Consensus Building and Natural Resource Management

Literature Review

Roger Lewins, with Peter Dixon and Julian Barr

The recent interest in consensus building for improved natural resource management has its origins in several related fields of theory and experience. Concerns that centralised states (whether 'democracies' or command economies) seemed ineffective in dealing with local and global environmental issues lead to a new emphasis on decentralisation and subsidiarity. Since the mid-1980's this has resulted in the growing interest in citizen or "non-expert" groups and their potential role in new modes of environmental governance (e.g. Local Agenda 21 after Rio 1992). In the development context, consensus building resonates with the demand for resilient co-management partnerships, collaboratively designed through wide participation and emphasising inclusion and equity. The belief is that new institutions are likely to be sustainable if the interests of all stakeholders are accommodated. The sustainable livelihoods approach can provide a benchmark for the design of processes and management plans in this regard.

The local or traditional processes of conflict resolution that operate in the developing world tend to function to preserve the status quo, or maintain "*business as usual*". This review specifically highlights the processes that may be adopted by an external third party to build consensus between stakeholders (sometimes with apparently conflicting interests) in order to strengthen development initiatives within natural resources management (NRM).

Consensus building processes differ with regard to their desired function, their approach and their long-term effect. The review concludes with a typology that illustrates the scope of consensus building methodologies within NRM - presenting them as a spectrum from directed, problem-solving and arbitrated processes, to more participatory, facilitated processes of joint problem-identification and planning. This latter group demonstrates how some forms of consensus building (from both corporate and development contexts) can successfully be combined with tools commonly used within participatory rural appraisal (PRA) and participatory learning and action (PLA).

The different approaches meet their objectives to varying degrees, but those processes that can build social capital and promote collective action through mutual learning are more likely to provide sustained benefits - effects that can outlive the activities and external support of development projects and programmes.

Introduction

The purpose of this literature review is to provide a synthesis of the evolution, theory and practice of consensus building and its application to natural resource management. The review presents a wide range of academic approaches to and case study accounts of consensus building and comprises six sections:

- Section 1 frames the review by providing an outline of the terms and definitions commonly applied to situations of "conflict" and "consensus". This section presents a simple and widely used model of conflict to view consensus and explain the role played by individual and collective motivation.

- Section 2 examines the evolution of consensus building methods within the developed world, from ad hoc attempts to democratise the resolution of local disputes, to a series of recognised methods and approaches applied to corporate and civil cases. The use of game theory and mathematics in designing and understanding consensus building is briefly examined.

- Section 3 examines four specific approaches to consensus building in more detail: Alternative Dispute Resolution (ADR), Soft Systems Methodology (SSM) (Checkland, 1981; Checkland and Scholes, 1990), the relevance of SSM as Agricultural Knowledge Systems thinking (Röling, 1992; Salomon and Engel, 1997) and ADR as Managing Conflict and Building Consensus as applied to rural livelihood projects (Warner, 1999).

- Section 4 outlines the character of indigenous approaches to consensus building (local dispute resolution) in the developing world and considers the potential for adapting Western approaches to this context.

- Section 5 presents several case studies of consensus building methods applied to NRM - including forests, wetlands and fisheries in South Asia and elsewhere.

- Section 6 concludes the review by providing a typology of approaches to consensus building.

- Glossary of terms

- References

Section 1   Consensus and Conflict

The extensive literature offers a diverse interpretation and treatment of conflict and consensus but for the purposes of this review it is possible to identify a single and flexible working definition of consensus that accommodates several theoretical approaches and relates well to issues within NRM.

Although it need not be a corollary of the absence of conflict, it is useful to introduce the notion of consensus by first considering simple theoretical approaches to conflict. With particular reference to NRM, conflict can be regarded as a situation where strong and persistent divergence of positions (needs, values etc.) among users and other stakeholders presents an obstacle to managing a specific area and/or natural resource (NR)(Rijsberman, 1999). However, conflict as defined here need not be static, permanent, or necessarily negative in the longer-term. Many authors have stressed the positive nature of conflict as a catalyst to adapting failing institutions and see conflict as a necessary precursor to the evolution of appropriate social and political structures for improved management or governance. Powelson (1972), for instance, distinguishes between negative "conflict over consensus" where primary societal objectives are contested and positive "conflict within consensus", where it is merely the best means to achieve commonly respected objectives that are contested (see "The Management of Conflict in Tropical Fisheries" DFID Project R7334 for a comprehensive treatment of conflict)[1].

Conflicting parties tend to defend their own interests but the duration, intensity and end-points of conflicts are a reflection of other, more subtle motivations of the individual or group. Simplistic theories of conflict have assumed self-interest and individualistic behaviour but the 'dual concern' model (Pruitt and Rubin, 1986) incorporates the interest each party has for the welfare of the other (essentially stressing ethical or civic considerations as well as material self-interest underpinning the behaviour of social actors in communities), and predicts five potential end-points to conflict (Figure 1.1).[2] Of these five end-points, the position or outcome of "problem-solving" is the most desirable in being the most likely to result in long-term solutions to conflict. The product of successful problem-solving is consensus i.e. agreement whereby *all* stakeholders perceive their position to be strengthened (Warner, 1999).

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[1] It should be noted that low-level conflict resolution occurs on an on-going basis in most communities (See Chanan 1992 *Out of the shadows: local community action and the European Community.* Luxembourg: Office for the official publications of the European Communities). However, it is predicated on unequal relations of power between parties which may lead to an unfair allocation of entitlements and social exclusion. Third party intermediation, and particularly consensus-management approaches, seek to manage this power dimension so that all parties can reach an agreement that satisfies each (i.e. 'win-win' solutions).

[2] On different approaches which do or do not incorporate a 'societal' or 'community' dimension see Kymlicka, W., 1990 *Contemporary political philosophy: an introduction.* Oxford: Clarendon. Also Giddens, A., 1998 *The third way: the renewal of social democracy.* Cambridge: Polity Press. (The idea of 'Community' has many different meanings and is a 'contested' domain (see Kymlicka 1990 Turner 1990, Lister 1991, Meekosha 1993).The concept has been used ideologically (see Plant 1974, Williams 1983, Etzioni 1995), while its 'utopian' features have been used to support both collective action and liberal individualism (see Smith 1996, Kymlicka 1993, 1995).

If this outcome does not evolve endogenously, the intermediation of a third-party may be required. There are essentially two pro-active responses to conflict – attempts at resolution or attempts at management. Conflict resolution occurs where the fundamental interests of all groups are addressed and satisfied and the sources of conflict are permanently removed (Miall *et al*, 2000). Conflict management, however, depends on limiting or directing the course of conflict by actively enhancing actors' capacity to deal with economic, environmental, social or political change. Rijsberman (ibid.) describes a continuum of conflict management approaches that reflects the nature of intervention and the desired final impact (Figure 1.2). The approaches range from consensus building, where the role of a third party as mediator may be negligible and outcomes or
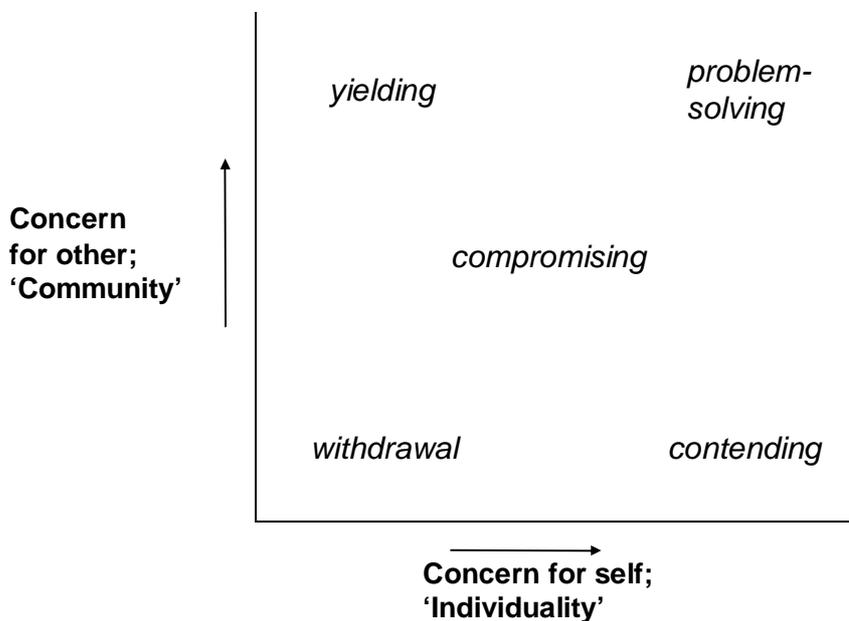

Figure 1.1. The dual concern model with the five basic responses to conflict (adapted from Pruitt and Rubin, 1986).

agreements may be flexible and informal, to "binding assistance". Unlike consensus building, which may emphasise participation, binding assistance is a top-down process where a third party acts as an arbitrator as opposed to mediator[3]. Outcomes here are often termed "agreements" and tend to be legal or contractual in nature.

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[3] Arbitration is defined here as an adjudicatory process where an independent third party issues a judgement after the conflicting parties have presented their case. Mediation is a less formal process where a neutral third party facilitates exchanges between the conflicting groups but has no power to impose a solution (Center for Democracy and Governance - USAID, 2000). At issue of course is whether the adjudicator has either the legitimacy or the ability to impose and maintain this binding assistance. (On the salience of this at the micro-level in relation to Common Property Resources (CPRs) see Ostrom, E., 1987 'Institutional arrangements for resolving the commons dilemma: some contending approaches.' (in McCay, B.J., and Acheson, J.M., *The question of the commons: the culture and ecology of communal resources.* Tucson, Arizona: University of Arizona Press).Ostrom, E., 1990. *Governing the commons: the evolution of*

—————————————— increasing third party intervention ——————————→

Consensus building	Relationship building	Procedural assistance	Substantive assistance	Advisory non-binding assistance	Binding assistance

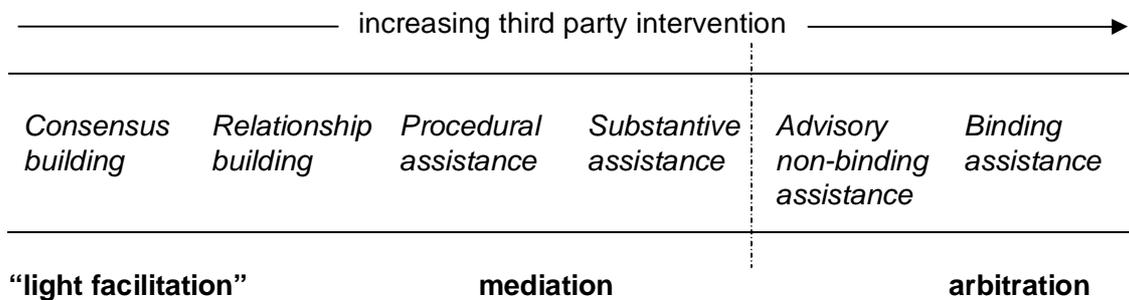**"light facilitation"**   **mediation**   **arbitration**

Figure 1.2. Continuum of Conflict Management Approaches. (Modified from Rijsberman (1999), Moore and Priscoli (1986), Priscoli (1990) and MacNaughton and Brune (1997).)[4]

Consensus building then, can be considered as just one of several tools for the management of conflict (Warner, ibid.), but as conflict management at its most participatory and locale specific. In contrast to the force, avoidance and compromise that characterises conflict resolution or binding approaches, consensus building attempts agreement through co-learning and "mutual gains". In other words, consensus building creates a situation whereby all participants benefit from the process (see Section 2 for a brief explanation of Game Theory and the "win-win" scenario). As such it is based on a concept of community as a 'heterogenous whole' in which there are stakeholders with different needs, livelihoods and goals and with different perspectives on NRM, but also as having a 'sense of community' and an ethical dimension which can transcend the individual self-interest which is prioritised in conflict models of society (e.g Utilitarianism, Marxism).

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institutions for collective action. Cambridge: Cambridge University Press.
[4] This continuum mirrors that suggested by Arnstein (1969) and Biggs (1989) where relations between local people and development professionals/ governments vary along a continuum from collegiate to contractual. In all instances (see also Fig. 3.1 by Scialabba p.11) the significant variable is the relative power (and legitimacy) of one party to impose its decisions concerning NR use on other parties. As experience has shown, NR allocation which is directive is difficult to achieve, can lead to conflict or other 'negative' behaviour (e.g. poaching, black-marketing), and is often unsustainable due to the high cost of policing it.

Section 2.1 The Evolution of Consensus Building Approaches

The majority of debate about and practice relating to consensus building has centred on public or corporate dispute resolution in the developed world. Because the common aim of these approaches is to avoid legal processes, they are collectively known as alternative dispute resolution (ADR, see Section 3.1). Whereas litigation may be described as a process of "*decide, announce, defend*" (Environment Council, 1995), ADR attempts to create value and build consensus, and avoid the rigidity and transaction costs involved in litigation and binding assistance.

Although court-avoidance is now a recognised function of ADR, it grew out of an American social movement in the 1970's attempting to develop new and transparent ways to reach local agreement. Community groups in the U.S. challenged the traditional conventions of oppositional debate and voting and replaced them with an emphasis on informal, flexible agreements between participants. The goal of the entire process shifted from one of reaching a single decision in time (a motion in favour of one party at the expense of another) to that of collective agreement and improved relations between participants.[5]

Before ADR, local groups in the U.S. had modelled their decision-making on Robert's Rules of Order. Colonel Robert published this method in 1870 in response to the escalation of disputes and conflict arising from the chaos of the Gold Rush in San Francisco, and since then the rules have performed a useful function in setting a standard method for group decision-making (Estes, 1989). However, Robert's Rules were based on the procedures of Congress and merely transferred majority voting and complex procedural rules to local groups and scenarios outside government. The assumption was that majority rule was necessary to "restrain the individual" in the best interests of the group (Susskind, 1999). In practice, the complexity of Robert's Rules ensures that only the convenor (not the stakeholders) really understands proceedings, and the ignorance of the participants makes the debating process prone to manipulation. In the 1970's, local groups and organisations started developing alternatives to Robert's Rules that were more inclusive and better suited to the ideologies of the civil rights movements of the time (freedom of speech, awareness building, social integration etc.).

In 1976, the community-based experiments of the early 1970's were transplanted to a regional context with the San Francisco Community Boards Programme where various forms of ADR were adopted for school-based mediation and for use within "neighbourhood justice centres". ADR was then adopted by business during the 1980's as firms, seeking to avoid litigation costs, began to internalise dispute resolution (see Soft Systems Methodology, Section 3). Since then, the use of ADR has grown and evolved into nationally recognised and institutionalised methods for dispute-resolution, particularly in the U.S[6].

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5 This has become known as the 'Third Way' (see Giddens, A., 1998 The third way: the renewal of social democracy. Cambridge: Polity Press.)
[6] Federal district courts have voluntarily adopted ADR approaches in order to reduce costs and delays in civil litigation, for example.

In the 1990s, the role of non-expert (or non-elite) public groups in both the developed and the developing world expanded from one of dispute resolution to a more general contribution to the decision-making process. This new role was partly in response to growing public cynicism and what was seen as increasing alienation from the democratic process and the apparent inability of the market or the state to resolve complex environmental issues. Holmes and Scoones (2000) have undertaken an extensive review of the role and character of various approaches (including neighbourhood forums, citizen's juries, consensus conferences, deliberative polling, multi-criteria mapping, public meetings and rapid and participatory rural appraisal), collectively termed deliberative inclusionary processes (DIPs).

Quoting Bloomfield *et al.* (1998), Holmes and Scoones highlight five characteristics common to DIPs; i) an emphasis on social interaction (face-to-face meetings), ii) a reliance on verbal debate, iii) an appreciation of the likely diversity of viewpoints, iv) a period to reflect on and re-evaluate the positions of participants, and v) a recognition that the value of the process itself may outweigh the quality of the decisions produced.

These processes may function with or without the support of the state but the political space for them to operate is often created by government. In particular, DIPs in the context of environmental decision-making often takes place at the level of local government and with central support. The state, in turn, gains greater perceived legitimacy in policy and planning, and the benefits derived through increased public support and compliance (Pelletier, 1999). However, whereas DIPs in the developed world may allow direct links to policy formation, similar process in the developing world tend to extract information for deliberation by policy-makers in isolation (Holmes and Scoones, ibid.). As with other forms of negotiation and attempts to build consensus, there are also real risks that DIPs may fail to represent the true diversity of interests and may be influenced by underlying power relations[7] (see also PAPD evaluations within this project).

While DIPs are not dealt with further in this review, it is worth noting that the institutional structure of successful DIPs may help provide suitable models for other processes and their linkage to secondary stakeholders and policy and planning at a wider scale (eg. support for local consensus building in NRM and its scaling-up as co-management).

Section 2.2   Theoretical Approaches to Consensus Building

A large sub-section of the research on consensus and conflict adopts a mathematical (or cost/benefit) approach in attempting to understand the cause, stability and likelihood of resolution by ascribing certain weights and scores to behaviours (and so to outcomes) in "games". Pruitt and Carnevale (1993) explain how negotiation relates to games of moves in two ways: 1) games of moves can be solved by re-negotiating the

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[7] Holmes and Scoones highlight the reliance that DIPs place on the potential for "*communicative rationality*" (the power of discursive and social processes to re-define and discover truths for the common good (Habermas, 1984)). However, this effect will depend on egalitarian and uncoerced processes free from the effects of initial variations in power and selfish manipulation (Dryzek, 1990). Holmes and Scoones cite Pellow (1999) who discovered that "*infrapolitics*" shaped the agenda for discussion in several case studies of DIPs.

rules and attempting dialogue to reach agreement (on future rules of engagement) and; 2) the strategies in games of moves (concession-making, position-taking and the withholding of information) are comparable to the tactics employed in negotiation.

Conflict resolution has frequently been viewed as a zero-sum game where the outcome of negotiation is to shift benefits (sovereignty of territory, rights to practice traditional livelihoods etc.) from one party to another (see Pruitt and Carnevale). By contrast, consensus building is better represented as a positive-sum game because the total size of the benefits to be gained is not fixed, but can grow according to the quality of the process with potential commensurate gains for all parties.

The simplest and most extensively researched example of a non-zero sum game is the Prisoner's Dilemma (Dawes, 1973) which neatly represents the persistence of conflict and the entrenchment of counter-intuitive positions. In the game, two prisoners each have two options - to co-operate with each other (remain silent) or to defect (inform on the other). The reward structure of the game is such that the rational choice for each player is non-co-operation, even though the players realise co-operation may provide a greater total pay-off. The prisoner's dilemma mirrors negotiation in that the players selfishly take the easier option to exploit one another, but this is tempered by an understanding that co-operation (consensus) may be preferable. According to Lax and Sebenius (1986), in real situations of conflict, the "negotiator's dilemma" is choosing whether to contend an issue ("claiming value") or to solve a problem ("creating value") i.e. to accept immediate gains or to gamble and expend time trying to increase total benefits through dialogue. However, the social trap of this dilemma depends on the game being played only once. Axelrod (1984) has demonstrated how players can learn co-operative behaviour through repetition and that a combination of "nice" and "nasty" responses will eventually evolve into a co-operative strategy.

More elaborate theoretical games attempt to score the likelihood of conflict resolution with respect to starting conditions, the behaviour of players and the context of dispute. For instance, Hackett et al. (1995) analysed conflict resolution in CPRs in relation to the heterogeneity of endowments (differences in access to benefits) and the flow of information (i.e. a "stark" institutional setting versus face-to-face communication). Although models such as these may provide insights into the relative importance of the factors surrounding conflict and successful negotiation, their usefulness is limited because it is difficult to ensure that the rules of the game and the scoring of outcomes reflect the underlying motivations and norms in field situations involving real conflicts. In the above study, for example, heterogeneities in initial endowments were found to have less influence on the ability to craft joint "surplus maximising" agreements (consensus or win-win outcomes) than experience from field observation would suggest. Hackett et al. acknowledge that their laboratory modelling of conflict assumes access to complete information and the reversibility of outcomes and decisions - conditions unlikely to be met in real contexts involving conflict within NRM.

Mathematical approaches to understanding conflict and reaching agreement need not be abstract or theoretical, though. Multi-criteria analysis (MCA) has been used in attempts to mathematically reconcile the diversity of stakeholder opinions and objectives regarding the management of natural resources. (See Mardle and Pascoe (1997) for a comprehensive review of MCA applications in fisheries). The various

management objectives are weighted (i.e. ecological, social, economic) and best-fit management strategies are calculated by applying sets of pre-designed algorithms. However, the trade-offs calculated by MCA rely on "satisficing" (essentially identifying strategies by upsetting the least number – or least important - of stakeholders) and as such represent "finding compromise" rather than "reaching consensus" through problem-solving (see Figure 1.1). In addition, MCA is still largely experimental in the development context and has only been applied where policy and management options are tightly framed and where large and reliable sets of data are available.[8]

Brown *et al*. (2000) have applied a multi-criteria approach to decision-making within the Buccoo Reef Marine Park, Tobago (DFID Project R7408). Four potential policy scenarios were tested with respect to the environmental, economic and social objectives of the various stakeholder groups. Stakeholder analysis was used to identify relevant actors for consultation and objectives were quantified and weighted with techniques derived from environmental economics, social analysis and ecological modelling. The social and political structure of Tobago allowed an intensive facilitative process with both primary and secondary stakeholders. However, processes such as these are dependent on respondents having access to complete information and having a good and accurate understanding of the potential impact of alternative management scenarios on their livelihoods (employment, earnings, etc.). In addition, the development of best-fit management plans through balancing stakeholder objectives does not rest easily with consensus building – especially if the level of understanding between stakeholders and their underlying motives does not increase (see for instance the review of Managing Conflict and Building Consensus, Section 3.4). Where the active involvement of secondary stakeholders is problematic it may be more productive to build the capacity of local groups to negotiate and engage with other relevant stakeholders directly.[9]

A related mathematical tool is Q-methodology, developed by the physicist-psychologist William Stephenson in the 1930s. Q-methodology uses factor analysis to analyse and represent the diversity of views held by stakeholders in any given situation and can be used to produce typologies of subjective viewpoints. Steelman and Maguire (1999), for example, have undertaken an extensive review of the environmental preferences and beliefs of residents within the Chattooga watershed in the US. Initial interviews and written responses were used to develop 55 "Q-sample statements" and respondents

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[8] For an example of the trade-offs involved see the Tangail CPP. A scoping survey carried out by consultants at the Tangail Compartmentalization Pilot Project (CPP) (an FCD project in an area of about 13,000 hectares west of Dhaka), noted that, unless mitigation measures were implemented, 'the predicted annual loss [of fish] will have a serious impact on the nutritional status of about 17,000 of the 29,000 households in the project area and on the living standards of 260 professional fishermen as well' (CPP: 1996a). The Dutch consultants to the project nevertheless suggested that the benefits to houses, infrastructure and agriculture would be positive after the implementation of the CPP despite the negative impact for fisheries (CPP: 1996b). It is not clear from their account, however, whether HHs negatively affected were consulted as to their views on the potential trade-offs, or which criteria should be given most weighting and who should determine this. (For a detailed critique of the CPP from an environmental and social perspective see Soussan and Koudstall 1995.)

[9] Additionally, as with the Tangail CPP evaluation (see previous footnote), such a 'benefit-cost' analysis raises issues concerning the extent of primary stakeholder participation in planning for NR allocation between competing ends, which is reminiscent of those raised by large infrastructural projects such as dams. Where there are multifunctional NRs, what function, and whose interests, should be prioritised?

were asked to rank the statements from "disagree" to "strongly agree". QMETHOD software was used to analyse the range of responses and three distinct management philosophies were identified: 1) minimise human disturbance, 2) active management for timber and 3) maintain access and minimise impact. In addition, several consensus statements emerged (all respondents agreed that the water resource, mixed forest and hardwood forest are crucial for the residents of the watershed). Steelman and Maguire intend that their findings influence the US Forest Service in policy development by:

> *"…1) defining different publics with which the agency can consult as it shapes its management direction, 2) identifying public viewpoints and perceptions, 3) providing sharper insight into the public's preferred management directions, 4) identifying criteria that are important to the public, and 5) explicitly outlining areas of consensus and conflict."[10]*

The most useful contribution Q-methodology and MCA can make is in presenting the range of stakeholder perspectives to policy makers and to the stakeholder groups usually excluded from formal decision-making processes. Consensus may be fostered if these studies are carefully designed and incorporate further inter-stakeholder dialogue *after* analysis.

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[10] Similar goals underlie the problem-census stage of the PAPD methodology in the current research. Note, however, that the two methodologies differ in their derivation of stakeholder groups - Q-methodology deriving different 'publics' from their responses to a formal measure (the questionnaire), whereas the PAPD methodology constructs stakeholder groups according to a mix of wealth-ranking, occupational and gender indices. In the PAPD methodology similarity of response between groups (ie.a common 'problem') is taken as an opportunity for building wider consensual NRM, whereas Q-methodology appears to focus primarily on *differences* between groups.

Section 3.1   Alternative Dispute Resolution

Although the nature of ADR processes vary according to their setting (civic environmental or corporate dispute etc.) they share a common emphasis on informality and direct and equal participation by all stakeholder groups. In consequence compliance and satisfaction with ADR negotiated settlements tends to exceed those reached through formal legal means. ADR achieves this by reducing the emphasis on written rules and evidence to a minimum, and by encouraging openness, information-sharing and face-to-face relations between the parties (exactly the characteristics of ADR that make it interesting in the context of consensus building and NRM in the developing world).

There are six basic ADR models, representing the full spectrum of third party intervention (see Center for Democracy and Governance, 2000; Scialabba, 1998). Although it is convenient to present these models as distinct approaches, the nature of any one process of resolution may vary over time, with respect to certain stakeholders, or in relation to sub-sets of problems. Brown et al, (1995) use the analogy of a mountain to represent this spectrum and the desired end-point of self-negotiation as its summit (see Figure 3.1):

> *"At the summit of the mountain is co-operative teamwork, with the goal of achieving a synergy of solutions of mutual advantage to all interests. At the base of the mountain, from where any climb has to begin, are isolation, the decision not to engage in the debate at all, and confrontation, in which positions have been adopted in fixed opposition to one another."*
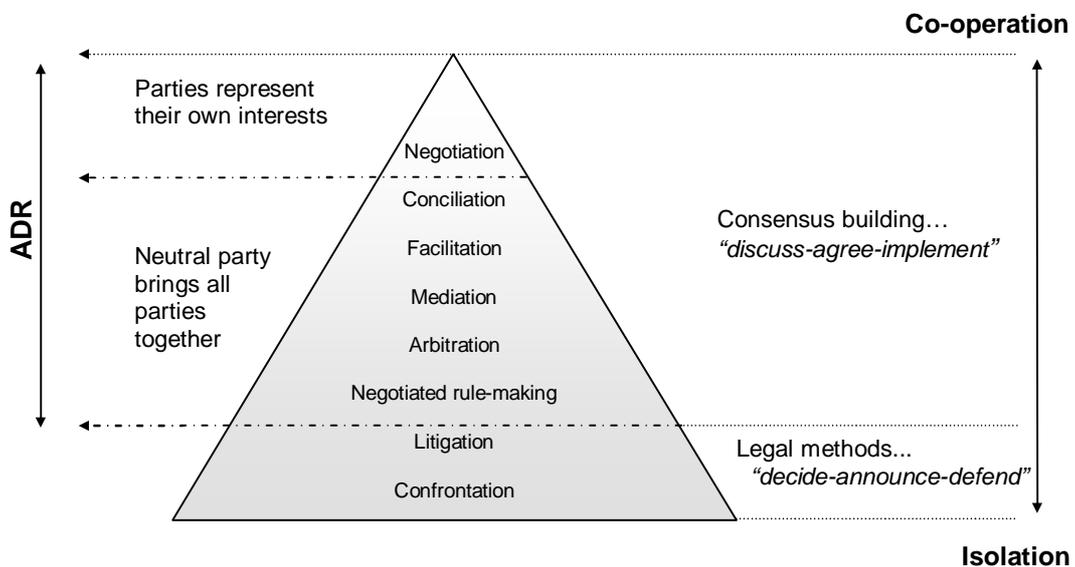

Figure 3.1. The models of alternative dispute resolution (from Scialabba, 1998).

Negotiation – negotiation is the most common form of dispute resolution. All parties in the dispute voluntarily seek a mutually acceptable solution and the disputants are free

to control the process and eventual outcomes. Each party has full responsibility to present and defend its own interests.

Conciliation – a process whereby a third party meets with disputants separately in an effort to promote mutual understanding and future dialogue. The outside party is involved at the beginning of the process, or later only in a supportive role (as record-keeper, administrator etc.).

Facilitation – the third party here is more actively involved but, as in conciliation, is not expected to influence outcomes by volunteering ideas or actively moving parties towards agreement. However, facilitators may play a supportive role in offering advice to groups or individuals involved in the process.

Mediation – a flexible process in which disputants meet together or in turn, with a neutral third party. The mediator has no power to broker agreement or directly influence outcomes but may have a role analysing the conflict and identifying underlying interests or best alternatives to negotiated settlements.

Arbitration – an adjudicatory process where disputants present their arguments, positions and interests as evidence and an independent party casts binding or non-binding judgement. This is the obvious alternative to court proceedings but crucially differs in that disputants can choose the identity of the arbitrator. A hybrid process known as "med-arb" combines an early emphasis on negotiation and the supportive approach of mediation with the power to issue a final decision if none is forthcoming.

Negotiated rule-making – this process is increasingly applied to large-scale public disputes. Representatives from each party are invited to present their case and negotiate changes in existing management rules. This principle is supported in Chapter 28 of Agenda 21 (Scialabba ibid.)[11].

By introducing consensus building to a new audience and set of users, ADR has encouraged a proliferation of approaches and progressive thinking on dispute resolution. A recurrent theme in ADR (and a mantra for facilitators and mediators) has been the emphasis on understanding disputes <u>from the perspectives of the contesting parties</u>. In order to gain a constructive outcome such as consensus, any third party must understand what motivates the groups in the dispute. Again, the need to separate positions from interests is repeatedly stressed in the ADR literature. In their influential book *"Getting to Yes"*, Fisher and Ury (1981) state:

> *"Interests motivate people; they are the silent movers behind the hubbub of positions. Your position is something you have decided upon. Your interests are what caused you to so decide.Reconciling interests rather than positions works for two reasons. First, for every interest there usually exist several*

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[11] *"Through consultation and consensus-building, local authorities would learn from citizens and from local, civic, community, business and industrial organisations and acquire the information needed for formulating the best strategies."* (quoted in Scialabba, 1998.)

possible positions that could satisfy it. All too often people simply adopt the most obvious position…."

Recently, these principles have been applied as "alternative conflict resolution" (ACR) in attempts to build consensus within NRM in the developing world[12]. ACR also emphasises dialogue and an improved understanding of underlying interests, but tends to be applied to smooth the implementation of NRM development projects (see Section 3.4). For example, Borrini-Feyerbend (1997) outlines the principles of negotiation and mediation for project personnel involved in wildlife conservation. However, initiatives such as these are obviously externally-driven. It is questionable to what extent mutual learning occurs between local stakeholders and the convenors of the process, and there is a danger that mediators define the "acceptable" outcomes, themselves.

A consideration of their application in the developing world reveals some of the limitations of ADR models.. The key theme of ADR is one of pro-active engagement and the concerted effort of all parties to seek an agreement. In some respect, the quality of the process will reflect the participants' understanding of ADR (their rights, knowledge of procedure etc.) and the ability of the participants to maintain momentum and dialogue. Any imbalance in skills, knowledge or confidence is likely to weaken the likelihood of reaching lasting consensus. The ability of ADR to overcome the power imbalances that characterise much conflict in the developing world is debatable, while if disenfranchised groups are proactively supported there is a danger of creating "coerced harmony" that ultimately works to perpetuate underlying problems (Scialabba ibid.). Again, ADR requires a considerable investment in institutional and financial support and if realistic approaches are not adopted the poor are likely to face high opportunity costs (e.g. investments of time) which may be a disincentive to participation.

Section 3.2   Soft Systems Methodology

Soft Systems Methodology (SSM) was developed in the 1970's in response to the apparent inability of existing systems approaches to deal with human and social issues[13]. Previously, "systems engineering" (SE) had been successfully applied to problems within so-called "hard systems", where the components of the system are easily identifiable, neatly bounded, and where the desirable design or management goal is clearly defined. Attempts to transfer rigid SE to problem-solving in contexts such as business management and other human-activity systems have high-lighted the limitations of these approaches but have also helped to develop theory on the complexity of human-based problems and their resolution. A key point in the development of systems thinking was Checkland's (1981) observation that these human problems (as products of numerous independent individuals with unique world views) are difficult to define or constrain and as such are better considered components

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[12] Traditional and indigenous approaches to reaching agreement may share marked similarities to Western ADR, however.

[13] A "system" can be considered as any "….set of elements mutually related such that the set constitutes a whole having properties as an entity…..the whole may be able to survive in a changing environment by taking action in response to shocks from the environment". (Checkland and Scholes, 1990).

or products of a "soft system". [14] In contrast, hard systems are easily quantified, "knowledge-rich" and predictable (Warner, 1997).

The emergence over the last two decades of the soft systems approach to problem-solving is a direct result of Peter Checkland's pioneering work at the University of Lancaster in the UK.[15] Checkland attempted to apply SE thinking to several case studies of corporate and government management, but in each case found the complexity of the issues involved (and particularly the conflicting definition of 'the system' by different parties) required a new and more flexible approach to problem-solving. According to Checkland and Scholes (1990), it is the unbounded character of soft systems and the diversity of perceptions and positions that characterise management problems and make them particularly difficult to resolve:

> *"When Lancaster researchers tried to apply the methodology of systems engineering to ill-defined problem situations, they quickly found themselves in difficulties because the question: "What is the system?" and "What are its objectives?" were not answerable. What in fact made the situations ill-defined was that objectives were unclear and that both what to do and how to do it were problematical. With the intended methodology manifestly inappropriate, some fundamental rethinking was necessary".*

Checkland approached human interaction and organisational culture as a soft system of individuals each interpreting the world differently and interacting in complex, changing and unpredictable ways[16]. In such systems, problems do not exist as 'technical' problems *per se* in isolation from people, but are shaped by them and may be influenced by strongly entrenched beliefs, values and positions. Soft system problems tend to be numerous and "messy" because they are difficult to disentangle and because the consequences of the problems are not well understood (Ackoff, 1969).

Checkland (1981) developed a step-wise and iterative methodology that in turn describes the real world situation, devises explanatory models, debates their relevance and then implements changes to the system (Figure 3.2). Stages 1 and 2 attempt to represent the management system as vividly as possible – to produce what Checkland calls "rich pictures" of the real world. It is important to describe both the design of current management institutions (the "structure") and the dynamics of management activity (the "process"). Stage 3 involves defining the key systems that appear to be central to the management situation. These definitions are intended to encapsulate the nature and character of these systems. Stages 4 and 5 are key to the whole methodology. First, explanatory models of those systems seen as influential at Stage 3

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[14] For systems thinking as applied in NR research see Ison, R.L., Maiteny, P.T., Carr, S., and Thomas, A., 1996 'Systems methodologies for sustainable natural resources research and development.' Paper presented at DFID SEM workshop March 1996. A shorter version of this has been published as Ison, R.L., Maiteny, P.T., and Carr, S., 1997 'Systems methodologies for sustainable natural resources research and development.' *Agricultural systems,* Vol. 55, No.2

[15] Checkland's work was part of a wide-spread shift in the social sciences away from positivism to interpretivism (see e.g. Kuhn 1962)
[16] What Checkland calls the Human Activity System (HAS).

are devised (Stage 4), and these are then "brought into the real world" and set against the situation as it seems to operate (Stage 5). These stages directly reflect Checkland's emphasis on participation and negotiation, and are deliberately designed to generate discussion and debate. The debate will identify potential desirable and feasible changes[17] to the management system. Stage 7 then implements the suggested changes to the system, which, in turn, defines new problems that may be tackled by the methodology once again.
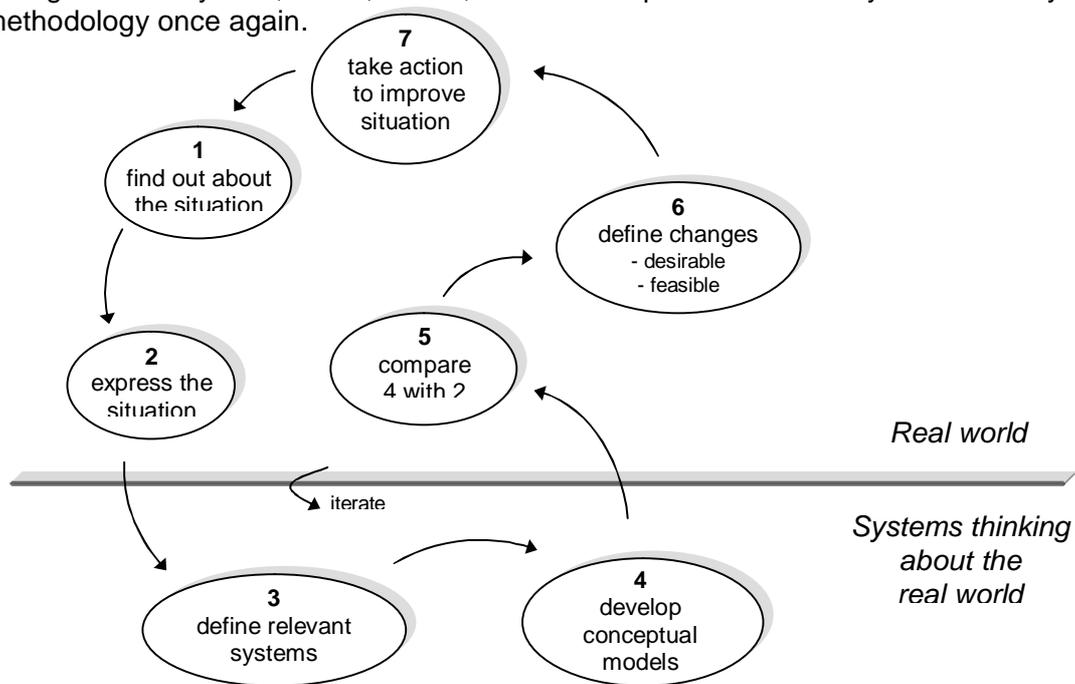

Figure 3.2. Checkland's Soft Systems Methodology in summary (adapted from: Checkland, 1981).

One of SSM's main contributions to thinking on consensus building is a philosophical one. In rejecting a reductionist and goal-oriented approach to problems-solving, and acknowledging the interconnectedness of problems, stakeholders and the effect of analysts themselves on 'problem' definition, Checkland justifies learning about the processes themselves, rather than searching for fixed solutions. SSM is more concerned with social learning, with engendering discussion (through devising and debating the merits of alternative abstract models of the real world, and defining desirable and feasible changes) than in finding solutions to pre-defined problems. This emphasis on learning and participation, and an acceptance of the diversity of values and positions, has influenced the design of consensus building approaches outside the sphere of business management in which SSM was originally developed and tested. SSM is applicable to any multi-stakeholder context (such as NRM systems) and its focus on dialogue and participation has led to its adoption in the development context as Agricultural Knowledge Systems thinking (Section 3.3)[18].

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[17] Desirable and feasible "..given prevailing attitudes and power structures, and having regard to the history of the situation under examination." (Checkland, 1981).

[18] SSM also influenced the design of the PAPD workshop approach of CNRS and Newcastle University in

Section 3.3 Agricultural Knowledge and Information Systems and Platforms for Negotiation

Recent analysis of the process of innovation and networking within agricultural development and extension has emphasised the diversity of stakeholder perspectives and the speed of change in their relations and positions. The agricultural knowledge and information systems (AKIS) approach developed by Niels Röling and Monique Salomon (1992) and their colleagues at Wageningen Agricultural University in the Netherlands, recognises the need to understand and manage these dynamics for effective agricultural development. AKIS rejects the top-down and narrow target-group mentality to extension (as in Training & Visit), places the onus on collective action and stakeholder input to NRM (Steins and Edwards, 2000) and, in moving from a technical to a knowledge-based approach, seeks an improved understanding of the role of social institutions in dissemination and learning[19].

AKIS focuses on the precursors to social innovation for successful agricultural development and stresses that successful development depends on "strategic consensus" - suitable institutions and patterns of interaction must be fostered (Engel and Salomon, 1997). A better understanding of the current synergistic system of linkages, the processes of convergence (the merging of positions and ways of thinking), and co-learning is required wherever the complexity and speed of change (social, economic, environmental change) creates conflict. This focus on the convergence of positions in agricultural extension reflects the diversity of objectives, perspectives and relationships within NRM generally, and suggests a wider contribution from AKIS to consensus building.

The AKIS work on agricultural extension has highlighted four determinants for success within management systems: 1) co-operation between actors/ stakeholders; 2) effective internal and external communications and information-flows; 3) transparency and agreement among actors with respect to interests and objectives and; 4) the degree to which tasks are divided and co-ordinated within the system so that knowledge is shared (Engel and Salomon, ibid.). All four relate to managing institutions: the first three to human relationships and the degree of consensus between actors, the last to questions of structure and design. The main emphasis here is on assuring good information flow and transparency and so enhancing the scope for consensus (a central tenet of Habermas' Communicative Action (1987) - see also Section 2 on games). However, in order to achieve these four determinants, the various stakeholders must be assured access to suitable "*platforms for resource use negotiation*" - defined by Röling (1994)

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this project (see Report 3).

[19] There is a critical mass of researchers at Wageningen, which includes Long and van der Ploeg as well as Roling. All focus on the heterogeneity of the social fabric (e.g. 'farming styles', 'coupled livelihoods'), and the subtlety of the linkages between the different actors at the local level and between them and the wider social and regulatory structures in which they are located (e.g. endogenous development). For some key texts see bibliography. The emphasis of AKIS and RAAKS is shared with the sustainable livelihoods approach (see Section 4) and the PAPD process of Newcastle University/CNRS in this project. (For a general illustration of the approach see Barr *et al* (2000a, 2000b).

as statutory or voluntary decision-making bodies dealing with specific sets of NRM problems and representing interdependent stakeholders. Platforms here can be interpreted as formal or informal decision-making institutions.

The concept of "social learning" is central to AKIS and to much of the literature on platforms for resource use negotiation in general (Steins and Edwards, 2000). Quoting Glasbergen (1996), Steins and Edwards accept social learning as:

> *"a process that can be encouraged by lifting barriers to communication and by encouraging interaction between the parties involved in policy issues. The core idea is that parties can learn from each other by more open and responsive communication".*

Platforms for negotiation provide the opportunity for social learning by breaking down barriers and encouraging new relations. This, in turn, increases the likelihood of creative solutions to NRM problems through collective action rather than positional self-interest.

In their review of empirical work on (CPR) management, Steins and Edwards identify four key variables that influence the effectiveness of platforms to promote collective solutions to NRM problems – scale, process, representation and heterogeneity.

The question of scale is central to the design of any institution and is complicated by the pattern of overlapping informal and formal institutional structures present in virtually all NRM systems. The incompatibility of some platforms with pre-existing traditional or government institutional structures highlighted by Röling and Jiggins (1998) could be avoided by ensuring that new systems are given legitimacy by being nested within pre-existing frameworks (Ostrom, 1990). New platforms should (where possible) be integrated within the system of formal management institutions and should ideally be recognised by government, though it is recognised that many NR systems (and the problems associated with them) do not readily fit with administrative divisions established for other purposes[20]. In addition, the scale at which platforms are established should be politically and environmentally appropriate. In the case of migratory fish stocks, for instance, they should at some level represent users across the whole range of these species (i.e. across watersheds, riverine and marine ecosystems)[21].

Processes of social learning, conflict resolution and negotiation are a key factor in the effectiveness of platforms, and are central to their functioning. These educational and awareness-building activities are also likely to strengthen actors' decision-making capabilities and improve the longevity of platforms as institutions.

Representation and user heterogeneity are related. Platforms should represent the diversity of positions held by a range of stakeholders including those affected by, but

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[20] In Bangladesh User Management Committees and Lake Management Groups within the CBFM and Oxbow Lakes Project are limited in their ability to implement change because they are not legally recognised institutions (see Report 6).
[21] On the need for different management arrangements for e.g.'white' and 'black' fish, see FAO 1999

not directly reliant on, the activity or resource in question.[22] Cultural norms should obviously be considered in relation to the role of women or ethnic groups in these institutions, but it is important to include as many minority interests and perspectives as is politically feasible.

The influence of increasing user heterogeneity on prospects for collective action is considered a limitation by some authors on the grounds that stakeholder positions and interests are less likely to be reconciled. However, Steins and Edwards (ibid.), quoting Keohane and Ostrom (1990), suggest that diversity within platforms can add value to processes through improved problem-solving and the accelerated exchange of ideas through synergy. In this way, it can be argued that the range of endowments and preferences presented by a diverse user group actually promotes the attainment of solutions in a process analogous to trading i.e. diversity (in entitlements, skills etc.) provides an incentive for co-operation through exchange and potential mutual gains.

Engel and Salomon (ibid.) have developed a participatory method that allows extension practitioners and local stakeholders to jointly identify the potential for development through platforms. Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) is a set of tools that seeks to evaluate and understand both the nature of co-operation and conflict (the extent to which stakeholder objectives and positions/interests are compatible) and the characteristics of existing institutions and linkages (how management tasks are sub-divided and co-ordinated, and how knowledge is shared). For each of the sixteen steps within RAAKS, a set of analytical methods or design options are offered to provide alternative perspectives or "windows" on management issues and the suitable participatory tools to gather and process relevant information. The process can be enhanced through stakeholder participation in the choice of appropriate tools at each of the steps (Figure 3.3).

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[22] DFID distinguishes between primary stakeholders (who may be directly affected by an intervention) and secondary stakeholders (who have a tangential interest in the activity, resource in question, or in any change of practice) (see DFID 1998).
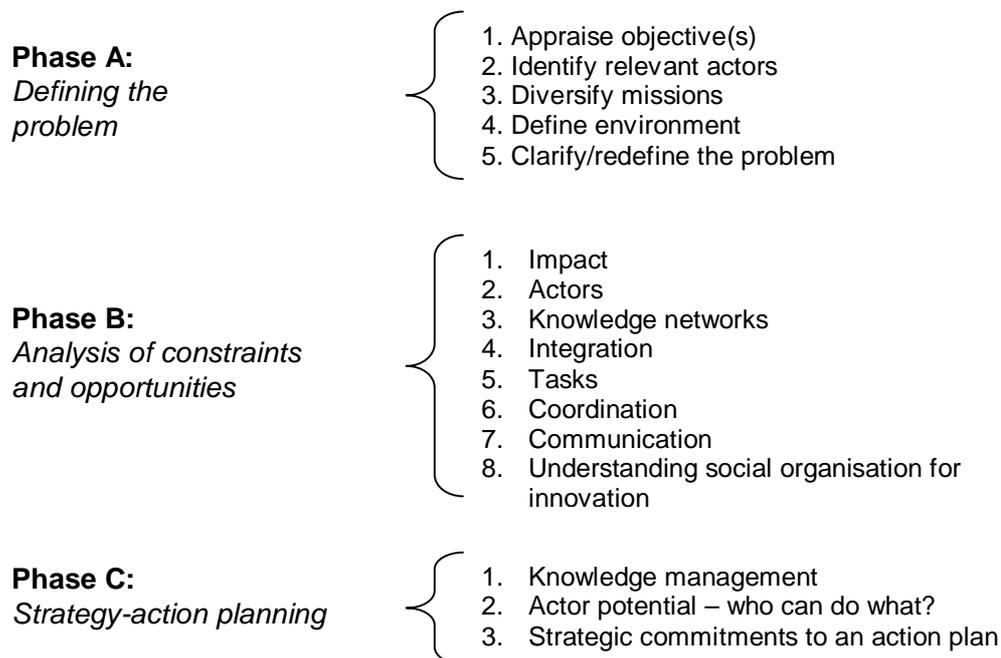
Phase A:
Defining the problem

1. Appraise objective(s)
2. Identify relevant actors
3. Diversify missions
4. Define environment
5. Clarify/redefine the problem

Phase B:
Analysis of constraints and opportunities

1. Impact
2. Actors
3. Knowledge networks
4. Integration
5. Tasks
6. Coordination
7. Communication
8. Understanding social organisation for innovation

Phase C:
Strategy-action planning

1. Knowledge management
2. Actor potential – who can do what?
3. Strategic commitments to an action plan

Figure 3.3. The activities of RAAKS summarised (after Ramirez, 1998).

There is potential for RAAKS to be applied to scenarios other than those of agricultural extension or the developing world, however, and Engel and Salomon recognise that these tools can be applied to any system where the speed of environmental (or economic) change requires innovative responses.

The theoretical basis of AKIS is the social actor approach which sees people and language as central to an understanding of complex social constructs such as NRM systems (Röling, 1996, Long and van der Ploeg 1994, Long & Long 1992). In acknowledging the complexity of interaction between societies and NR systems, the social actor and AKIS approach, in turn, relate to and draws from soft systems methodology (Checkland, 1981: see Section 3.2). In the case of NRM, the "hard system" is represented by the natural resource and the "soft system" by its management through human interaction and relations. In accepting that NRM objectives vary between stakeholders and are not set, and through the promotion of suitable platforms for negotiation, the AKIS approach mirrors that of Checkland and his application of systems methodology to consensus building in the corporate setting.

Engel and Salomon's convergence as the narrowing of "schools of thought" is analogous to consensus, and the AKIS approach relates to consensus building and NRM in a much wider context than agricultural extension. For instance, in confronting institutional issues such as the effects of scale, breadth of representation, the role of social learning and informal networks, it resonates with the sustainable livelihoods approach to development and particularly with respect to social capital and transforming structures (see Section 4). In summary, the AKIS approach contributes to

the bank of theoretical work on consensus building by adopting a soft systems approach to NRM systems. It does this by stressing the mutual interdependence of actors within systems and the importance of suitably designed institutions (platforms) to promote co-learning and collective responses to management problems.

Section 3.4 Managing Conflict and Building Consensus in Rural Livelihoods Projects

In acknowledging stakeholder interconnectedness and the central role of social capital in building consensus, Warner (ibid.) has developed a manual, incorporating the sustainable livelihoods approach, for the improved management of participatory community-based and externally driven projects. *"Managing Conflict and Building Consensus in Rural Livelihoods Projects – strategies, principles, tools and training materials"* (MCBC for short) is a comprehensive introduction to consensus building for GO, NGO and community partners that outlines the motivation behind conflict and some basic ground rules for seeking consensus. The manual is based on guidelines developed by the Overseas Development Institute for the management of community-based natural resource projects in Fiji and Papua New Guinea, funded by the DFID and organised by the United Kingdom Foundation for the Peoples of the South Pacific[23].
The aim of MCBC is to improve the management of stakeholder negotiation within NRM projects by highlighting and making accessible the key concepts of consensus building to project managers and personnel. The manual achieves this by introducing the core issues diagrammatically and by providing exercises throughout the text for use in a workshop setting. MCBC offers guidance on problem solving *within* existing projects where there are disputes between project stakeholders, rather than a tool for participatory consensus building *prior to* specific interventions.

Warner provides simple outlines of conflict theory and is careful to approach consensus building as a conflict management tool, recognising that the goal is not necessarily to remove or tackle the underlying causes of disputes, as conflict resolution does, but to seek "creative lateral solutions" which supersede the causes of dispute through mutual learning. [24]

In presenting consensus building in the context of the sustainable livelihoods framework and livelihoods assets, Warner suggests a potentially wider role for its application. Consensus building is introduced as a method to improve co-operation and co-ordination between (and within) civil society and formal institutions. Within the context of the sustainable livelihoods approach, this is achieved by consolidating human capital (through improving skills and awareness-building) and particularly social capital, by building trust, fostering open dialogue and creating communication networks between stakeholders. In turn, consensus can both enhance the performance of existing management institutions and lead to the evolution of new institutions as

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[23] Michael Warner acknowledges contributions to the manual by the Centre for Rural Development Training,University of Wolverhampton (the originators of the RAAKS Handbook), the Foundation for the People of the South Pacific in Fiji, the Foundation for People and Community Development in Papua New Guinea and the PEACE Foundation.

[24] That is, the reasons for conflict between stakeholders 'fall away' or are suspended in the light of the new context created by the lateral thinking.

transforming structures (see Section 4). In addition to consolidating social capital at the micro-level of community or household, the manual also presents consensus building as a tool to strengthen vertical linkages between civil society and formal institutions and as a method to strengthen the cross-sectoral horizontal linkages between these institutions. In this way, consensus building may have a role to play in improving co-ordination and integration not only at the micro-level but also at the regional and national administrative level.

The manual develops its approach to consensus building by first defining the roots of conflict within NRM as either "developmental" and resulting from changing economic or environmental factors, or "structural" and resulting from endogenous and pre-existing grievances or imbalances of power[25]. Consensus building is attracting more interest, Warner argues, because conventional "adversarial" approaches to conflict have failed to recognise this complexity. The manual stresses the rigidity and limitations of more easily achieved "solutions", particularly of compromise which is so often confused with consensus (see Section 1 and Figure 1.1).

The design of NRM projects in the developing world has tended to restrict opportunities for finding creative solutions to conflict because stakeholder motivation is generally only considered in relation to successful project management and the attainment of project goals (which are usually set by external agencies). If project design is rigid (i.e 'blueprint') and stakeholder objectives are seen as fixed, the prospects for reaching productive solutions to underlying conflict are immediately reduced. Although projects may attempt an early understanding of existing conflict and power structures, stakeholder analysis tends only to be adopted to identify beneficiary groups and those groups that provide a potential threat to the achievement of project goals. A fundamental understanding of the pattern of interaction between stakeholders and the underlying motivation for this are normally not considered. Warner presents this as the "compromise" approach to projects, whereby stakeholder analysis uncovers initial positions and then works to find "best fit" solutions within the rigid frame of the project. The next requirement in this cycle is to invest time and energy convincing stakeholder groups of the merits of these "solutions".

By contrast, a "consensus" approach first attempts to understand stakeholders' social and economic needs that shape their positions, and takes a process approach to project management. in this respect, the Manual's approach to consensus building is based on Fisher and Ury's distinction between positions and interests (Section 3.1). Warner states:

> *"The approach assumes that different stakeholders will find that they have more underlying needs in common than they did initial objectives. This widening of the area of the "common ground" provides greater scope for finding "win-win" solutions."*

The MCBC approach to consensus building depends on: 1) directing conflicting parties towards addressing their underlying needs and away from negotiating their immediate

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[25] Developmental and structural conflict are not mutually exclusive – developmental pressures can re-awaken or aggravate historic disputes, for instance.

demands; 2) considering a wide and creative range of options instead of single solutions and; 3) eschewing personalised and exaggerated positions within the conflict and attempting an improved understanding of people's underlying needs.

One advantage of consensus building over a stakeholder analysis approach to projects is that participants are more likely to perceive outcomes as legitimate and useful, having been involved in a participatory process of co-learning – that is they come to have a high degree of ownership of the process and of the collective outcomes which emerge from it. Warner presents the consensus building process with respect to ten overlapping stages that should be approached in sequence (Figure 3.4)

Accommodate cultural differences – the manual acknowledges that different cultures may perceive conflict in very different ways. Violence, negotiation or reconciliation can have very specific meanings depending on social norms and values (see Section 4). Culture can also dictate the appropriateness of the decision-making process (voting, autocracy etc.) and of outcomes (written or verbal, for instance). Where cultural diversity is low it may be appropriate to incorporate traditional or existing systems of conflict management but if cultural diversity is high the manual argues, a new and independent mechanism for conflict management may need to be devised.

Acknowledge perceptions – a crucial early stage to understanding conflict is to acknowledge that although people's perceptions do differ, they are real. In other words, perceptions are manifested physically and have real effects. It is important that facilitators should comprehend ("understand rather than agree with") stakeholder perceptions of conflict and its causes. As Warner quotes from Fisher (1994); *"…a party's power depends on its ability to put itself in another party's shoes"*.

Ensure good communications – Open communication is a recurrent theme in the consensus literature (perhaps a reference to Habermas' Theory of Communicative Action) and here Warner stresses the skills and behaviour of the facilitator and participants in ensuring an efficient process of dialogue.

Create a level playing field for negotiations **–** All participants should have equal access to information and should have an equal capacity to influence proceedings. In order to achieve this, time may have to be allocated to improving the negotiating capabilities of the most disenfranchised groups.

Build and maintain rapport – A productive climate for dialogue exchange depends on some standard of rapport between facilitators and participants. Again, personal communication skills are key to developing trust, but also in avoiding bias through favouritism.

Focus on satisfying underlying motivations – This is central to most practical guidance to consensus building and builds on Fisher and Ury's emphasis on understanding interests rather than positions. Warner introduces "motivations" in terms of deeper interests, social and cultural values, ethnic identity, basic welfare, loss of power and social inclusion. It is most productive to focus first on those motivations that are common to all parties.

Widen the options – If a process is to move towards Fisher's "mutual gains" or the win-win scenario of game theory, then dialogue must be freed from inflexible or non-negotiable positions or dogma. The facilitator will require lateral thinking and creativity to explore options through brainstorming with participants.

Clarify motivations and options – This stage is to re-define stakeholder motivation within the conflict and to then make this explicit to all groups. Brainstorming with all groups is then used to produce potential solutions that accommodate all motives.

Achieve mutual gains – This is what distinguishes consensus building from other responses to conflict such as compromise, withdrawal etc. Thus all steps in the MCBC process are designed to lead to this goal. As Warner states:

> "*The approach is possible because in a conflict situation the basis for agreements is severely constrained by emotive and personalised demands. This limits options and stifles creativity. First building the trust of the conflicting parties, then drawing out their true motivations and interests, clarifying these factors to remove exaggerations and modify false perceptions, and then brainstorming to generate the widest and most creative possible range of solutions, provides a pathway to achieve mutual gains.*"

Test agreement for feasibility – Any agreements reached must be realistic before the process can be concluded or considered successful. In particular, the agreement must be socially, politically and environmentally viable and acceptable to the constituents of the stakeholder representatives consulted.
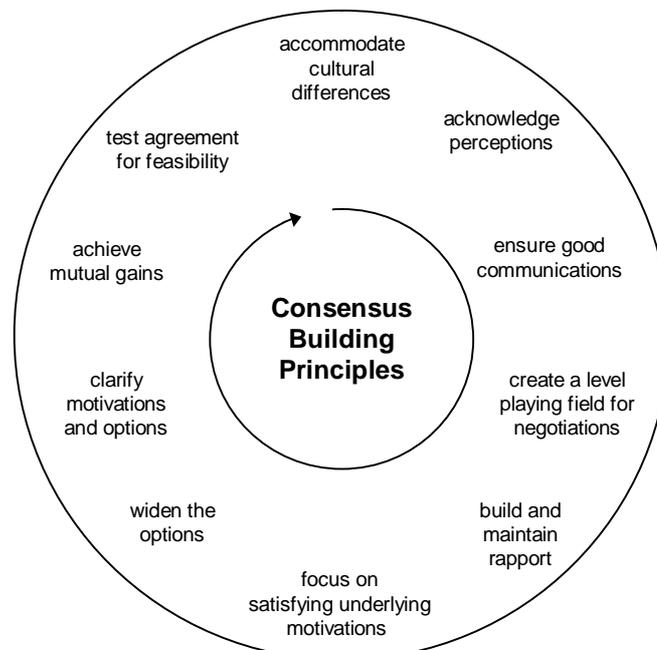

Figure 3.4. The MCBC principles presented as step-wise process (Warner, 1999).

The manual is realistic in recognising the limitations of the approach presented here to overcoming all conflict (particularly structural or violent conflict), and acknowledges the need to have a "best alternative to a negotiated agreement" (BATNA). In fact, even in less severe cases Warner suggests consensus building may not be the "most practicable strategy" for dealing with conflict and that an initial *Conflict Analysis* and *Consensus Building Plan* should be developed before entering into *Consensual Negotiation* with local stakeholders[26].

Because the manual is aimed at problem solving *within* NRM projects, the emphasis tends to be on resolving disputes and on reaching agreement. Consensus building here is presented as a tool to finding solutions and supporting project management, rather than as a precursor to promoting collective action. However, the sustainable livelihoods framework and the concept of social capital suggests a more subtle role for consensus building and one which is not merely a response to pre-existing conflict or for adoption within project interventions. Rather than a cyclical process of problem identification, brainstorming, problem solving, testing and so on, consensus building might be better represented as way to create and sustain value through the development of social and human capital.

Section 3.5   Future Search

Future Search is a methodology that was developed in the United States to help communities and organisations find common ground for action. It has started to be used in the UK, particularly by county and local councils trying to implement Local Agenda 21 (Walker, 1999). The methodology attempts to involve relatively large numbers of people in improving whole systems and although the methodology was not designed for an NRM context (having been formulated in principally urban, developed world contexts) its core concepts of stakeholder perceptions and mutual learning, which both resonate with SSM concepts, make it appropriate to NRM situations where community management is an objective. Future Search has its roots in the Search Conference (Emery & Trist, 1973), large-scale community futures conferences (Schindler-Rainman & Lippitt, 1980), the Dialogue Group (Bohm, cited in Weisbord & Janoff, 1995), Open Space Technology (Owen, 1991), and Participative Strategic Planning Conferences (Jacobs, 1994).

In essence, Future Search is a large group planning meeting taking place 3, that aims to assemble a "whole system" in one place, so that participants can create a grounded and realistic task-focused agenda for action. The "whole system" consists of a broad-cross section of stakeholders with different needs and perspectives; while the processencourages diverse perceptions and allows participants to forge new relationships. The process aims to work with 60-70 individuals representing about 6 to 12 main stakeholder groups (these groups may include agencies in a 'planning

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[26] These stages are to ensure that the conflict is well understood and that the actions of facilitators and participants are not likely to aggravate the situation.

partnership', or may consist only of community and civic bodies, or perhaps NGOs and other interested parties). The geographical area dealt with within a Future Search conference should be small enough that people can identify with it, but large-enough for decision-makers to consider it worthwhile to invest time and effort, and somewhere that 'feels like' a natural unit (Walker, 1999).

The underlying objective is to give a broad cross-section of a community greater control over the process of change or improvement in their communities and organisations. There are three main categories of Future Search:

- Future Search processes that lead stakeholders to create a shared future vision for their community or organisation
- Future Search meetings that enable all stakeholders to discover shared intentions and take responsibility for their own plans
- Future Search events that can help people implement a shared vision

Future Search consists of five tasks, each taking three to four hours, done either in groups of mixed constituency or in separate stakeholder groups:

Tasks	Group type
Review the past	Mixed
Explore the present	Stakeholder
Create ideal future scenarios	Mixed
Identify common ground	Stakeholder & self-selected groups
Make action plans	Stakeholder & self-selected groups

Each task concludes with a whole group dialogue.

Starting groups of mixed constituency seems to be important for the initial session to emphasise that this is not '*business as usual'*. Mixed groups are less likely to recycle old information and because they do not have the weight of history bearing upon them, are more likely to start from a fresh perspective.

The initial task is reviewing the past – the creation of a large 'time line' to which everyone contributes. This is useful as it shows everyone has a valid contribution, that all participants live in the same space and that they all have similar psychological needs (Weisbord & Janoff, 1995).In exploring the present, the aim is to identify the key *trends* occurring now. These trends are both local and global and participants are asked to translate their problems into the trends they reflect. At the end of the session participants use sticky dots to 'vote' for the trends that they consider are most pressing.

The creation of an ideal future scenario requires participants to project themselves 10 to 20 years into the future and describe in concrete terms their ideal scenario at that time, and the obstacles they need to overcome to reach it. After identifying individual scenarios, a whole group dialogue identifies common futures themes, potential projects to realise the common future scenarios, and unresolved differences between stakeholder scenarios. By focusing on the future, Future Search aims to avoid

stagnating in the repercussions of past and present issues. It does not aim to be either a problem solving or conflict management methodology, but projects itself into the future to skip past these concerns. Conflicts between stakeholders are acknowledged, but '*put on hold*' so that participants can focus on common ground. This focus on the future is analogous to the focus on '*potential*' in sustainable livelihoods approaches, which try to move beyond traditional needs assessment based on present needs (DFID, 2000).

The final part of the Future Search conference is for stakeholder groups and/or self-selected groupings to make short and long range action plans for implementing the common ground in their ideal future. Groups canvas support for their projects and report back to a final conference plenary session which, in turn, provides an opportunity for groups to collaborate across traditional boundaries. Suggested projects are those that participants can, and are willing to, do now, without negotiation or permission from higher authorities. This final step of the Future Search conference seeks the commitment of participants in undertaking specific actions and encourages them to take responsibility for their own projects. These projects are recorded on planning sheets, helping maintain mutual action.

As a consensus building methodology, Future Search has the benefit of being inclusive, transparent and treating all participants as peers. It overtly avoids trying to resolve present conflicts by asking participants to focus on the future and switch their mind-set from centering on differences between them to focusing on the common ground between them. This may require careful facilitation. It is an empowering methodology, equipping participants with the confidence and plans to take responsibility for their own common futures. However it makes two important assumptions about implementing action plans that emerge from the process: i) that mutuality will be sufficient to ensure people maintain their commitments to the action plan, and ii) that no outside assistance or authorities are needed. Assumption i) is likely to hold in communities with high levels of social capital and motivation. Assumption ii) may not hold in an NRM context in many developing countries where communities have little experience in being empowered to undertake their own NRM, or where local government operates in a top-down mode. Here outside assistance from a facilitating body, for example an NGO, is likely to be beneficial in managing the process and ensuring that less powerful and articulate stakeholders have a full input.

Section 3: Summary

The methods outlined above represent an evolution over three decades in the application and approach to consensus building. The principles of successful consensus building, originally devised for the civil or corporate setting in the developed world, have remained largely unchanged, but new tools have been adopted to provide rounded approaches for use in the developing world context. In particular, the increasing emphasis on stakeholder participation in development has produced tools and methods well suited to creating dialogue and debate (e.g. participatory rural appraisal as used within RAAKS)[27]. The common theme of these methods is the

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[27] There are an increasing number of Handbooks containing PRA/ PLA tools. See for example National

emphasis on promoting open channels of communication between stakeholders and mediators, and the attempt to understand people's underlying needs and interests rather than attempting to reconcile positions. The relationships and commonalities between the methods are demonstrated in Table 3.1.

Environmental Council 1991, SHOGORIP, 1992, IIRR 1996, Grenier 1998, Sillitoe *et al* 2000, and of course the journal RRA Notes (later PLA Notes). All seek to access NR users' knowledge, perspectives and goals.

Approach	Context	Purpose	Influences	Author
Alternative Dispute Resolution	Developed world, civic, environmental or planning disputes	Court avoidance, conflict resolution	Anthropological studies of North American and African tribal systems (Gibb, 1963; Danzig, 1973), U.S. peace movement	Numerous but crystallised by Fisher & Ury (1982)
Soft Systems Methodology	Corporate or any management system	Principally, corporate dispute management	Numerous but particularly Boulding (1956)	Checkland (1981), Checkland & Scholes (1990), in relation to NRM: Wilson & Morren (1990)
Agricultural Knowledge Systems / Rapid Appraisal of Agricultural Knowledge Systems	Principally, agricultural extension in the developing world	Promotion of adaptable and synergistic networks for agricultural development	SSM, Theory of Communicative Action (Habermas, 1984), Social Actor Approach (Long & Long, 1992)	Röling (1992), Engel & Salomon (1997)
Alternative Conflict Management as "Managing Conflict and Building Consensus"	Community-based NRM projects in the developing world	Successful management and implementation of projects (training of project staff).	Sustainable Livelihoods Approach (see Carney, 1999), ADR, Fisher and Ury (1981), Moore (1996)	Warner (1999)
Future Search	Community or organisational change. Mainly, developed world urban situations.	Empower groups to develop action plans to achieve an improved future.	Search Conference (Emery & Trist, 1973), large-scale community futures conferences (Schindler-Rainman & Lippitt, 1980), the Dialogue Group (Bohm), Open Space Technology (Owen, 1991), Participative Strategic Planning Conferences (Jacobs, 1994).	Weisbord & Janoff (1995)

Table 3.1. The origins and purpose of the consensus building methodologies.

Section 4   Consensus Building and Development

Indigenous Approaches to Consensus Building in the Developing World
(local dispute resolution – LDR)

Conflict resolution and consensus building in the developing world tends to draw on combinations of both informal indigenous processes, and formal legal structures of the state. Although these indigenous forms of consensus building may not relate directly to the conceptual approaches outlined in Section 3, Moore (1996) has remarked how they resemble mediation processes in the developed world and Castro (1996) has attempted a classification with respect to their resemblance to negotiation, mediation and arbitration (see Section 3.1). However, the complex ways in which traditional approaches and customary legal orders are subsumed within local and national legal structures make it difficult to identify "typical" developing world approaches. It is also inappropriate to present "modern" western approaches and "traditional" indigenous approaches as discrete entities, and Castro (ibid.) suggests indigenous approaches should be considered as dynamic and evolving, rather than fixed and rigid:

> *"Indigenous knowledge - whether about farming or settling disputes - does not provide a set formula for community decision-making. It is simply a repertoire of ideas and actions from which individuals and communities faced with specific problems can draw, depending on their own level of knowledge, their preferences, and their ability and motivation to act."*

Castro considers the structure of conflict resolution in the developing world as one of legal pluralism, whereby the individual, group or community may rely on processes directed by state, religious, ethnic, caste or local systems. In reality, these systems overlap, although community members may hold very different views of legitimate authority and decision-making from those of government.

Although indigenous conflict resolution at the local level tends to rely on processes of negotiation, mediation and arbitration, a common theme to these approaches is a reliance on face-to-face communication (see the explanation of Hall's "high context" engagement below). For instance, Cohn (1967) describes how in northern India the first step of simply talking provides a key function in relieving aggression prior to dispute resolution. Once a decision has been reached through mutual agreement or some form of arbitration, then peer pressure, social ostracism or threat may be applied to ensure compliance.

Governments that seek to decentralise legal processes (and to reduce administrative costs) may set up local procedures and structures for local dispute resolution which draw from indigenous approaches (Castro, ibid.). However, there is a danger here that indigenous and locally respected approaches are co-opted by the state and by the elite to consolidate political structures and maintain current imbalances of power (e.g. the *salish* courts in Bangladesh and the *gram panchayat* in India) and thereby limit access to entitlements by the poor.

Deliberate attempts to accommodate and recognise traditional practice and customary legal orders within a formal legal structure, require a comprehensive understanding of the cultural and political role of these practices and of their potential suitability within a national system of conflict resolution. For instance, Moore and Santosa (1995) describe the limited success of the Indonesian government in its recent attempts to promote the traditional dispute resolution practice of *musyawarah* for use within a national framework. (After independence, the government of Indonesia attempted to shift dispute resolution away from village-based practices to formal judicial and bureaucratic institutions. However, because the traditional systems had been so effectively eroded within local government, bureaucrats did not recognise or understand the principles of *musyawarah* and its role in reaching consensus (*muafakat*) when they were re-introduced.)

There is a danger that indigenous approaches to consensus building are presented as egalitarian processes that necessarily provide fair and equitable outcomes (Nader, 1995). As in all resolution processes, some groups will be better placed to manipulate proceedings through their better knowledge or social status. However, it may be possible to democratise traditional consensus building methods further, through cross-fertilisation between developed world and developing world approaches and experience.

Transplanting Approaches to Consensus Building

Theoretical and practical approaches to conflict management and consensus building have tended to understate the diversity of perceptions, norms and values that shape the cultural context of conflict and negotiation. Because these approaches are predominantly designed in response to disputes in the developed world (particularly the U.S.) they often lack what Kramer and Messick (1995) term a "social contextualist perspective". In other words, much of the theory and practice of consensus building methodology is too generic and often fails to consider the local significance of conflict and consensus and how local actors perceive processes of facilitation, compromise etc. As Rabbie (1994) states:

> *"The importance of culture and cultural symbols in facilitating or hindering cross-cultural communications dictates a need to incorporate cultural attitudes and perceptions into models and theories of conflict analysis and conflict resolution. Models that were produced by Western specialists have continued to lack the proper tools to deal with non-Western nations, and thus they have remained largely irrelevant to those people."*

This theme is taken up repeatedly in the literature, particularly in respect to conflict resolution and the transplantation of developed world approaches elsewhere. For instance, Avruch et al. (1991) believe that the culturally diverse ethnoconflict theories (locally constructed views of conflict) and ethnopraxis (local techniques and practices for dealing with conflict) need to be developed and incorporated into any general approach to conflict resolution. Miall et al. (ibid) acknowledge that adapting theory and

practice between cultural contexts is the most pressing and challenging task facing the field of conflict resolution.

The approach to researching conflict and consensus in the developed world has focussed on the attainment of measurable outcomes and products (such as civil dispute settlements, court avoidance etc.) rather than the processes themselves in a social context (Thompson, Peterson and Kray, 1995). This bias may not be universally appropriate, however. In describing the complex and apparently unpredictable interaction between social and physical systems Uphoff (1996) suggests that a typically Eastern "b*oth/and*" worldview that acknowledges the overlapping, interactive nature of systems may be more appropriate than social science based on a Western "*either/or*" epistemology[28]. Non-Western cultures often adopt a creative and inclusive stance on conflict (a non-zero-sum perspective) and this co-operative approach can contribute to the development of conflict resolution in the West[29].

Lund *et al.* (1994) emphasise that models should not be interventionist but culture-centred, incorporating culturally-sensitive assessments of each scenario and, presumably, applying suitable participatory tools and approaches. Such an assessment would have to consider the cultural context of conflict and norms of negotiation. Hall (1976), for example, distinguishes between the two extremes of an American "low context" perspective to negotiation and a Japanese "high context" perspective. Typical characteristics of negotiation in low-context cultures are an emphasis on the self, autonomy, direct (face-to-face) engagement and competitive strategies. Conversely, high-context cultures emphasise collective identity, inclusion, indirect engagement and collaborative strategies. Generally, it is the developed and multi-institutional cultures that are low-context, although Hall considers the Japanese perspective a high-context one:

> *"Low context cultures generally refer to groups characterised by individualism, overt communication and heterogeneity. The United States, Canada and central and northern Europe are described as areas where low context cultural practices are most in evidence. High context cultures feature collective identity-focus, covert communication and homogeneity. This approach prevails in Asian countries including Japan, China and Korea as well as Latin American countries."*

Although this cultural diversity in the perception of conflict and consensus is widely acknowledged, anthropological models such as Hall's may be limited in offering pragmatic solutions to adapting existing approaches in isolation. The sustainable livelihoods approach can provide a frame in which to better gauge the relevance of different approaches to building consensus (see below).

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[28] Uphoff was attempting an explanation of the scale of consensus and the surprising speed and success of an irrigation project at Gal Oya, Sri Lanka.
[15] In 1978 the US adopted a traditional practice of Egyptian village conflict resolution (the *Mulakah*) to broker agreement between President Sadat of Egypt and President Begin of Israel (Miall et al., 2000).

R7562 – Methods for consensus building for management of common property resources

Monitoring Consensus Building

Innes (2000) provides guidance on the monitoring of consensus building, but both processes and outcomes are difficult to systematically record and evaluate. Generally, process evaluation will depend on qualitative feedback via interview or questionnaire, whereas outcomes may be evaluated quantitatively with respect to locally appropriate indicators of success or failure (these may include incidences of community co-operation, or verbal or violent conflict etc.)[30].

There are three main problems in evaluating consensus building: 1) how can apparent outcomes be attributed to the process with absolute certainty; 2) how can feedback from participants be used or quantified if their knowledge of the process (or alternatives) is limited and; 3) what feedback is representative when consensus building is necessarily concerned with numerous stakeholders and diverse opinions. As Innes (ibid.) states:

> *"Process may be very difficult to assess. A simple survey of participants or a measurement of outputs will probably not provide a meaningful assessment. Either could lead to a conclusion that a process was unsuccessful when it was actually successful or vice versa. For example, participants responding to a survey could say they were satisfied with a process when they were actually manipulated and misled, or they could say that they were dissatisfied when they actually accomplished a great deal but had unrealistic expectations. "*

Directed attempts to building consensus in NRM in the developing world are not always carefully monitored or documented. Where consensus building is externally-driven by NGO or government some form of process monitoring may be adopted. This may take the form of a diary or log kept by project personnel or a specially formed community group[31].

Consensus building within NRM projects is often considered a supporting activity rather than the prime purpose of intervention (see Section 3.4) and as such, if monitoring does take place, it may not be very thorough. However, there is potential to adopt locally relevant criteria or indicators for monitoring as part of a comprehensive and participatory approach to consensus building within projects (see Guijt 1999 for a comprehensive review of participatory monitoring and evaluation)[32].

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[30] Field evaluation in the current project draws from guidance provided by Innes (2000), Burgess and Burgess (1996) and Kaner (1996). (See Report 3).
[31] See Report 3 for an outline of the River Management Committee within the Community Based Fisheries Management project in Bangladesh.
[32] For a detailed treatment of evaluation see; McCool and Guthrie (2001), Innes (2000), Hines (1998) and Burgess and Burgess (1996). Other key texts include; Marsden and Oakley (1990), Marsden, Oakley and Pratt (1994), and Mosse, Farrington and Rew (1998). See Report 3 for the development of a Consensus Assessment Survey (CAS) and process evaluation methodology within this project.

Consensus Building within the Sustainable Livelihoods Framework

This review has presented consensus building as both: 1) a directed attempt to promote collective action through mutual learning and the development of appropriate stakeholder institutions or; 2) a means to better achieve *other* project goals through a holistic and participatory approach to project design and management. Both scenarios fit well within DfID's sustainable livelihoods framework.

Through building or reinforcing horizontal relationships, trust and reciprocity within the community and vertical links with other groups and institutions, consensus building obviously relates to the concept of social capital. Similarly, mutual learning (and Glasbergen's social learning (ibid.)) through participation and the sharing of knowledge will enhance human capital by developing new skills and an awareness of new approaches to decision-making and dispute resolution.However, consensus building has a more subtle role in helping to provide sustainable livelihood options from livelihood assets. New networks of communication, informal institutions and specially designed institutions for management and decision-making can help realise the potential for sustainable livelihoods by acting as positive "transforming structures[33]" for the poor and socially excluded[34].

There are a number of parallels between current concepts of social capital and concepts relating to consensus. Krishna & Shrader (1999) use a framework that separates micro and macro levels of social capital. The macro-level relates to the institutional context in which organisations operate. The micro-level is relevant to consensus building. Two types of micro-level social capital are identified:

- Cognitive social capital
  Refers to values, beliefs, attitudes, social norms. 'Values' include co-operation and "the trust, solidarity and reciprocity that are shared amongst members of a community and that can create conditions under which communities can work together for a common good". This is very similar to definitions of consensus.

- Structural social capital
  Includes the composition and practices of formal and informal local institutions that serve as instruments of community development. "Structural social capital is built through horizontal organisations and networks that have collective and transparent decision making processes, accountable leaders, and practices of collective action and mutual responsibility". These structures are likely to emerge from situations which have build higher levels of cognitive social capital.

Consensus building can also act at the interface between livelihood assets and transforming processes. In Bangladesh, many of the problems of fulltime fishers relate to "transforming processes" (Barr & Haylor, *submitted*). Access regulations and difficulties of enforcing property rights mean that fishers are unable to convert their

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[33] Also known as 'Policies, Institutions and Processes' (PIP).
[34] This is reflected in the emphasis that AKIS and RAAKS (Section 3.3) places on social learning and platforms for resource use negotiation. Platforms here operate as transforming structures.

environmental endowments into entitlements (Leach *et al*, 1997). By building consensus, fisher gain sufficient social capital to be able to stand up against discriminatory transforming structures and processes.

There are also parallels between good practice within the sustainable livelihoods framework generally (a focus on participation, an awareness of the interconnectedness of stakeholders and their actions, the need to strengthen their capacity to deal with shocks and trends) and effective consensus building. In relation to consensus in NRM, for instance, if processes are externally-driven there is a danger of overlooking very site-specific social, economic and environmental characteristics that are essential to understanding ongoing disputes. It is crucial that participatory approaches to consensus building should be adopted (by NGOs, government agencies, community groups etc.) if the comparative advantage of locally appropriate strategies and endogenous skills and knowledge are not to be overlooked. The approaches and lessons learned from conflict management elsewhere will contribute, but it is local stakeholders that must play the central role in creating new relations and platforms for action. Local people should not be the passive recipients of a consensus building process, but should be proactively involved as personnel wherever possible (Duryea, 1992).

R7562 – Methods for consensus building for management of common property resources

Section 5   Case Studies

The following case studies are representative of the range and character of consensus building efforts within NRM in the developing world. Case Study 1 demonstrates how dialogue within and between local stakeholder groups can help generate new management options through mutual learning. Case Study 2 explains how new NRM institutions can generate conflict, both horizontally within the user communities, and vertically with government institutions. Consensus might be achieved through better local knowledge of the role and potential value of new local institutions through transparency and greater consultation with local stakeholders. Case Study 3 extends to the regional scale and the more overtly political and legal representation of a single ethnic interest group. This example demonstrates how the political position and skills of certain stakeholders may be championed to ensure future benefits through self-negotiated settlements.

Case Study 1.

Community-based Planning for Wetland Management: Lessons from the Ucchali Complex in Pakistan (Bisham Gujja and Michel P. Pimbert, 1995).[35]

Source: Paper presented at the International Conference on Wetlands and Development, Kuala Lumpur 1995).

Wetland conservation in Asia is often viewed as an issue of law enforcement and of how best to impose new laws or regulations on local communities (Scott, 1989). In this study, Gujja and Pimbert undertook a participatory planning exercise with local communities at two villages in the Ucchali complex of Pakistan to explore ways to balance conservation and the needs of local communities.

The Ucchali complex is a wetland comprising three interdependent lakes (Ucchali, Khabbaki, and Jalar) in the north of Punjab which are internationally significant as the only over-wintering ground for White-headed Duck (*Oxyura leucocephala*) and three other endangered species of bird including the Imperial Eagle (*Aquila heliaca*).

An initial integrated management plan for the region was developed by WWF-Pakistan and WWF International in 1993 with the aim of preserving its natural integrity and sustainably catering to the needs of local communities. Gujja and Pimbert undertook participatory rural appraisal to develop the management plan further with a view to achieving a *modus vivendi* between the needs of wildlife and those of local communities, and applied a combination of group and team dynamic methods, interviews and dialogue, and visualisation and diagramming methods.

From the early stages of the appraisal it was obvious that any useful management plan would have to balance the conflict of interests between the needs of the local communities and the wider conservation agenda. A constructive dialogue was entered into with the communities by encouraging them to share their perspective on the

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[35] See also Gujja *et al* 1998, and Pimbert and Pretty 1997.

historical aspect of this conflict. In conjunction with the community, this process led to the development of several alternative scenarios that might better balance both management objectives.

Lake Khabbaki and Dhadar village

Discussion with local farmers revealed negative attitudes to Lake Khabbaki and its management for conservation. In a ranking exercise, the preferred management option for the majority of farmers was the total drainage of the lake to provide agricultural land. The resource of the lake's water was valued higher than the wildlife resources available to fishers and wildfowl hunters, and many farmers expressed a desire to use the water to irrigate land 100 meters above the lake.

A time-line exercise revealed that the lake was formed quite recently and had expanded considerably since the 1950s. The formation of the lake was seen as having undermined the productive assets and livelihoods of the majority of farmers in Dhadar and the neighbouring area (social mapping showed farming households to represent 90% of the total).

At village meetings a number of grievances over the lake and its management were explained. Farmers were angry because they saw the lakebed as an extremely fertile resource, unfairly made inaccessible to them for the conservation needs of "wealthy people". Villagers also complained that licences to shoot waterfowl and catch the stocked species of fish were only provided to government officials and outsiders. The severe punishments for poaching increased villagers sense of injustice. Most male speakers felt that the benefits gained from cultivating the lake would help all local stakeholders and not just farmers. However, women had quite a different perspective on the value of the lake and saw it as an essential source of water for washing clothes and for drinking. Water shortages created much more work with women regularly having to walk 4-6km to collect water.

A small community of immigrant fishers also expressed more positive views on the lake, relying on fish catches directly for their livelihoods and generally valuing the wildlife resource the lake provides.

Conflict Resolution and Compensation

Group discussions and semi-structured interviews were held with men and women representing the various groups identified through social mapping. The discussions focussed on options to improve the management of the lake and the advantages and disadvantages of the ideas were debated by men and women separately. The villagers decided to rank the management options with regards to their potential results, impacts, feasibility, advantages and disadvantages (see table).

The farmers' argued that the lake bottom was needed for agriculture and that an exchange for rights to forest land would be workable for government and the villagers. The women emphasised health and education (A community welfare package) above the exchange of land rights.

Wetland management options	Men's preference ranking	Women's preference ranking
Substitute the land at the lake bottom with forest to the north	1	2
Exchange rights to the lake bottom for a community welfare package	2	1
Use lake water for irrigation and partially reclaim the lake bottom	3	3
Direct fishing revenue to community improvements	4	5
Beautification of the lake and construction of lodges	5	4
Leave the lake as it is to protect water table	6	6

Ranking of management options by men and women of Dhadar village (Gujja and Pimbert, 1995).

The villagers saw their management ideas as a basis for debate and negotiation both within the community and with government authorities. Before a final village meeting the community agreed to respect the control of fishing and hunting on the lake and to consider the lake government property on the understanding that they be compensated for loss of land to the lake. There was also a consensus that poaching should be stopped (irrespective of social status) and that fishing should be properly controlled.

Ucchali Lake and Ucchali Village

Lake Ucchali, also a recently formed water-body, is saline and its formation has submerged 1000 acres of arable land and waterlogged a further 1000 acres. The lake is seen as a constraint on local livelihoods and villagers have no interest in the lake's wildlife. Most villagers do not perceive that there are any benefits to be derived from the lake (there are no fish, reeds or grasses).

Widening the Options

In initial discussions, the community insisted that the lake should be removed and the land returned to the farmers. After further group discussion the villagers rejected the feasibility of draining the lake and considered the following management options:

1) social forestry to plant the infertile shore of the lake and provide firewood, habitat for birds, reduce soil salinity and beautify the lake. A social forestry committee would be formed to manage the process and co-ordinate group action.

2) control of salination by digging channels. This option was brought to the attention of the whole village by several farmers who had already experimented with drainage channels to increase the flow of water into the lake.

3) planting of salt-tolerant grass species to encourage birds to the lake and the stocking of salt-tolerant fish.

4) ecological restoration by reducing salt content or introducing salt-tolerant plants and invertebrates.

The main objective of the process was to use participatory approaches to encourage debate and the expression of new ideas for the management of the lake. The quality of management ideas and options put forward by the villagers was high and showed the conservationist's knowledge to be limited. Discussions revealed the limitations of simply designating an area as an "internationally important conservation site" if local people do not benefit in the short-term. The villager's management proposals sought to link the needs of outside conservationists with those of the local community, while the management plans were thorough enough to include proposals for appropriate institutions such as resource-user groups or to the strengthening of existing ones such as the Forest Protection Committees.

Gujja and Pimbert argue that the previous top-down and coercive approach to the conservation of the wetlands is likely to alienate local people from the purpose of management and result in an increasing reliance on enforcement and prohibition of activities at the lakes. The study presents what Pimbert and Pretty (1995) consider a people-centred, process-oriented approach where outsiders do not consider themselves as "implementers" but as "enablers". The case study considers the ways in which consensus between outside conservationists and local stakeholders for the management of multifunctional resources might practically be achieved. [36]

Discussion

This case study represents a participatory approach to reaching consensus between multiple stakeholders. Although the process is driven externally by WWF-Pakistan and WWF-International, and the main aim is one of consolidating vertical institutional relationships rather than reaching consensus through enhancing local, horizontal ones, the approach of Gujja and Pimbert allows creative input by local stakeholders. At various stages, participatory methods are applied in the multi-stakeholder context and within separate stakeholder groups which helps generate dialogue on potential solutions and identify the range of local perspectives.

Gujja and Pimbert acknowledge that different stakeholders view the Lakes in quite different ways but use this diversity of positions positively by encouraging alternative management scenarios from the community. The advantages and disadvantages of the suggestions are debated publicly and accepted or rejected in a filtering process in a similar manner to that of the action plan development phase of the PAPD process (Barr *et al,* 2000).

The community saw the process as legitimate and valuable because the development of action plans was viewed as a means to convince others in the community and to influence government.

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[36] See also IUCN 1999.

Case Study 2.

Jabalpur District, Madhya Pradesh, India: Minimising Conflict in Joint Forest Management (Shashi Kant and Roshan Cooke, 1999).

Source: Buckles, D. (Ed.) 1999. Cultivating Peace – Conflict and Collaboration in Natural Resource Management. World Bank Institute.

Joint Forest Management (JFM) relies on mutual sharing of responsibilities between forestry departments and local communities. The limiting factor to its success is the successful resolution of conflicts between the two groups and within communities. The institutional requirements for successful conflict resolution were found to be transparency, accountability, a shift in forest ownership from state to community and the absence of uncertainty.

Kant and Cooke applied participatory approaches to identify what villagers perceived as unjust or inequitable within the current JFM system. Community forestry groups evolved in the late 1970s in response to a need to protect dwindling forest resources from exploitation by outside groups. The emergence of these groups reflected the apparent inability of state institutions to manage the forests fairly and efficiently but their presence led to further conflict between community and the state. The National Forest Policy of 1988 sought to encourage popular participation and reduce conflict between forest managers and local users. In response to this policy and the growing emphasis on community needs over commercial ones, the government of Madhya Pradesh stipulated that Forest Protection Committees (FPCs) should be set up in sensitive areas and should receive 20% of all revenue created by the forests they protect. Village Forest Protection Committees (VFPCs) were set up in degraded areas and were allowed 30% of final timber produce.

In response to a bad fire and dwindling forest cover, a self-initiated forest protection committee was established in the study area in 1989. This group worked as a catalyst for the uptake of JFM in the area and in 1992 the group was formally recognised as a VFPC. The Madhya Pradesh Forestry Project of 1995 (funded by the World Bank) motivated the forestry department to establish other FPCs in the area. The process by which villagers were contacted and made aware of JFM was identical in each case. Individuals and groups were informed of JFM and these people discussed the programme with the community in general before a local forestry officer convened a meeting with the villagers.

Both tribal and non-tribal ethnic groups were represented at the meeting, although the target of a minimum of 50% the adult population was rarely achieved. Women were not permitted to attend the meetings but were made aware of the discussions.

The organisational structure of the FPCs and VFPCs was designed by government but includes the local forestry officer, all *Panchayat* officials, at least two women and a local teacher. Members are elected annually and the committee meets monthly to ensure the enforcement of national and locally devised rules. Kant and Cooke see these new committees as important conflict resolution institutions because the drafting of new local rules depends on face-to-face negotiation and skilful management of meetings.

The exchange of views and ideas at these meetings also provides an educational aspect as different stakeholders are given the opportunity to air their views.

The FPCs and VFPCs have the authority to levy fines against those breaking committee rules and these are usually paid quickly to avoid time-consuming referrals to local courts. Because offenders are from the same village or neighbouring villages, the VFPCs essentially function as conflict resolving bodies both within and between villages. The management of collective funds is decided by consensus at a general meeting where each of the committee members is entitled to identify key local problems or target areas for funding. A short-list is developed and through a process of debate (providing mutual learning of the needs of the community) several of the proposals are selected.

Outcomes at village level

The quality and coverage of forests surrounding the four villages in this case study has improved since VFPCs have been in operation. Two of the villages (Kundwara and Roriya) have benefited from their close proximity to the regional Forestry Department offices and have received extra support and are now seen as model VFPCs. These villages are also quite culturally homogenous which has helped in the implementation of forest protection measures. The Gond tribals of these villages have an agricultural heritage together with detailed knowledge of the value of the forest resources. In Takiaria and Jamuninya, however, the dominant tribal groups (Baigas and Kol) have traditionally depended primarily on the harvest and sale of forest products. The cultural diversity within these villages and their greater dependence on forest products has made regulations harder to enforce.

To ensure the long-term success of these local management institutions, conflict between local people and forest managers must be minimised. Kant and Cooke have identified several potential areas of conflict between the informal institutions of the villages, the formal institutions of the VFPCs and their vertical relationship with the Forestry Department. Several internal conflicts within the VFPCs reflect the system of selecting members. For instance, members are elected for five year terms and although the committee is re-elected annually, incompetent or unpopular members can retain their influence for the entire five year period. The allocation of paid positions to the members is also a source of conflict and the overlapping relationship between the *Panchayat* officials, the FPCs and the VFPCs makes the institutions competitive rather than complementary. As discussed, the problems enforcing protective measures (such as restricting the gathering of fuel wood) at Takiaria and Jamuninya reflect the historic dependence on the resource by those communities. If conflict is to be avoided, time must be invested in gradually developing the informal institutions at these villages and ensuring that formal institutions better fit local ones.

There are also horizontal conflicts within JFM and with other government departments. The Watershed Development Program (WDP), for instance, shares similar objectives to the JFM but has failed to link with it at a political level or at the local level where WDP committees have undermined the effectiveness of VFPCS and vice versa.

Kant and Cooke argue that communication between all groups should remain open to

avoid confusion and to gain the trust of all stakeholders. Increased interaction and openness will enhance the effectiveness of JFM. The authors argue that the "change agents" (the government and committee officials) are not properly accountable to either the public or the government. The lack of regular committee meetings allows influential members to by-pass democratic procedures and this lack of communication means that conflicts tend to escalate quickly. The local feeling of mistrust seems to signal a deficiency in the system.

Forestry officials need to re-learn their roles under JFM and operate as "conflict managers" rather than "conflict generators". High ranking officials seem to be making this shift but local officers are not so willing to relinquish their power and the benefits they have become used to. The transient nature of some of the JFM projects and the short posting of forest officers has also created mistrust and conflict. Another potential source of conflict is the gender imbalance in forestry management. Although two women are entitled to committee membership, the perspectives of women in the wider community are not acknowledged in project plans and the drafting of rules (women are not permitted to attend village meetings in this region). In fact, many of the committee rulings operate against the interest of women as the major gatherers of fuel wood and women rarely benefit from the collective funds raised. Kant and Cooke suggest that this imbalance can only operate to undermine the creation of an environment in which to facilitate both conservation and equity goals.

Conflict resolution and consensus building is obviously a key function of management within the JFM and the new institutions developed to run the programme must adapt to the new environment of collaboration and openness. If the programme is to gain the confidence and support of local communities then present conflicts must be addressed early on. Increased transparency, accountability and stability are needed to reduce conflict, increase the potential for collaborative management and improve the effectiveness and sustainability of the programme.

Discussion

This case study is a commentary of how new institutional arrangements for NRM at the local level can both provide new platforms for negotiation *and* create conflict through unsuitable design. As with Ucchali in Case Study 1, the emphasis is on vertical institutional linkage, but Kant and Cooke also consider horizontal governmental relations and the way in which these formal structures are superimposed on local, informal institutions (traditional culture and gender relations). As Kant and Cooke acknowledge, any local NRM body must be considered in a wider regional or national institutional setting, and this case study deals with conflict within the co-management of forests.

The case study does not present any active and ongoing attempt to resolve conflict but provides suggestions for more suitable institutional design (both procedural and structural) that are likely to improve management through building consensus.

Kant and Cooke show that top-down approaches to forest co-management are unlikely

to be universally appropriate where local stakeholders represent a diversity of interests, attitudes and relationships to the resource. In addition, the confusion and uncertainty that surrounds the FPCs and VFPCs has corresponded in local pessimism and a reluctance by communities to actively engage with these decision-making bodies. Kant and Cooke stress the importance of a secure and open working relationship between local resource users and their managing institutions if VFPCs are to provide useful and lasting benefits to local forest management.

Although Kant and Cooke are not explicit about how consensus can be achieved, a participatory approach to discussing the role of VFPCs and their function with respect to local stakeholder input (the development of locally-relevant action plans, for instance) would consolidate the committees and their relationship to the local community.

Case Study 3.

Conflict and Consensus Building in the Awá Indian Territory – Ecuador (Christine Penzich, Garry Thomas and Tim Wohlgenant).

Source: The Role of Alternative Conflict Management in Community Forestry. RESOLVE, FAO 1994.

Since the formation of the Awá Indian Territory in 1984 there has been a series of conflicts between the Awá people and neighbouring peasant communities. The forest inhabited by the Awá in Ecuador is rich in raw materials, timber and minerals and is under pressure from encroachment and over-exploitation. Conflict has occurred as a direct result of designating the forest a conservation area. This case study describes the attempts to resolve actual and potential conflict in the region.

The Awá Region refers to an area in northwest Ecuador that includes the Awá Community Settlement Forestry Reserve and the Awá Indian territory. The area is extremely rich in biodiversity and represents the largest remaining tract of western ecuatorial forest. The Awá Region is also one of the country's poorest areas and the population suffers from severe health problems including malnutrition, parasitosis and malaria.

The designation of the Awá Indian Territory as a conservation and development region was hampered by conflict between national and regional government. Further conflict occurred at the local level between various user groups who perceived a threat to their continued access to the forest's resources and to their livelihoods. The main sources of the conflicts were: 1) the economic interests associated with the natural resources of the area and; 2) the absence of a legal framework appropriate to the situation.

Penzich et al. focus on the consensus building processes that occurred after the Awá territory had been established. When the territory was designated the Awá community attempted to control access to the area and this resulted in violent conflicts with "outsiders". The Director of the Awá programme was called on to act as facilitator in a meeting with Awá chiefs and representatives from the local towns. In a step-wise

approach to the problem, the Director outlined the common skills, attributes and needs of the Awá and the other communities (despite their cultural differences) and asked both sides to present their view of the problem. The Awá representatives blamed outsiders for poisoning the river system with mercury, destroying the land with dynamite and stealing from local people's homes. The townspeople complained that the Awá prevented them from carrying out their normal economic activity of panning for gold.

The Director recognised that the needs of both groups were not mutually exclusive and asked the townspeople if they would abide by Awá rules if they were allowed to continue panning for gold. The Awá were asked if they would allow the townspeople access if they abided by Awá rules. A consensus was reached. This mediation process classically concentrated on underlying interests rather than positions.

Community participation in the resolution of conflict

The Awá community's role in conflict resolution underwent a profound change - from passive recipients of advice and legal representation to leadership in negotiations and decision making. External actors had originally worked to organise the Awá community and as act as their legal representatives. Early meetings between the groups were designed to promote indigenous organisation, raise consciousness and build the organisational skills and capacity of local groups. As the technical and legal understanding of the Awá groups improved they began to push for greater political involvement in the management of the territory.

Penzich et al. reach the following conclusions:

- Community leaders and negotiators should first actively seek the majority opinion of their community before sitting at the negotiating table

- Leaders and negotiators should be aware of what constitute acceptable concessions (the community's best alternative to a negotiated settlement)

- The community should not reject the support of facilitators

- Ideally, leaders and their representatives should have negotiating experience.

Discussion

As in the example of new forestry policy in Madhya Pradesh, this case study outlines conflict generated by the uncertain role and responsibilities of stakeholders within new management regimes. In this case the Awá community wrongly challenged the rights of other users in the territory. The Director of the Awá programme intervened and adopted the stance of mediator between the conflicting parties, classically highlighting the common interests of both groups as opposed to attempting to compromise their positions. Penzich et al. then go on to explain how the Awá developed political and negotiating skills to represent their interests more effectively in a formal, legal context.

The authors present conflict resolution in this context as an aggressive attempt by the Awá community to obtain what they regard as rightfully theirs. Concession is presented as failure and access to reliable information helps strengthen bargaining positions and respond to counter-arguments (this contrasts with the view of the consensus process in Case Study 2 where transparency and the flow of information between and within conflicting parties was shown to be the key to engendering trust and collaboration. This example demonstrates how the negotiating position of a single stakeholder group may be enhanced through awareness-building and training (investments in human capital) so that the group can effectively represent itself in a legal and adversarial environment.

Section 6   Synthesis - a Typology of Consensus Building in NRM

This review has illustrated how consensus building processes in the context of NRM may be applied (or entered into by participants) for a variety of reasons. The typology below (Table 6.1) attempts to illustrate the basic range of consensus building methods and their functions. The pupose of consensus building will influence the design, character and approach so that methodologies may adopt either fixed or flexible structures to problem-solving or problem-identification. From left to right, the typology represents a gradient from directed trouble-shooting - where the goal of consensus building may be pre-defined and the character and outcomes of process may largely be dictated by a third party - to facilitated and participatory processes where problem-identifiction may play as central a role as problem-solving[37]. Culturally specific and informal approaches to building consensus in NRM are acknowledged, but the focus is on those processes where efforts are in some way initiated, managed or supported by an external third party.

Type A – *Establishment of NRM initiatives.*

This form of intervention assumes a constraint to some pre-defined management objective. Consensus building in this context is perceived as a method to remove the constraint and to achieve given management or project goals. However, because the underlying causes of management problems (what motivates stakeholders, institutional constraints etc.) may remain unknown, the third party may need to rely on enforcement or repeated interventions to implement change. Borrini-Feyerabend (2000), for example, acknowledges that many attempts to achieve nature conservation targets had previously relied on top-down and rigid approaches to problem-solving. More recent approaches have attempted to incorporate participatory methods and a wider community and livelihoods perspective. These types of process may also use educational campaigns and awareness building to strengthen local support.

Example 1

The problem and needs assessment within the Khulna-Jessore Drainage Rehabilitation project was a directed attempt to ameliorate siltation and drainage problems, some of which were aggravated by the project itself (see Bangladesh Case Studies). Part of the watershed was divided into six zones for local consultation and several stakeholder groups were identified and consulted at the village level. However, the options available to the Bangladesh Water Development Board (BWDB) were constrained by engineering and financial factors, and in this respect the BWDB held a veto on the selection of practical proposals. The project attempted to accommodate stakeholder concerns and suggestions but was ultimately limited in its ability to respond to local needs.

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[37] Although the typology presents consensus building models as distinct approaches, consensus building for improved NRM is also influenced by institutional arrangements, project design and additional activities that may or may not specifically aim to build consensus (see Report 6).

R7562 – Methods for consensus building for management of common property resources

	Type A	**Type B**	**Type C**	**Type D**
	Establishment of NRM initiatives	**Problem-solving within NRM initiatives**	**Promotion of mutually-beneficial collective action**	**Local processes to create *consensus & avoid *conflict* (sustain social capital)**
CB Purpose	↓	↓	↓	↓
Indicative Approach	Alternative Conflict Resolution to achieve "Collaborative management" of conservation-related projects	Alternative Conflict Management to overcome obstacles to successful implementation	RAAKS and PAPD to identify problems and reach envisioned futures	Local dispute resolution
Character of Process	Pursuit of sectoral or agency objectives	Balancing multiple stakeholder objectives	Mutual learning and inclusive planning	Traditional / pre-existing approaches
	arbitration ←	mediation →	facilitation	facilitation, mediation or arbitration
Outcome	Short-term objectives met / underlying conflict may remain / enforcement may be required	Project goals accomplished / consensus specific to project design / impact may not outlive project / trade-offs negotiated	Social capital reinforced / collective action promoted / effects intended to outlive period of facilitation / stakeholders empowered	Status quo maintained
		examples		
	Community-based planning for wetland management, Pakistan (Gujja & Pimbert, 1995 - see Case Study 2) Problem / needs assessment – Khulna-Jessore Drainage Rehabilitation Project, Bangladesh (see Report No. 6).	Consensus building within the Community Based Fisheries Management Project at Ashurar Beel, Bangladesh (see Report No. 6). Framework for Consensus Participation in Protected Areas, Zambia (Warner, 1997)	Participatory Action Plan Development at Posna, Diksi and Kathuria, Bangladesh (see Report 3) RAAKS with livestock farmers in Northern Ghana (Karbo & Bruce, 1997).	Mediation by *adat* in *Musyawarah*, Indonesia (Moore & Santosa, 1995) Arbitration by *matbor* of *salish* courts, Bangladesh (Center for Democracy and Governance, 2000)

Increasing local participant input ↑

Decreasing 3rd party influence →

Table 6.1. The four basic NRM consensus building "types" - with respect to purpose, character and effect.

Example 2

Gujja and Pimbert (ibid.) have applied a participatory and consultative approach to assist project design for the improved management of the Ucchali wetlands of Pakistan (Section 5; Case Study 2). It was acknowledged that the current integrated management plan for the region had created tensions between the various user groups and the agencies responsible for the area's management. A process of discussion between and within a range of stakeholder groups was initiated to breakdown the adversarial relationship and to identify mutually acceptable proposals with local communities. The facilitators provided an educational role in assessing and explaining the feasibility and potential impacts of the suggested management strategies. However, in this example of "collaborative management", the boundaries that define acceptable or inappropriate management suggestions and scenarios, were essentially pre-defined by national and international obligations under the Ramsar Convention[38].

Type B – *Problem-solving within NRM initiatives.*

This form of process acknowledges the diversity of stakeholders, their interests and motivations. There is a concerted attempt to understand the positions taken by individuals or groups and to create new and more productive lines of discussion and debate. The third party acts as mediator by guiding and encouraging interaction between the parties and there is a horizontal process of dialogue between local stakeholders. The process is designed to improve the impact and effectiveness of ongoing projects or programmes and may be either reactive to problems as they arise (a form of trouble-shooting to redirect the project) or may draw on pre-designed and project-specific instituions as "platforms" for negotiation. In both cases, the process may be a cyclical one of negotiation, adaptation, monitoring, negotiation and so on.

Although the type of perceived problems may not be pre-empted by the mediator (as in Type A processes), the design of consultation processes, the role of local stakeholders, and their subsequent role in the project more generally, is largely dictated by the third party concerned.

Example 1

The "*Framework for Consensus Participation in Protected Areas*" (FCPPA) provides step-wise guidance for undertaking participatory and consensus–seeking negotiations for project planning or management (Warner, 1997). The FCPPA was developed and tested in the setting of Game Management Areas in Zambia and was a directed attempt to improve participation in the design of management plans. The process centres on several distinct activities that represent stakeholder analysis and assessment, participatory community assessment, and finally, planning and participatory monitoring

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38 Another example is the King Mahendra Nature Conservation Trust which has promoted a collaborative and integrated approach to the management of the Ampuna Conservation Area in Nepal (see Borrini-Feyerabend, 2000). Decision-making committees operate at local, regional and national levels to develop suitable agreements and management tasks under the facilitation of *lami* ("matchmakers"). Stakeholders have direct input but their participation is fixed in the context of national or international conservation commitments and objectives.

and evaluation. Warner suggests that the FCPPA can perform either of two functions – to help design new conservation and development projects or to shape periodic strategic exercises within ongoing projects.

At each of the steps the facilitating agency has a central role in identifying, assessing and guiding stakeholders, and although Warner recommends adopting impartial (non-wildlife authority) personnel, the outcomes and scope of the process must by definition be a conservation-oriented one.

Example 2

The User Management Committees of the Community Based Fisheries Management Project in Bangladesh perform a central function in negotiating and legitimising project activities at each of the project sites. The establishment of the Beel Management Committee at Ashuar Beel helped overcome previous conflicts in the fishery and provide a strong basis for future management decisions and the activities of the project, generally (see Bangladesh Case Studies). The Committee represents a broad range of stakeholders (including fishers, non-fishers, elite and women) but the rules of election and the role and function of the Committees within the project as a whole are dictated by the implementing NGOs (in this case, ICLARM and Caritas).

Type C – *Promotion of mutually-beneficial collective action*

This type of process does not search for discrete solutions to single, identifiable problems but emphasises the value of new stakeholder interactions and mutual learning through facilitated discussion. Although collective action might be promoted, it is the reinforcement of social capital that is intended to benefit communities, within and outside the sphere of projects or programmes. In this respect, the design and application of this type of process is not exclusive to project management and does not presume identifiable technical constraints to development.

Example 1

Karbo and Bruce (1997) have demonstrated how RAAKS (see Section 3.3) has been used in the Upper East Region of Ghana to help motivate pig farmers to form co-operatives. Facilitators from the Animal Research Institute and a local agricultural NGO undertook the initial stages of RAAKS (*redefinition of the problem*) with a number of farmers at specially held workshops. Initial discussions quickly identified the major obstacle to the formation of co-operatives – the diversity of individual farmer's strategies and methods used in rearing. Later discussions focussed on how farmers could come together to plan with extension staff and credit organisations, given that the pooling of stocks was not a pre-condition to forming a co-operative.

In the next series of discussions, farmers went on to nominate eight groups of 5-10 members each which would manage their activities collectively and go on to make up a larger farmer's association in the near future. A problem census revealed that the constraints to pig-farming were all related to lack of credit (an inability to invest in improved breeds, feed, repairs and housing) and arrangements were subsequently

made for favourable loan arrangements with the NGO and the Rural Bank.

The success of this process depended on re-framing the farmers' reservations regarding the pre-conceived limitations of co-operatives (the belief that all stock would be brought together) and directing this new enthusiasm to joint-identification of problems and solutions.

Example 2

The Participatory Action Plan Development (PAPD) methodology has been jointly developed and tested in Bangladesh by the Centre for Natural Resource Studies (CNRS) and the University of Newcastle (see Report 3 for a review of PAPD and its performance at three project sites in Bangladesh). The approach adopts four steps; i) identification of suitable stakeholder groups for consultation, ii) a problem census held with each of those groups, iii) a planning workshop and, iv) action plan implementation. The process introduces the key issues faced by each stakeholder group to all the participants and the emphasis is on highlighting commonalities between people's interests and how solutions might accommodate all concerns. In this regard, much depends on the expertise of facilitators in guiding and motivating participants towards successful and constructive outcomes. (Process evaluation undertaken within this project revealed an overall ability to stimulate participants and develop feasible action plans).

The focus on problem-identification, rather than just problem-solving, and the development of alternative management scenarios acknowledges Soft Systems Methodology and Future Search, but PAPD also draws on a suite of activities and tools commonly associated with participatory rural appraisal (for instance, problem census, time-lines, diagramming and mapping).

Type D – *Local processes to create consensus and avoid conflict*

These processes operate at a local scale (either with or without the formal acknowledgement of the state) and tend to function as dispute-resolution mechanisms. Groups or individuals may act as arbiters, mediators or facilitators in cases that may directly or indirectly reflect NRM issues (conflicts over access rights, land disputes etc.). Whether the mechanisms are driven by an underlying motive to maintain the status quo and current power structures, or whether they are concerted attempts to avoid violence, communities tend to draw on a universal array of procedures to treat disputes: avoidance, coercion, negotiation, mediation, arbitration and adjudication (Nader and Todd (1978) in Castro ibid.).

Example 1

In Bangladesh, the traditional body for dispute-resolution is the *salish* court, comprised of several respected *matbor* elders. The process is a directed one, and the various parties are encouraged, with considerable input from the court, to reach consensus. Although, the ability of the *salish* to impose or influence agreements will reflect the local status of its members (rather than an ability to reach equitable or informed decisions),

the *salish* of Bangladesh traditionally represents people of all religions and is accessible to everyone, regardless of literacy or social class (Center for Democracy and Governance, ibid.).

Example 2

Moore and Santosa (ibid.) discuss the process of *musyawarah* and how the Indonesian government has attempted to institutionalise this form of dispute-resolution within a formal and bureaucratic framework (see Section 4). As with numerous other consensually-based systems of village justice found throughout the archipelago, the *musyawarah* attempts consensus (*muafakat*) through the efforts of a customary law leader, or *adat*, who may either advise disputants or impose binding decisions (Ihromi, 1988). As such, the process rests on an acceptance of social rank and status. However, Moore and Santosa consider this last factor a major constraint to its uptake and relevance to modern disputes in Indonesia today where stakeholder groups are well-organised and sophisticated and where stakes are high (environmental and social pressure groups, NGOs, corporate interests etc.).

Glossary of Terms

Agricultural Knowledge and Information Systems (AKIS) – an approach developed by Röling and Salomon (ibid.) to represent the dynamics and unpredictability of agricultural extension and group learning processes at a local scale. AKIS acknowledges the importance of *social learning* in the adoption and evolution of ideas*.*

Alternative Conflict Management (ACM) – generic term for those consensus building approaches applied to natural resource management (particularly projects) and which adapt *ADR* principles to the development setting.

Alternative Dispute Resolution (ADR) – consensus building approaches specifically designed to avoid normal legal or formalised processes of resolution and to emphasise openness and dialogue. Principally developed in the U.S. to democratise civil planning and corporate dispute resolution.

Arbitration – an adjudicatory process where disputants present their cases to an independent third party for binding (compulsory) or non-binding judgement.

Best Alternative to a Negotiated Agreement (BATNA) - any party's insurance strategy if consensus building should break down. A BATNA may for instance consist of withdrawal from a conflict, or an attempt to reach some form of compromise rather than consensus..

Binding assistance - where an external third party (arbitrator) has been granted the authority to impose solutions to a dispute.

Collaborative management – pro-active engagement of local stakeholders in natural resource management projects, particularly conservation projects (Borrini-Feyerabend ibid.).

Conflict – the pursuit of incompatible goals and positions by different groups (Miall et al, ibid) that may obstruct rational management (Rijsberman, ibid.).

Conflict management – approaches that limit and contain the negative impacts of conflict rather than remove its underlying cause.

Conflict resolution – both the process and outcome of halting conflict by removing underlying causes.

Consensus – a positive outcome (or state) where all stakeholders consider their position and interests to be strengthened (or to be strong).

Consensus building – any process that seeks to agreement and create value by expanding the range of possible management options (Susskind, 1999). Consensus building approaches may be applied to manage conflict, but may also be used to engender greater collectivity and cohesion generally.

Deliberative Inclusionary Processes (DIPs) – the range of participatory forms of policy

formation and planning that explicitly aim to involve public or "non-expert" groups (for instance, citizen's juries, public meetings and participatory rural appraisal).

Facilitation – a "light" form of third-party involvement with the aim of establishing communication, rather than necessarily identifying solutions.

Game theory – a mathematical approach to economics and social behaviour that attempts to recreate real trade-offs and motives by defining the rules of transaction in simulated "games". (Generally based on neo-classical economic conceptions of human motivation)

Interests – what the participants in a process of negotiation set out to achieve (Susskind, 1999) and what motivates people within conflict (Fisher and Ury, ibid.).

Mediation – a process of negotiation whereby a third-party maintains constructive dialogue but does not actively direct the discussion or dictate its outcomes.

Multi-Criteria Analysis (MCA) – a mathematical and economic approach to finding "best-fit" management policy solutions. Important management criteria (employment, conservation, revenue etc.) are identified and given nominal values before they are traded-off mathematically.

Platforms (for resource use negotiation) – formal or informal decision-making bodies representing interdependent stakeholders and concerning certain sets of management problems (Röling, ibid.).

Position – the public stance of an individual or group towards an issue or dispute. Positions are dictated consciously, or subconsciously, by *interests* (see above).

Prisoner's Dilemma – a situation whereby the logical, selfish position of each party is actually counter-intuitive and destructive. (See Game theory)

Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) – a set of participatory tools developed by Salomon and Engel (ibid.) and designed to actively involve local stakeholders in re-appraising management options and problem-solving. Principally designed to analyse the effectiveness of agricultural extension programmes but applicable to any system.

Social capital – the formal and informal networks of membership, reciprocity or trust that people may draw upon in pursuit of their livelihoods. (DFID SL Guidance Sheets, April 2000).

Social learning – the enhancement of social capital by lifting barriers to communication and encouraging mutual learning through dialogue.

Soft Systems Methodology – Peter Checkland's (1981) methodology to understand complex, "messy" problems that characterise human and management systems. SSM accepts the diversity of world views held by stakeholders but attempts to promote learning by deconstructing and discussing problems and potential solutions.

Sustainable Livelihoods Approach -- a framework designed to improve understanding of poverty and the effectiveness of development policy and programmes. The SLA focuses on the potential of individuals to realise sustainable livelihoods through their present assets (human, social, physical, natural and financial) and how these assets might better be utilised to meet the current and future needs of the poor. (DFID SL Guidance Sheets, April 2000).

Transforming Structures – the formal and informal institutions that can convert livelihood assets to sustainable livelihoods. They can include both political infrastructure and social networks. They can have both positive and negative impacts. (DFID SL Guidance Sheets, April 2000).

Win-win – the end-point of negotiation, analogous to consensus, whereby all parties perceive their position to be strengthened.

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