and line and net fisher representatives, ward heads and the Sarkin Samari (youth leader).

Both these structures and surrounding informal institutions of traditional authority still impact resource use and distributive mechanisms at the local level (see below).

Figure 3. represents these formal institutions diagrammatically and show their interface with statutory or traditional structures.

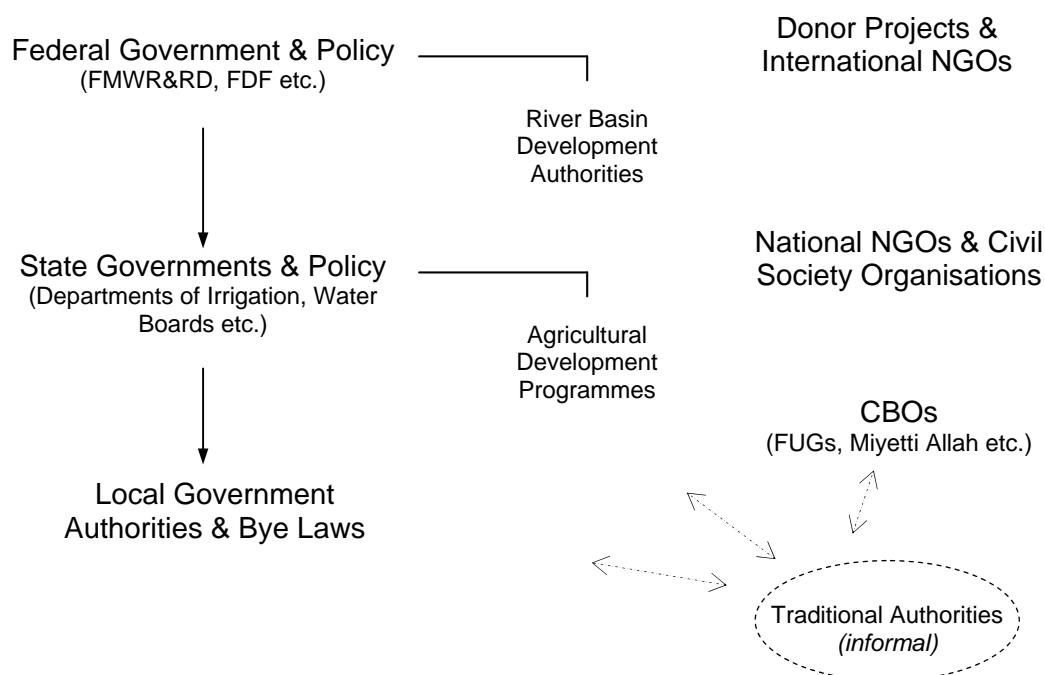


Figure 3. The formal institutions relating to IWRM in the HJKYB. Traditional, informal authorities interact with and shape management performance of formal institutions, especially at local level. (Adapted from Blench (2004) and Bdliya (xxx)).

Informal institutions relating to water management in the HJKYB

National and ubiquitous institutional phenomena

As discussed, the performance and character of the formal structures outlined above are themselves influenced by the informal institutional environment in which they operate. In other words, *de facto* outcomes are a result of the institutional milieu represented by *de jure* structures and responsibilities *and* informal processes associated with cultural norms and ways of doing things. To use a project-specific analogy, the way these structures operate is not quite as outlined in the log-frame!

At all levels, there are pressures and motives that influence the performance and decision-making of individuals in organisations and within society, generally. Of particular national and donor concern is the chronic corruption and rent-seeking which pervades government institutions. One fascinating aspect of Nigeria's corruption is that it is recognised as a problem and openly discussed by all. In this respect, there appears to be real potential for DoC to target this "structural feature". The Federal government's own National Economic Empowerment and Development Strategy (NEEDS) and State Economic Empowerment Strategies (SEEDS) is testimony to international and public acknowledgement of the problem.

Institutionalised corruption severely constrains the ability of government to provide services and to work towards national and international development goals. It causes a breakdown in the link between demand from the electorate and civil society and so to appropriate responses from democratic government (what is commonly termed the "social contract"). Although corruption may be a manifestation of individualism, and a rational response to this environment, there are probably other, more subtle, aspects to this behaviour. The institution of the patron-client relationship, for instance, is likely

to operate at all levels. There are obviously complicated relationships between different sections of society based on power, access to resources, labour and favour and these will operate between bureaucrats and administrators just as they will between local resource users in traditional or neo-traditional resource management systems. In the former case, rather than the conventional landlord-peasant (feudal) relationship, the interaction will seek to establish security and trust in response to vulnerability in an unpredictable political environment. In addition, new forms of patron-client relations will have developed in Nigeria that seek to build political allegiances and support, as they have done in other contexts. In Bangladesh, for instance, Islam (2002) suggests that there now appears to be a new form of patronage evolving and one which “*is more to do with the penetration of macro-politics into the rural space and people’s need for protection against escalating violence*”.

As Neiland et al (ibid) state:

“Ethnic-centred politics continues to play a major role in Nigeria, and traditional government is integrally linked with the local power-base of politicians.”

Other informal institutional characters relating to cultural norms will operate within different ethnic groupings. These may correspond to set responses to infringements of rules by individuals or to long-established conflict with other resource users, for instance. Prejudice towards certain groups and rigid roles for both genders are other examples.

Finally, these informal institutions will impinge on NRM issues, either directly or indirectly and they will influence outcomes in dispute resolution and resource management, in general. Central to these issues will be the management of seasonal water, the associated livelihoods activities and the resulting trade-offs between different users.

Traditional Management Institutions

It is correct to assume that aspects of traditional (or customary) management institutions function throughout rural Nigeria. Generally, these systems of rules are concerned with maintaining control over access and use of resources. In the pre-colonial period, their primary objectives would have been to perform a distributive function within the local population and the management of surplus across the year. With the appearance of Islam these systems would have adopted a less egalitarian and more hierarchical, patron-client, structure.

As Neiland et al (ibid) state, traditional management institutions have since modified in response to the demand for capital accumulation and profit-making introduced during the colonial period. While some institutions (types of rules, management objectives etc.) will have been eroded others will have changed to undertake new functions. In particular, these systems have evolved to undertake economic functions relating to the intensification of production and the emerging private interests.

An interesting dualism exists between statutory modes of management (intended to function through policy, enforcement and the operation of the relevant government

machinery) and pre-existing traditional management systems with their own objectives and “institutions”. Once again, although the traditional and statutory modes of management are conveniently discussed as separate entities, they do function to shape one another so that *de facto* and overall management institutions may be the result of an uneasy alliance between competing or overlapping interests (see Box 2).

With respect to the fisheries of the Basin, Neiland et al (ibid) have identified three basic “types” of management system; *traditional* – under the administration of the *sarkin ruwa*, village and district heads, *modern* – under the real administration of the Nigerian state, and *mixed* – a combination of the two, “*by design or otherwise*”. In an extensive survey of the Upper River Benue, Lake Chad and the Nguru-Gashua Wetlands, only about 10% of village fisheries could be said to have been administered by the State.

With respect to DoC, Rajano Soni (2002) argues that informal or customary institutions are largely overlooked in the discussion of progressive change for Nigeria and that most DFID programmes in the country have targeted statutory processes at Federal and State level.

JWL has acknowledged the significance of these institutions early on, however:

Despite the ambiguities introduced by Federal, State and Local governments, local people – through their customary institutions – continue to see themselves as being the principal “owners” of many natural resources.....In general, land is still seen as being invested in local institutions, rather than in more distant and less legitimate, governmental institutions. To the extent that local people and customary authorities do see themselves as being key stakeholders, they are more likely to feel capable of changing rules about access to natural resources. That is a definite plus.

Rowley and Winter (ibid)

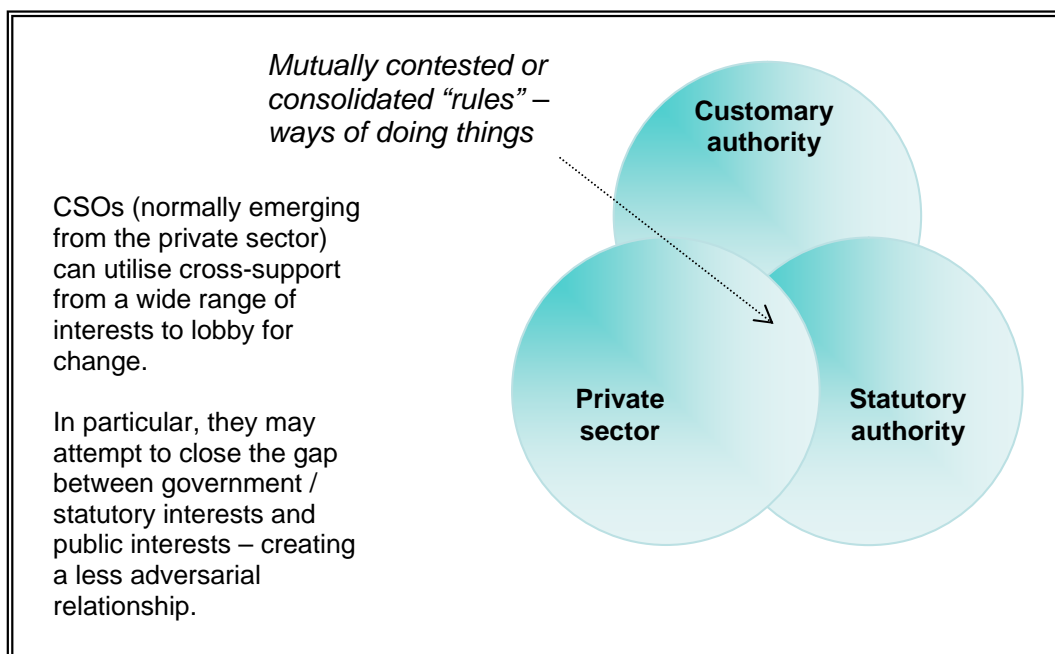
Market-related Institutions

In addition to the unions and trade associations linked with agriculture, fisheries, transport etc., the market can be viewed as an informal institution (with no set structure) in its own right. The Sustainable Livelihoods approach rightly considers markets as institutions because they represent sets of established and repeated rules. In rural Nigeria, the rules of the market might manifest themselves as intensification and concentration of agricultural and fisheries production, or as a challenge to statutory forms of resource management (e.g. fisheries control) and traditional management (e.g. the interests of local entrepreneurs clashing with or consolidating other local elite).

In the Basin, there is no doubt that commercial interests have been successful in mobilising government support on several occasions (especially below the level of the State). Market processes have compelled individuals to form alliances such as unions and trade associations to lobby Local and State government representatives for improved services, for instance.

As in many developing countries, the linkage between rural and urban markets has freed up a new middle-class of educated professionals and the CSOs that are

evolving in Nigeria are largely drawn from these groups. These people may be employed as junior administrators in government or business but volunteer to represent public interests under the guise of local development fora⁸.



Box 2. Local institutions as the result of interacting, competing and consolidating rules relating to customary, statutory and private sector (market) interests. CSOs may attempt to reconcile and accommodate these interests in order to achieve widely supported change.

⁸ "Although not rooted in the poorest communities, they nonetheless often take up causes that form part of the anti-poverty agenda." (Heymans & Pycroft, 2003).

Summary

The enforcement of Federal and State law is virtually non-existent at this level and where it does occur is likely to be applied as threat and an opportunity for rent-seeking (see Rowley & Winter, 1998).

Formal and informal institutions reinforce or challenge one another to shape *de facto* management outcomes and practice. In the case of management decisions at local level, for instance, Local Government Authority “rules” and rulings may work to support or conflict with village-level, customary approaches to related issues.

With respect to rural development then, we might argue that these pre-existing institutions should be acknowledged and perhaps incorporated into policy or project design and approach. While Goldman (1998) asserts that local institutions tend to be by-passed or weakened by development initiatives, Cleaver and Franks (ibid) argue that it is these very institutions that will have most influence over development project success or failure.

Although traditional management institutions still play a very important role in shaping local management decisions and in resolving disputes relating to natural resources, the geographic range of key issues such as water management (their causes and effects) is now so great that these systems have less relevance and impact than they once did (Blench, ibid). Unfortunately, due to lacking capacity, political will and public legitimacy, statutory authority has, in the main, failed to fill this gap.

The setting is further complicated by the emergence of a professional class that has helped form a range of organisations (CSOs) attempting to represent public concerns to political stakeholders. The entire institutional “*bricolage*” is summarised in Figure 4.

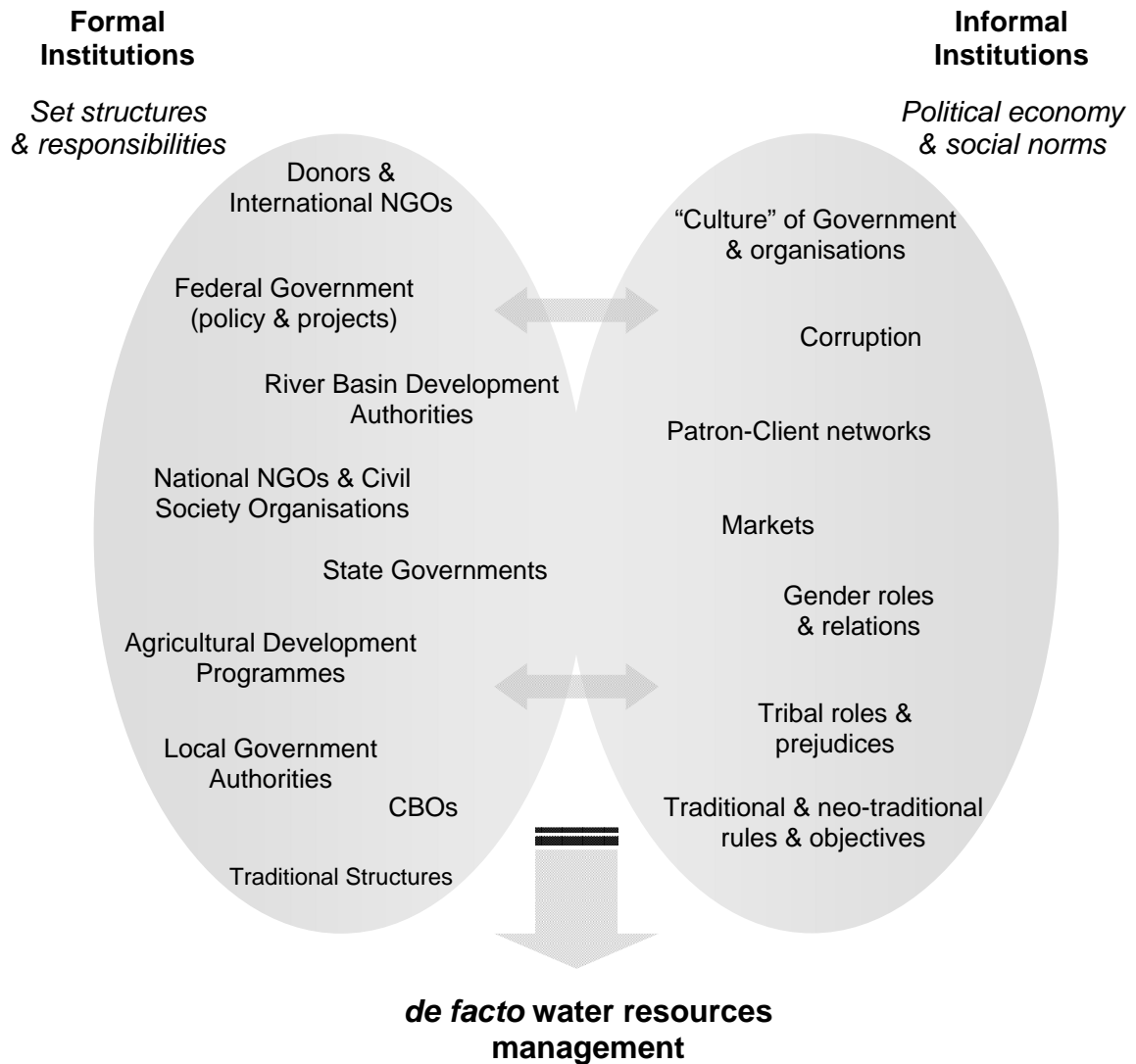


Figure 4. The “*bricolage*” of formal and informal institutions that interact to shape *de facto* water resources management.