

## INSTITUTIONS, LIVELIHOODS AND CONFLICTS IN BANGLADESHI FISHERIES

### Abstract

The emergence of the Sustainable Livelihoods Approach (SLA) to development has served to widen the focus of practitioners and researchers alike. With the emphasis now on livelihoods rather than any particular economic sector, the impact and influence of various forces on the process of development can be analysed. In this respect the SLA has helped bring the issue of conflict over natural resources in from the cold: rather than conflicts being seen as sectoral events negotiated through the legal system, they can now be viewed as part of the institutional context within which livelihoods are situated. Drawing on a case-study from Bangladesh, this paper discusses the role of institutions in the evolution and mediation of conflicts and analyses how conflicts impact upon the livelihoods of those that rely on natural resources for their income, food and security.

### INTRODUCTION

Conflicts over natural resources (NR) have occurred for as long as the users of a resource have had to defend their rights against the demands of others. Until recently any analysis of those conflicts has tended to focus on the process of the conflict itself: who were party to the conflict, what was the impact of the conflict and how was the issue resolved. But, recent research conducted by the 'Management of Conflict in Tropical Fisheries Project' shows that such analysis often fails to fully understand the conflict and thus results in a short-term solution to what is often a long-term problem. Natural resource conflicts take on many forms: violent clashes are rare but can result in blood shed, high body counts and in the extreme a state of near-war between nations<sup>1</sup>. Most conflicts, however, never make the headlines and rarely appear in court transcripts. These conflicts rarely result in violence and are normally a long, ongoing process of positioning and counter-positioning between households or communities over access to and use of a particular resource. Research has tended to concentrate on violent conflicts, or those that resort to the judicial system for resolution. The myriad smaller conflicts are more interesting from an NR perspective and potentially have a bigger impact on development, yet research in this area has been lacking.

Research into natural resource conflicts needs to understand the livelihoods context of the problem. New paradigms for development encompassed in the Sustainable Livelihoods Approach (SLA) have helped widen the field of vision of the researcher and policy maker: focus has now shifted beyond the economic sector in question to related up-stream and down-stream sectors. The SLA has also seen the advent of a more holistic view of how livelihoods are constructed: they are not just the function of economic activity and assets, but also the complex interplay of well-being, entitlements and opportunities. This holistic paradigm has helped shed light on the issue of conflicts as the level of analysis shifts from 'incident' to 'livelihoods' and

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<sup>1</sup> The UK-Icelandic Cod War of the 1970s is a good example of how natural resource disputes can draw in forces at an international level. At a much more parochial level, in early 2002 nearly 200 were reported dead following a dispute over the access and use rights to a fish pond in Northern Nigeria.

encourages research to ‘get below the surface to informal institutions and processes’ (Farrington, 2001:3).

A key part of the SLA is understanding the role of institutions in the construction (and deconstruction) of livelihoods; understanding institutions also helps to make the analysis and management of conflicts more useful from a policy point of view and more long-term from a development point of view.

Bringing together the three key issues of conflicts, institutions and livelihoods, this paper has the following objectives a) to review the connections between institutions and conflicts and b) to discuss why an understanding of conflict is a crucial part of the debate on sustainable livelihoods. The paper is organised as follows. Part One analyses the SLA; part two places SLA into an institutional context whilst part three discusses how SLA informs the debate on NR conflicts. Part four concludes by looking at the policy implications of SLA and NR conflicts.

The emergence of the SLA in development has been hailed in some circles as a new, revolutionary aspect of analysis and in other circles has been taken on-board wholeheartedly as the new paradigm for progress. In reality, the simple assumptions behind SLA have been held as true for many years by those working in the field. Scoones (1998) neatly summarises the essence of a sustainable livelihood as follows:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.

SLA can be used on three levels (Farrington, 2001:3): as a set of principles that guide project formation; as an analytical framework for development or as a development objective. For the purposes of this paper we will be looking at the use of SLA as an analytical tool which has helped broker a multi-disciplinary approach to development in general and conflicts in particular.

Using livelihoods as the central pin of development policy and practice requires attention to shift away from the immediate sector of analysis (be it health, agriculture or transport, for example). By striving for a sustainable livelihood the many complex parts of people’s lives are catered for, hopefully with a knock-on effect throughout the system. The situation in NR is no different to any other. By focussing development on the wider aspects of NRM (such as the role of women and children on the harvesting and processing of product; the role of the market in distributing the produce to others; the influence that change in other sectors can have on the potential for continued harvesting and so on and so forth), the overall context within which NRM is taking place can be influenced and the ‘livelihood’ rather than the ‘economic activity’ can be moved forward.

The SLA is built around a number of simple building blocks.

First, livelihoods are described as being made up of five ‘elements’: human, social, financial, natural and physical capital. Each of these elements dictates how

individuals, households and communities function and, to an extent, dictates how well they are able to harness their capabilities to improve their well-being.

Second, because the capitals mentioned above do not interact in a vacuum SLA also highlights the role of policy, institutions and processes<sup>2</sup> (the PIPs box) in affecting outcomes. Some commentators see the outcome as split into two sections: livelihoods and sustainability. The former to do with employment, poverty reduction and well-being and the second with the resilience of the livelihood (Scoones, 1998:5).

Third, the sustainability element of the SLA is made up of the inputs ie those issues that are likely to destabilise livelihoods such as shocks and stresses (acting on both the NR base, the acquisition of capitals etc). Stress is defined as a small, regular predictable disturbance (the Monsoon for example) whilst a shock is large, infrequent and unpredictable (flooding after an abnormal Monsoon).

Fourth, the SLA allows for an examination of the coping and adaptive strategies formulated to deal with the shocks and stresses (UNDP, 1999)

Were the ‘perfect’ sustainable livelihood to exist, the combination of ‘capitals’ held by the households (for example) would be able to absorb and manage shocks and stresses through their ability to draw on policy, institutions, processes (and markets) so as to be able to influence the outcomes. In this sense, then, the SLA provides a yard-stick by which to be able to assess livelihoods.

The emphasis on the sustainability of livelihoods is particularly pertinent to fisheries where declining stocks, increasing effort and more efficient gears have meant that coupling the development of livelihoods with a recognition of the need to ensure sustainability have become paramount. Those engaged in fishing are often involved in a web of other activities, the SLA allows some of this complexity to be unravelled (see Allison and Ellis, 2001 for example).

Having mapped out the process of inputs, capitals, PIPS and outcomes, it is then possible to identify entry points for intervention – for policy-making and development initiatives at the national, local and household level. Scoones summarises these entry points as follows:

1. Resources can be accumulated to create reserves and buffers against shocks and stresses. By tackling bottle necks in markets or in the processing sector, reserves can be built up and distributed more easily and all levels throughout the economy.
2. Activities associated with different livelihood strategies may be spread over time
3. The mix of activities may be changed over time to reduce exposure to risk. Enabling different actors to improve their human capital (through training courses and capacity building) enables households to pursue alternative or complementary activities such as product diversification or gaining new skills.
4. Pooling options may be used as an insurance or consumption-smoothing mechanisms to reduce the impact of stress or shocks. Initiatives to promote

<sup>2</sup> It is interesting to note that some organisations are now adding ‘markets’ to the PIPs box (iied, pers. comm. December 2001)

community-based or co-operative management of resources helps spread risk throughout a community rather than leaving a number of households exposed.

A further entry-point could be defined as improving the capacity to deal with shocks and stresses. This is the point at which the need for better conflict management enters the frame. This will be discussed in Part Three.

Whilst the SLA acknowledges that a livelihood is made up of five basic elements (the capitals), one of the revolutionary aspects of the SLA is the recognition that the context of the PIPs box is important to an understanding of how livelihoods react to inputs into the system. The existence and importance of the PIPs has long been acknowledged by social scientists working in development, but was often dismissed or ignored by more sectoral perspectives. Policy and process are equally important to a discussion on NR conflicts, but for the purposes of this paper, we will concentrate on Institutions. There are myriad definitions of institutions, so first we have to establish where the boundaries lie.

Institutions are a collection of rules that structure behaviour (North, 1990) and taking a slightly wider perspective, they are also a collection of systems, processes and structures that serve a specific role in society (UNDP). Under both views, institutions can be both formal where the rules are set by others (marriage, property rights, the state, judiciary, law enforcement agencies, education, health, politics) or informal where the rules are set by the users (CPR, social norms).

Under normal circumstances, the institutions act as the ‘gateway’ or ‘access mechanisms’ (Scoones) through which stakeholders, armed with their bundle of capitals (or assets) pass on their way to the outcomes. The institutions in question evolve, change and adapt as new circumstances are brought to them; the manner in which stakeholders are able to use the bundle of capitals changes as do the outcomes and a state of equilibrium should be maintained. As external factors impact upon the system (the shocks and stresses mentioned before) so the system has to adapt and cope until a new equilibrium is found. Sometimes, however, the ability to adapt or cope is lost and the ability of institutions to mediate capitals or act as access mechanisms often fails. This happens for a number of reasons.

Institutions may be unable to meet the demand put upon them or to evolve fast enough to cope with changing situations. Institutions emerge as the result of a ‘supply and demand’ effect. A ‘shock’ creates an institution; demand for subsequent change to the format of that institution comes about when a gain cannot be captured under existing arrangements. Demand for such change may be stimulated by changes in product and factor prices (wages, land etc); technology (new machines and processes) and market size (rise in population) (Feeny 1998). Demand for change can also come when there is a perceived need to shift income towards the institution, that is, demand can come from a need to increase supply and alter distribution (Thomson et al, Feeny, 1998: 177). Change, however, is not solely dependent upon supply and demand factors. Change is often dependent upon the state’s willingness and ability to help new institutions emerge (Thomson, Feeny and Oakerson:132.) and, although demand is a necessary condition for institutional change, it is not a sufficient condition—the role of politics and political economy is also crucial (Feeny, 1998:168).

Failure to internalise rising transaction costs can also be a cause of failure. New Institutional Economics argues that institutions emerge to minimise transaction costs<sup>3</sup>. As transaction costs rise, so institutions adapt and change accordingly (North, 1995:24) although this process is the subject of much debate (Knight, 1992). If the institution is no longer able to effectively minimise transaction costs, however, it is weakened and is increasingly unable to function properly<sup>4</sup> (Klitgaard, 1998:337).

The outcome of institutional failure is that the organisations and structures that rely upon the institutional framework cannot operate effectively which has a number of impacts on fisheries livelihoods.

Rising competition for a resource can see the collapse of informal (de justo) property rights. If the institution (in this case property rights) is not able to evolve fast enough to internalise rising transaction costs presented by an increased number of users, or more efficient gears, stock depletion and the subsequent erosion of livelihoods is often the result. And, using an SLA to analyse this outcome, the impact of such institutional failure will affect many households not directly connected to fishing.

Similarly, property rights also collapse where there is no enforcement of the (formal) access or use rules for the resource. Corruption and political negligence often constrains enforcement institutions such as the police and fisheries officers with outcomes similar to those detailed above.

Finally, conflict can have profound effects on both institutional stability and sustainable livelihoods, though the cause and effect mechanism involved here is by no means linear: conflicts can raise transaction costs which in turn impact on the institutions' ability to function which in turn can lead to further conflict. To understand how conflicts and SLs interact, we first need to understand something of the anatomy of conflicts.

Broadly speaking, conflict emerges when 'the interests of two or more parties clash and at least one of the parties seeks to assert its interests at the expense of another party's interests' (FAO, 1998:199). Conflicts of this type do not necessarily have to be violent nor highly disruptive, in fact many conflicts that arise as a result of differing interests are low-level, non-violent phenomena (Warner, 2000).

Conflicts between groups emerge for a variety of reasons. Conflict can arise as a function of social structure (the sociological perspective), as a function of power relations (the political perspective) or as a result of rational decision-making by an individual seeking to maximise their personal utility given a pool of scarce resources

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<sup>3</sup> Transaction costs represent the costs (time, money) associated with gaining information, making decisions, carrying out decisions and negotiating contracts (Abdullah et al, 1998). In terms of fisheries, they can be divided into the *ex-ante* costs of collecting information and making collective decisions in the fishery and the *ex-post* costs associated with implementing collective decisions. Transaction costs in fisheries arise, mainly, from the fact that the fishery involves multiple stakeholders with differing objectives and long-term goals (Kuperan, 1999).

<sup>4</sup> A rise in transaction costs could be due to development pressures (political and economic), environmental scarcity (perceived or otherwise) and structural problems (political and economic). As a result of the rise, markets may collapse, property rights become unclear and States may be prone to civil unrest.

(the economic perspective). The issue that often sparks off a conflict is the 'perception' that the one group is gaining (or, in economic terms, maximising their utility) at the expense of another. The underlying reason why conflict emerges, however, is often more complex. Race, gender and religious issues may in fact be the root of the problem with the conflict settling on physical assets such as access to a fishery<sup>5</sup>.

Warner (2000:11) identifies four issues that may explain the emergence of conflict a) demographic change (a sharp influx of new-comers perhaps driven by declining economic or ecological well-being in other sectors); b) natural resources competition (increased dependence upon the natural resource can heighten competition for space and resources<sup>6</sup>); c) developmental pressures (as government policy switches from livelihood protection to food production) and d) structural injustices (changes in legislation that deny or severely restrict access to a resource by dependent groups in society)<sup>7</sup>. Bennett and Neiland et al (2001) also cite institutional failure as a cause of conflict.

Conflicts enter the SL framework at a number of points. Firstly, they often provide the context or backdrop against which livelihoods are being pursued. Long, on-going conflicts will impact upon institutional capabilities (as noted above); upon the ability of individuals and households to command certain capitals (following Sen's entitlements approach to capital) and upon the overall state of the NR base. Second, conflicts are often the shocks and stresses that form inputs to the SL framework. Conflicts that flare up act as shocks, whereas long running disputes that may peak at certain times of the year (when fish stocks are low for example) act as stresses on the system. Where mechanisms exist to manage conflicts successfully, the resilience of the livelihoods to such shocks and stresses is not impaired. However, many fisheries operate in a context of no effective conflict management institutions and as such conflict is a major impediment to the pursuit of a sustainable livelihoods. The following case-study illustrates this point<sup>8</sup>.

Tangail District forms part of the extensive seasonal Bangladeshi floodplain. Several million households rely upon the floodplain for fishing, crop watering, jute processing and indeed, for transport. Unlike many other parts of the floodplain, Tangail district has extensive engineering solutions to the perennial flooding. Whilst fishing and farming in Bangladesh relies upon and has adapted to the annual floods which rise following the Monsoon, periodically the flood waters rise higher than normal, causing damage to property and the loss of life. Following the devastating floods of the late 1980s, the Bangladesh Flood Action Plan (FAP) Compartmentalisation Pilot Project (CPP) was started. Some 13,000 hectares in Tangail district became part of a "flood management laboratory". The project area was divided into compartments, into which the flow of floodwater was to be regulated by sluice gates and embankments (Panos, 1994). The main objective of the CPP was to "provide a secure environment for intensive agriculture, fisheries and integrated rural/urban development through

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<sup>5</sup> Such is the case of the casualties over the fish pond conflict in Nigeria cited earlier.

<sup>6</sup> Many of these ideas are explored in the literature by Homer-Dixon (1991;1994)

<sup>7</sup> Successfully identifying the 'triggers' (ex-ante) that are likely to cause the escalation of natural resource conflicts in a specific situation is an area that warrants further research.

<sup>8</sup> These case studies are based on field work undertaken during 2000 by the Management of Conflict in Tropical Fisheries Project.

controlled flooding and drainage” (Ali, 1997). This was to be achieved through the involvement of the local people, or “stakeholders” on the Sluice Gate Committees which would control much of the water flow. The sluice gates have controlled flooding in the area and, during the 1998 floods, much of the region was free from abnormal flooding levels experienced by neighbouring regions.

The sluice gates, have, however had a number of adverse effects. Hydrology systems are highly complex and by reducing flood inundation, fishing opportunities at a number of points have been disrupted or curtailed altogether. The artificially controlled water flow has affected the spawning activities and migratory patterns of fish, and has also seen large sections of the Logala River silt up. The action of the sluice gates also means that water is not allowed into the surrounding beels (natural depressions that fill with water during the flood) in adequate quantity to maintain the levels. Finally, the Sluice Gates are not large enough to allow ‘country boats’ or local river craft to move easily along traditional routes.

The changes attributable to the Sluice Gates have been gradual, yet the knock on effects have been considerable. Reduced fishing opportunities as a result of stocking problems have driven fishermen to move further and further afield to secure the same catch levels. Aside from the economic cost of fishing further afield, there are the added problems of mastans. Bangladeshi society is very hierarchical and operates in a context of coercion, corruption and violence. Mastans are muscle men or local mafia-type institutions. They control large sections of everyday life in Bangladesh – including fishing. Fishers venturing outside their normal orbit inevitably come into contact with the local ‘mafia’ who extract a ‘fee’ for fishing in what is often legally open access waters. Violent beatings or theft of catch and equipment is not an unusual occurrence in these situations.

As the supply of water and its restricted flow into beels raised the ‘value’ of fishing grounds, so a number of legislative changes conspired to ensure that traditional, open-access seasonal beels were opened up to private leasing arrangements. The cost of stocking and policing a beel is often beyond the means of the villagers that once relied upon the beel for their fishing income and many beels in the region are leased by businessmen from Tangail who reap the benefits of the beel’s income, employing a handful of fishermen to ‘share-fish’ the beel for them.

In those areas of the floodplain still accessible to the fishers, competition for resources is growing. The use of illegal (and invariably highly efficient) fishing gears and methods is rising as a growing number of fishers struggle to capture a decreasing pool of benefits.

Not surprisingly in this context of economic pressure and uncertainty, conflicts between the different users of the aquatic resources is rife, yet there are few means of managing these conflicts.

The Sluice Gate Committees should perhaps be a lynch pin in the system, yet membership of the Committees is highly subjective and open to corruption despite their outwardly inclusive make-up. The poorest members of society, and those with the greatest amount to lose frequently report that they have little or no voice on the Committees and are thus powerless to do anything to improve the situation.

Local formal institutions such as the local police force and the Fisheries Department that should be providing support to fishers are under-funded, over-staffed and open to corruption that ensures that the wealthy elite continue to co-opt the benefits from the floodplain to the detriment of the poorest.

Conflicts in the district cover a number of issues, but chief amongst them is the issue of the lack of enforcement on illegal fishing, violent behaviour of the mastans and the operation of the sluice gate. These conflicts represent stresses on the system rather than shocks in so far as they have been on-going for a long time, but when the conflicts escalate, as they do from time to time, the immediate effect of an increase in the scale or intensity of the problem represents a shock to the system.

All villages in this case-study reported that there were more conflicts now than 12 – 15 years ago. Most conflicts are never resolved because it is felt that there is no mechanism in place to perform this function. Although technically the government authorities and the police should have the role of law enforcement (which, while not actually resolving conflicts, would certainly minimise their eruption through deterrence) this is never used as it is perceived as ineffective, or powerless to act in the face of mastans. Suggestions on how the current situation might be improved all centred on a return to the previous form of fisheries management. The preferred option was a return to the system whereby only those living within 5 miles of the beel could fish there, though they felt there was no conceivable hope that the current power structures would change in their favour in the foreseeable future. Overall, the villages felt that the hardest problem they currently have to deal with is the high degree of power inequality within the community and the consequences of this: the allocation of resources and the appropriation of access to waterbodies. The village that reported the least number of conflicts was also the village with a high number of ponds. Although only a small number of villagers owned the ponds, a large proportion of the village was able to rely on work in the ponds during lean periods.

NR conflicts are thus impacting on the system at a number of levels in Tangail. Firstly the degree of vulnerability of households is increasing as financial and physical threats are made against the principle wage earner. Household transaction costs rise as fishers are forced to migrate further and further from their traditional fishing grounds, added to which is the extortion demanded from them by the mastans that control new fishing grounds. Second, pressure on the NR base rises as more fishers are forced to remain closer to home to fish, adding to the numbers of fishers that have been forced into open access waters as traditional beels have come under private, leased arrangements. As more fishers are competing for fewer fish (as a result of the hydrological impacts of the CPP) so the danger of stock collapse in the area becomes a possibility. Another implication is that levels of inequality in the district rise as control of resources and the ability to command entitlement to resources falls into fewer hands. As far as the PIPS box is concerned, conflict is both a cause of institutional failure (the under-funded and over-staffed fisheries officers are unable to keep abreast of the situation nor mediate effectively) and effect of the same. Failure to enforce basic property rights and fisheries laws results in conflicts as the 'rules of the game' are increasingly ignored by the most powerful players. On a number of levels, then, the SL debate in this part of Bangladesh is informed and contextualised by the problem of NR conflicts. To further complicate matters, many



of the conflicts are disguised by issues of religious persuasion. Establishing whether a particular conflict is actually over illegal gears or over the fact that the illegal gear is operated by Muslim fishermen is not easy to say. In other words, would the conflict have reached such a critical point and be seen as so detrimental to the livelihoods of others were the illegal gear operated by Hindu fishers?

Conflicts are clearly not the only factor impacting on SL in Bangladesh, but they do form a chief contextual component. By looking at conflicts through a SL lens it is possible to tease out the various components to the conflict from the complex mass of contributory issues and layered consequences.

An SL approach demonstrates that strong and flexible institutions such as clear property rights, management systems rooted in community traditions, fair law enforcement and a competent State are needed for effective fisheries (conflict) management. Arguably, the more nested the structure of formal and informal, local and state level institutions, the lower the transaction costs between the top and the bottom of the system and the more efficient the institutions in their management roles. In Bangladesh, like many other developing countries this is not the case. Communication between the different layers of fisheries management are frustrated, the legitimacy of the ruling body to control or manage resources is often missing or contested and political factions and the action of rent-seeking elites influence the vertical relationship. It is in this context of imperfect or missing information that many of the Bangladeshi institutions charged with managing fisheries have failed. This had been a contributory factor in NR conflicts because there is an increased perception of inequality or injustice among the stakeholders.

Modification of the myriad processes that contribute to conflicts and institutional formation is required to improve the interactions between government, communities and households. Institutional capacity building at the state level would improve the overall ability of the State to govern, at the local level it would help improve the ability of communities to manage their livelihoods by modifying property rights, social attitude, social capital and so on.

Turning SL policy into real SL outcomes at the local level is difficult (Shankland, 2000). However, given that tackling the source of the conflict is often impossible (because the source cannot be accurately defined) then emphasis should be on capacity building and institutional formation to try and boost local level ability to manage conflicts. This then, would be the key to advancing the goal of the attainment of SL in small scale fisheries.

Abdullah N M R, V Kuperan K and Pomeroy R.. Fisheries co-management and transaction costs. NAGA, The ICLARM Quarterly. 21:3, 40-42. 1998

M Youssef Ali. Fish, Water and People: Reflections on inland Openwater Fisheries Resources of Bangladesh, The University Press Limited: Dhaka. 1997

Allison E H and F Ellis. The livelihoods approach and management of small-scale fisheries. Marine Policy, 25: 377-388, 2001

FAO. Integrated Coastal Area Management and Agriculture, Forestry and Fisheries. Rome: FAO, 1998.

Homer-Dixon TF. On the threshold: environmental changes as causes of acute conflict. International Security 1991; 16(2):76-116.

Homer-Dixon TF. Environmental scarcities and violent conflict: evidence from cases. International Security 1994; 19(1):5-40.

Klitgaard R. Healing Sick Institutions. Borner S, Paldam M, Eds. The political dimension of economic growth. Proceedings of the IEA conference held in San Jose, Costa Rica. New York, London: St Martins Press, MacMillan Press, 1998.

Knight J. Institutions and Social Conflict. Cambridge: Cambridge University Press, 1992.

Kuperan K, Abdullah N M R, Pomeroy R S, Genio E L and Salamanca A M. Measuring transaction costs of fisheries co-management in San Salvador Island, Philippines. Naga, the ICLARM Quarterly, 24:2, 45-48. 1999.

North DC. Institutions, Institutional Change and Economic Performance. Cambridge: Cambridge University Press, 1990.

North DC. The New Institutional Economics and Third World Development. Harriss, J, Hunter. J, Lewis, C M Eds. The New Institutional Economics and Third World Development. London, New York: Routledge, 1995: 17-26

PANOS/BCAS. Rivers of Life, BCAS: Dhaka/PANOS: London. 1994

Scoones, I. Sustainable rural livelihoods: a framework for analysis IDS Working Paper 1998

Shankland A. Analysing Policy for Sustainable Livelihoods. Institute of Development Studies. Brighton, Sussex. 2000

UNDP. Towards a typology of Sustainable Livelihoods Systems. [www.UNDP.org/sl/documents](http://www.UNDP.org/sl/documents). Last accessed 11 November 2001.

Warner M. Conflict management in Community-Based Natural Resource Projects: Experiences from Fiji and Papua New Guinea. Working Paper 135 edition. London: ODI, 2000.