# Research as mediation: linking participatory action research to environmental conflict management in East Nusa Tenggara, Indonesia

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#### SUMMARY

Moeliono and Fisher highlight a research and mediation process conducted over eight months in the Riung Conservation Area on the island of Flores in Indonesia. Numerous conflicts have erupted over the use and management of the marine and terrestrial reserves. The process described by the authors is designed to identify the sources of conflict, gather sufficient information for negotiation and planning, organize the parties in preparation for negotiation, and bring the parties together to seek mutually acceptable agreements. In this case participatory action research techniques were especially useful in empowering local communities to participate more effectively in defining issues and negotiating key positions.





#### **KEY ISSUES**

- What is the connection between conflict resolution and participatory action research?
- How does obtaining access to information affect conflict management processes?

#### CONTEXT

• Why is Riung an arena of conflict?

#### CONFLICT BACKGROUND OR HISTORY

- How does historical analysis help us understand and manage contemporary conflicts?
- Can you distinguish primary and secondary stakeholders in the Riung conflicts?

#### CONFLICT MANAGEMENT AND RESOLUTION PROCESSES

- What were the chief steps in organizing and implementing conflict management?
- Who took responsibility for facilitating the conflict management process?
- What were potential sources of bias in the selection and composition of the research and mediation teams?
- How can participatory processes ensure and maintain trustworthy results?

#### CONFLICT MANAGEMENT AND RESOLUTION OUTCOMES

- What were the tangible and less tangible outcomes of the conflict management process?
- Why have few of the agreements been implemented? What could be done to ensure a greater degree of completion?

#### LESSONS LEARNED

- What do you regard as the most important lesson learned from this case study?
- How can participatory research affect power relations in conflict management?

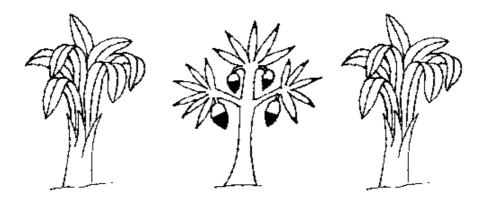


# **KEY ISSUES**

Protected conservation areas are being created throughout the world to conserve biological diversity, protect critical watersheds, prevent overexploitation of forest resources and preserve scenic natural areas. The establishment of these protected areas has often overlooked the presence of local people, and the gazetting of protected areas is in direct conflict with local people's livelihoods. These conflicts have challenged practitioners to seek new methods for reconciling the trade-offs between conservation and poverty.

This case is a brief description of a research and mediation process conducted over eight months in the Riung Conservation Area, a collection of marine and terrestrial reserves on the island of Flores in Indonesia. The process described here was designed to identify the sources of these conflicts, gather sufficient information for negotiation and planning, organize and empower the parties in preparation for negotiation, and bring the conflicting parties together to seek acceptable and sustainable solutions.

This case highlights the integration of two effective approaches for dealing with complex public policy decision-making: conflict resolution, and participatory action research (PAR). While conflict resolution strategies provide a general framework for convening parties over contentious issues, PAR can be used to facilitate the important information gathering and analysis phases. In the Riung Conservation Area, PAR techniques were found to be especially useful in empowering local communities to participate more effectively in defining issues and negotiating key positions. In addition, as a structure for dialogue and analysis of issues, PAR offered a more objective and neutral context than conventional mediation in which to develop stakeholder awareness about the conflicts and the perspectives of other constituent groups, and for the preparation of stakeholders for subsequent analysis and negotiation.



# CONTEXT

## The Riung Conservation Area, Flores, East Nusa Tenggara, Indonesia

Nusa Tenggara comprises the southeastern arc of islands of Indonesia (see the two Maps). The region is divided into two provinces, West Nusa Tenggara and East Nusa Tenggara. Nusa Tenggara's rugged topography, poor soils, semi-arid climate and erratic rainfall severely limit agricultural productivity. The island of Flores, however, presents a largely volcanic geology with more fertile soils, more regulated rainfall and cooler upland temperatures.



A view of Riung and the Seventeen Islands

The subdistrict of Riung (in Ngada District) is located on the northern coast of Flores, in the west-central portion of the island. The area consists of rolling hills that slope downwards to the sea, and the land is covered with forests interspersed with open grassland and a patchwork of small farms. The sea facing the coast of Riung is dotted with a number of small islands called the Seventeen Islands – it is an important fishing area for the local population.

Riung's unique geography is the reason that conservationists are eager to preserve its important ecosystems and biodiversity. In addition, public officials are interested in developing the area as a tourist destination. For these reasons, since the early 1980s several protected areas have been designated in the Riung subdistrict.



- In 1983 an area of approximately 1 670 ha around the town of Riung (within the administrative boundaries of five villages) was declared a protected forest.
- In 1987 the coastline and the sea around most of the small islands off the coast was declared the Seventeen Islands Marine Nature Reserve. Given its potential as a tourist destination, the government subsequently divided the reserve into two distinct units: i) the Seventeen Islands Marine Recreation Park, covering an area of approximately 9 900 ha; and ii) the Riung Marine Reserve, covering approximately 2 000 ha.
- Further inland, the terrestrial Wolotadho Nature Reserve, established in 1992, covers an area of 4 016 ha and completely surrounds the Riung subdistrict capital.
- Finally, a 200-m-wide strip along the coastline was declared a green belt conservation area.



# **CONFLICT BACKGROUND OR HISTORY**

Several "original" tribal/ethnic groups currently inhabit the area. The Bar, Tadho, Terong, Riung-Tiwumeze and Ria-Latung tribes initially settled in the hills and they are primarily farming communities. The immigrant Bugis and Bajo tribes from Sulawesi settled on some of the small islands off the coast, and mostly make their living from the sea. People from Selayar, an island south of Sulawesi, established settlements along the coast.

In the early 1970s, ignoring all existing local land rights, the subdistrict government resettled all upland people on the coastal plain. The government's stated intent was to improve these communities' access to government services, including the government-built schools and a health centre in the subdistrict capital. However, there was strong resistance to this relocation of traditional communities, and the government resorted to force, with assistance from local police and military units.

For a while the communities were largely compliant, and they stayed in the coastal areas, establishing gardens and fishing. As already mentioned, the forested area in the hills was subsequently declared a nature reserve and the area around it defined as a protected forest. Similarly, the sea around the islands was gazetted as a nature reserve and a marine recreation park. The regulations pertaining to protected areas effectively restricted local people's access to all forest and marine resources. While they disagreed with these policies, most people initially respected the regulations, and the government was able to enforce the rules. However, in the early 1980s an extended drought resulted in widespread crop failures. People pointed to the sandy soils and lower rainfall of the coastal area, and many decided to return to their old gardens in the uplands. This was not legally possible, however, as those upland areas were within the protected forest. As the food situation became precarious, some of the tribal leaders requested permission to open gardens within the forest zone. Recognizing their concerns, and with the approval of the District Head, the Chief of the District Forest Service gave his consent – on condition that as well as planting food crops the people would use recommended soil and water conservation measures and plant tree crops.

In farming this first land clearing, the people kept their promise and planted a variety of trees among their food crops. Soon after the first clearing had been established, other groups returned to the uplands and opened additional land clearings. However, for these subsequent land clearings no permission was requested and none of the guidelines were followed. As new members joined the groups, the land clearings were expanded.

Worried by the expansion and the lack of soil and forest conservation measures, the District Forest Service moved to control the land clearings and threatened to evict farmers from the area. Having de facto control of the land, the people maintained their access rights by virtue of their ancestral history in the area. They claimed that they had farmed the land before they were forcibly removed – an action to which they had never agreed. In addition, they pointed to the verbal agreement with the District Forest Service, and to the fact that they had paid taxes on the land. The district government, referring to various decrees regarding the protected areas, insisted on its authority to control this public land.





A newly opened farm within the protected forest zone

In addition to these conflicts over land use within the upland protected areas, related disputes developed over access to the Wolotadho Nature Reserve and fishing areas within the Riung Marine Reserve. The Agency for the Conservation of Natural Resources (BKSDA) tried repeatedly to prevent people from extracting timber from the nature reserve. BKSDA staff also patrolled the marine reserve to prevent fishing, particularly the use of explosives on the coastal reefs.

In 1995, Yayasan Nurani Desa (Sannusa), a local non-governmental organization (NGO), started to work in Riung. Unaware of the land-use conflicts, it focused its work primarily on agroforestry extension and the formation of savings and loan groups. As Sannusa staff became aware of conflicts over the protected areas, they considered organizing a larger dispute resolution effort. Sannusa requested the assistance of the Nusa Tenggara Community Development Consortium (NTCDC).<sup>1</sup> In response, NTCDC included the area, generically referred to as the Riung Conservation Area, as one of its priority sites in the region. Sannusa col-

<sup>1.</sup> NTCDC is a network of various agencies and stakeholder groups in the Nusa Tenggara area. It seeks to address regional development policies through regular convening, action research and capacity building.

laborated with several NTCDC partners in convening an initial participatory research effort focused on conflict analysis. Through village dialogues and discussions with public officials, it became apparent that these conflicts over access to forest and marine resources were linked to other related disputes caused by top-down, inconsistent and conflicting government policies that largely ignored local conditions and interests.

At the same time, however, additional conflicts emerged that involved more traditional rivalries and disagreements – both between local tribal and ethnic groups, and those involving competing jurisdictions among government agencies. These more latent, less obvious conflicts demanded a more comprehensive conflict resolution approach, one that also addressed the horizontal tensions among local communities and tribal groups, and the jurisdictional disputes among government agencies.

TABLE MAIN STA	KEHOLDERS IN THE RIUNG CONSERVATION AREA					
Government agencies	Communities		Local NGOs			
	Villages	Tribes/ethnic groupings				
Bupati's Office Bureau for Tourism Development Forest and Soil Conservation Service Natural Resource Conservation Agency Agricultural Service Village Development Bureau	Benteng Tengah Lengkosambi Nangameze Sambinasi Tadho Taen Terong Wangka	Bar Terong Riung- Tiwumeze Ria-Latung Tadho Bajo Bugis Selayar	Sannusa Yayasan Cinta Daerah			
Agency for Estate Crops Development	Outside agencies		Other			
Office for Public Works Land Administration Bureau District Planning Board Subdistrict Government Local police	Provincial Department of Forestry Provincial Forest Service Other NTCDC member agen- cies: Koppesda, Cornell University		Local Parliament - Riung Area Representative			

The stakeholder groupings in these disputes are outlined in the Table.

# CONFLICT MANAGEMENT AND RESOLUTION PROCESSES

Over a period of two years, Sannusa and NTCDC partners made several attempts to gain the attention of the District Government and initiate a formal conflict resolution process. In October 1995, Sannusa organized a participatory rural appraisal and conflict analysis exercise in the village of Sambinasi; the exercise included a workshop and presentations to the District Government. In February 1998, NTCDC's Conservation Working Group held its regional meeting in Riung to raise the profile and awareness of the conflicts over the protected areas. These attempts were largely unsuccessful for several reasons: i) Sannusa did not pursue the matter intensively; ii) it focused its analysis on a single village; and iii) it dealt only with the District Forest and Soil Conservation Service. Consequently, the District Government viewed the effort as relatively unimportant and localized, and solely within the jurisdiction of the Forest and Soil Conservation Service.

As Sannusa expanded its effort to address all the communities affected and assigned a full-time staff person to work directly on this effort, government officials began to take notice. At the same time, the replacement of key government personnel brought into office younger and more responsive officials. The increasing profile of the case, Sannusa's greater commitment to working at a larger scale and engaging communities and local public officials, the presence of more responsive leaders, and the broader process of government reform taking place in Indonesia combined to offer the right moment for organizing a comprehensive and inclusive conflict resolution effort.



Ilya Moeliono (Cornell, gesturing, in white shirt) and Ronny So (Sannusa, in blue shirt) discuss issues with local farmers

## **Preparatory activities**

After the initial unsuccessful attempts already described, in 1999 Sannusa began to work more closely with the NTCDC-based Natural Resources Research and Coordination Team (KOPPESDA). Together, they approached the various stakeholders, especially the District Government, to introduce and promote the idea of conflict resolution and develop support for a comprehensive process. Six months of discussion and relationship building resulted in the District Head issuing a decree formalizing the effort within the government bureaucracy. The decree was critical in legitimizing support within the various technical service agencies; it was also important in convincing local communities of the government's commitment.

#### Formation of a core team and issuance of a formal decree

The District Head's decree called for the formation of a team consisting of representatives from the principal government agencies, KOPPESDA, Sannusa and Cornell University.<sup>2</sup> The team was given the mandate to take any necessary steps to resolve existing natural resource and socio-cultural conflicts in Riung. Proposed actions included the design of an overall conflict management process, the formation of a research team and the accomplishment of general agreements reconciling these conflicts. The decree also acknowledged the importance of full participation of all stakeholder groups.

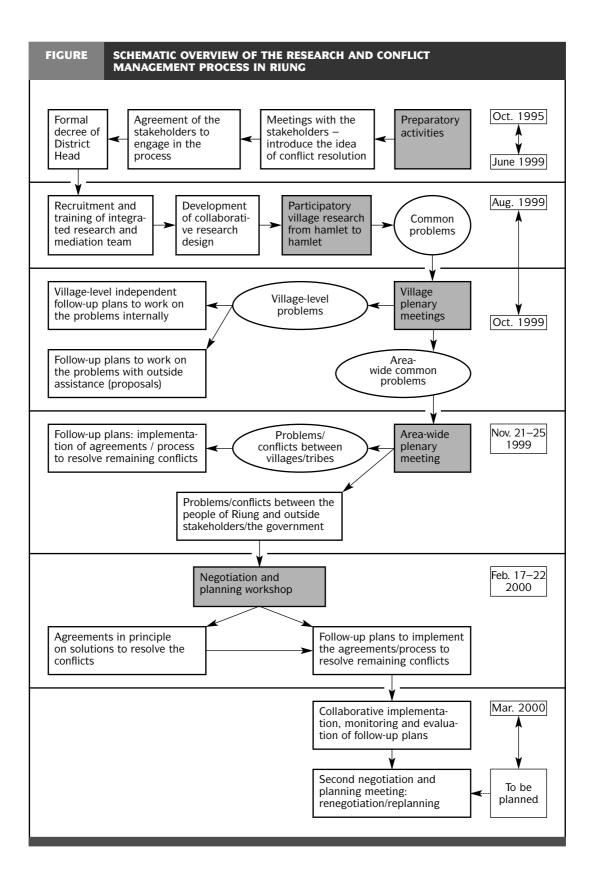
## **General process design**

A critical step in convening the process was the development of a map and schedule to guide the conflict management effort. This process design, presented in the Figure on the next page, was developed considering the need for sufficient information gathering, internal community and government-level discussion and analysis, collective dialogues to assess information, and extensive opportunities for negotiation. The design incorporated strategies to address concerns over the power imbalances between urban-based public officials and rural community residents (e.g. education, access to relevant information, level of organization and experience in negotiating).

The cost of all activities included in the process, excluding preparatory work and in-kind contributions from government agencies and communities, was approximately US\$26 500. Funding was obtained from three different donor agencies.<sup>3</sup>

<sup>2.</sup> Cornell University (United States), through its Program on Environment and Community (PEC), Center for the Environment, is an active member of NTCDC and has been supporting similar efforts in other areas in the region. Its participation was coordinated by PEC. Additional Cornell support was provided by the Cornell International Institute for Food, Agriculture, and Development (CIIFAD) and the Department of Natural Resources.

<sup>3.</sup> Ford Foundation, World Neighbors and Cornell University.



# Recruitment, formation and training of the research and mediation team

The decree also endorsed the plan to create a fact finding (research) team. The core group recruited 16 researchers from relevant district government agencies and local NGOs. Participants from these agencies were appointed by their agency's director, and were mostly drawn from junior staff.

As preparation, team members underwent two weeks of training that included an overview of the Riung subdistrict and the conflicts in the area, along with basic concepts and skills related to community-based natural resource management (CBNRM), PAR and conflict resolution. Team members developed the research design during the training, identifying the research goals, specific objectives, basic research questions and the various techniques for collecting and analysing information.

## Field-level participatory research and village plenary meetings

The research focused on identifying conflicts and gathering baseline information about the context of the disputes. This information was then used as input for the problem solving and planning process. The research was also viewed as a means for building a common awareness among stakeholders about the nature of the conflicts and potential paths towards resolution.

The research was conducted as a series of individual village-level studies. Team members were divided into several groups, each working in two villages in sequence. A number of interrelated conflicts were identified through the village studies, and these disputes were discussed during village plenary meetings organized at the end of each village study. Those conflicts that were considered internal matters of the individual village were discussed at the village level, with residents determining plans and actions for resolving these local disputes. Those problems that were considered to be common among all villages were high-lighted for later discussion during an area-wide plenary meeting.

## **Policy analysis**

Since many of the conflicts identified during the research were related to (if not actually caused by) inappropriate or conflicting government policies, analysis of relevant government policies was included in the overall process design. The policy analysis was also conducted as a participatory effort, in that officials from each of the government agencies identified and assessed how their agencies' policies related to the conflicts in Riung. This policy review was designed to help

public officials understand the origins of the conflicts, the implications of the policies, inconsistencies between policies and implementation, and also the need for a coordinated response to the emerging conflicts.

Unfortunately, as a result of various constraints (primarily other commitments and lack of time), the policy analysis was never fully completed.

## Area-wide plenary meeting

The area-wide plenary meeting offered a chance to consolidate the village research findings, as well as an opportunity for local community representatives and tribal leaders to negotiate. During this meeting, hosted in one of the villages, representatives from each of the villages presented a summary of the problems and conflicts identified in the village studies. The principal conflicts common to all villages were grouped into six categories and discussed separately (see Table).

During this area-wide plenary meeting, community-level participants reached agreement on a process for settling historical boundary and land disputes. They also reached agreement on those conflicts with the government that were to be discussed and resolved in subsequent meetings with the District Government. To this end, each village selected six representatives (the formal village head and five other members) to negotiate directly with the government.



Government officials meet with communities for initial discussions on forest management issues

TABLE CONFLICTS	ICTS IDENTIFIED IN T	IDENTIFIED IN THE RIUNG CONSERVATION AREA <sup>4</sup>	tion area <sup>4</sup>		
Land rights and tribal issues	Wolotadho Nature Reserve	Land clearings within the protected forests	Seventeen Islands Marine Recreation Park, Riung Marine Reserve	Development of tourism and green belt area	Economics, agriculture, livestock and plantations
Tribal area bound- ary disputes among tribes/ clans Administrative boundaries cutting across tribal boundaries Leadership dis- putes among clans/factions within the tribes Certification, sale and donation of tribal land to out- siders without con- sent from the tribes Construction of public buildings on tribal lands with- out the consent of the tribes	Wolotadho is not recognized by local people – Wewotadho is pro- posed Boundary markers deviating from offi- cial government map Reserve boundaries include agricultural land and residen- tial areas Construction of public infra- structure projects within the nature reserve Illegal logging and hunting	Protected forest de- clared state land by the government, claimed as tribal land by the people of Riung Gardens do not follow agreed soil and water conser- vation practices Expansion of exist- ing land clearings and opening of new ones Competition among different tribes in the open- ing of new land clearings Burning of grass- lands by the people	Illegal fishing in the nature reserve; use of explosives and poisons Declining fish catch; competition among fishers Use of fish traps promoted by the Fisheries Service, but forbidden by the Conservation Service Harvesting coral and mangrove for natural dyes Unfair competition of boat owners and local guides	Local residents not informed about tourism develop- ment plans; con- cerns about limited local benefits, fear of displacement Temporary markers for area planning placed without people's consent or understanding Residential areas included in the green belt area where no perma- nent buildings are allowed, but excep- tions made	Loose cattle destroying gardens Distribution of irri- gation water dur- ing dry season Imposition and fail- ure of various gov- ernment projects Lack of agricultural extension services Dysfunctional farmer groups and cooperatives Unfair distribution of agricultural credit Outstanding agri- cultural loans No veterinary assistance from the Livestock Service during disease out- breaks

RESEARCH AS MEDIATION: LINKING PARTICIPATORY ACTION RESEARCH TO ENVIRONMENTAL CONFLICT MANAGEMENT IN EAST NUSA TENGGARA, INDONESIA

4. Problems are not listed in any particular order or priority.

#### **Internal meetings**

After the communities' negotiation team was formed, internal discussions were held to examine emerging issues, define positions and interests, consider alternatives to negotiated agreements and generally prepare to face the government. On the government's side, the District Planning Board organized similar meetings to prepare the delegation from the District Government. Unfortunately, the governmental meetings were not well attended. Many agency directors were represented by junior staff members who were not in a position to negotiate.

## Negotiation and planning workshop

The preparatory process described above culminated in a six-day negotiation and planning workshop attended by representatives from all government agencies and communities. The workshop opened with a full day's report of the research findings. Following discussion of the research, community leaders presented their initial demands. To achieve a common understanding on key conceptual issues, the first day also included an introduction to CBNRM, as well as an introduction to basic principles of conflict resolution and negotiation.

The second part of the workshop was divided according to the six thematic issues identified by the research; these discussions were facilitated by members of the research team. In between the group discussions each side (i.e. government, community) met separately to discuss the issues and coordinate its responses. These discussions led to general agreements on most of the conflicts identified; the sole exception was continuing disagreement over land clearings within the protected forest.

The final phase of the workshop was structured to enable participants to translate their general agreements into concrete implementation plans. Unfortunately, time became a limiting factor. At the end of the workshop, many of the implementation agreements still lacked sufficient detail. The workshop was closed by a brief ceremony during which the agency and village representatives signed a document outlining all agreements reached.

#### Documentation

The various events, processes and results were documented in several forms, including: a) reports on the findings of the field research from each of the seven villages; b) a general report on the area-wide plenary meeting; c) thematic discussion papers for issues identified during the area-wide plenary meeting (see Figure on p. 218); and d) a general report on the negotiation and planning meeting. Although disagreements continued over portions of the reports, all documents were made available to the parties for reference during discussions.

# CONFLICT MANAGEMENT AND RESOLUTION OUTCOMES

The main outcome of the negotiation process was a 62-point agreement, including operational plans for implementation. Some examples of these agreements are presented in the Table.

TABLE	SUMMARY OF KEY AGREEMENTS REACHED						
Land rights and tribal issues	The Wolotadho Nature Reserve	Land clearings in the protected forests	17 Island Marine Recreation Park, Riung Marine Reserve	Development of tourism and green belt area	Economics, agriculture, animal husbandry and plantations		
Agreed to implement further col- laborative research on tribal his- tory, institu- tions and land tenure as a starting point to set- tle internal disputes Rebuild tribal insti- tutions and prepare for negotiations with District Government	Name changed to Wewotadho A participa- tory mapp- ing process to determine new bound- aries; resi- dential areas, gar- dens and infrastruc- ture will be excluded New bypass road to be built around the nature reserve; present road to be closed except to limited local traffic Local resi- dents given free access to sacred sites; allowed to build shrines, but should maintain the environment	No substan- tive agree- ment reached Agreed to continue the negotiation process after wider con- sultation with village elders	Fishing allowed in the pro- tected areas using only traditional equipment Local groups will assist the Conser- vation Agency and the police in protecting the reserves Government will desig- nate specific locations where lim- ited harvest- ing of coral and man- grove will be allowed	Existing plans to be revised based on alternative ecotourism plans to be proposed by the people of Riung Participatory mapping of the green belt area; residential areas and gardens will be excluded Local people can negoti- ate directly with outside investors who are interested in Riung	All govern- ment proj- ects will be discussed with local people before implementa- tion Government will estab- lish an ani- mal health post Government will assign a fisheries extension agent in the Riung sub- district Government will explore the potential to establish new irri- gated rice fields		

Other less tangible outcomes included empowerment of village-level and government participants and increased awareness of the conflicts and their causes. Specific new skills gained by the participants included research and data analysis, documentation and presentation of findings, facilitation, mediation and negotiation, and an increased awareness of the need for better coordination among parties to achieve more effective programmes.

While evaluations following the workshop indicated that people were satisfied with the agreements, at the time of writing (nine months after the workshop), few preliminary elements of the agreement have actually been implemented. It appears that each party is waiting for the other side to take the initiative. The lack of progress on implementation may also be partly due to the fact that many of the plans were not worked out in sufficient detail and thus people have been hesitant to take the initiative. Another factor is the absence of a formal mechanism to enforce and monitor implementation of the agreements. Nevertheless, some of the points of the agreement have been incorporated into the government's official development planning process for the coming fiscal year (2001–2002), and thus may be delayed only by formal approval and budget allocation.

Sannusa is currently attempting to move this process forwards and create stronger accountability mechanisms with village and tribal leadership. However, it may still be some time before results can be seen in sustainable management practices in the area.



A group of farmers within the protection forest

## LESSONS LEARNED

After the negotiation and planning workshop, the research and mediation team met to reflect on the process. Some of the lessons identified include:

- The importance of preparatory activities. Significant advance work is decisive in convincing groups of the value of participating in the process. Given the importance of this preparatory phase, the presence of a capable and committed initiating agency cannot be overestimated – this agency must allocate time and resources (and considerable patience) to these initial "diplomatic" activities.
- Research as mediation. Research can provide an acceptable framework to clarify the issues and bring together parties that might otherwise reject more formal or more obvious dispute resolution processes. Research is generally recognized as a logical first step; it is perceived as a far less threatening and somewhat neutral forum by parties unfamiliar with formal mediation. Research, with its notion of objectivity, also helps the parties distance themselves somewhat from the conflicts and start to perceive them as common problems to be solved in collaboration.
- Decentralization and CBNRM. Recent changes in national policies pertaining to natural resources management and to more decentralized decision-making processes created important opportunities to accommodate diverse interests within the introduced concepts of sustainable development and CBNRM. This provided a common framework within which the parties could meet and negotiate.
- Ecoregion as the unit of analysis. Conservation of protected areas suggests that resource management should be addressed at the ecoregional level. This approach helped mitigate many of the individual village-level disputes, providing a unifying theme to bring together a broader set of stakeholders. This larger unit of analysis, however, required special adjustments in approach:
  - Scaling up of PAR. This effort showed how a PAR process, through the application of participatory techniques and broader convening strategies, could be scaled up to an area much wider than individual village units. The use of carefully sequenced convening methods and the participation of democratically elected representatives were critical elements of this strategy.
  - Engaging multiple stakeholders. Working at this larger scale suggests the need to work simultaneously with many different stakeholders who have many different interests. This requires a process where internal differences within each of the stakeholder groups must be expressed and addressed before individual stakeholder groups participate in larger fora.



A traditional leader, holding a chicken to signify unity, opens one of the community discussions

- Dealing with multiple, interrelated issues. Another consequence of the large area and involvement of multiple stakeholder groups is the great number of issues and conflicts the process must accommodate. A clustering and prioritization of issues becomes necessary, together with a phased process for analysing and addressing these issues.
- Representative research and mediation team. One of the unique features of this effort was the establishment of an integrated research and mediation team whose members were recruited from among key agencies. Such an approach may be questioned on the assumption that researchers and mediators should be outside, neutral (i.e. disinterested) parties. However, this case demonstrated that recruiting members of a mediation team from among the conflicting parties is not only possible, but also preferable, as the mediators possessed significant knowledge of the issues and were well known to the parties.
- The need for empowerment and balance of power. Negotiations are often determined by the balance of power and are frequently skewed in favour of the stronger party. In an attempt to help parties manage factors influencing the balance of power – information, organization, legitimacy and numbers – the process design included many separate meetings. It is interesting to note that the aborted policy analysis event actually shifted the balance of power in favour of the communities. During the negotiations the village representatives presented a more or less united front while government representatives acted quite parochially on behalf of each of their respective agencies. Consequently, some suboptimal decisions were made as government participants made early concessions without sufficient coordination with other agencies.

- The importance of distinguishing "power at the table" from "power away from the table". Power gained through the preparatory research and convening process gave community representatives the upper hand during final negotiations. However, this fact did not enhance the implementation of agreements, since the parties have been largely unable to move the process along. It appears, therefore, that empowerment should not only be directed at gaining power in the negotiation process but also at finding more effective means of implementing agreements.
- ◆ The need for activist mediation. The research and mediation process is an intervention in a political process and therefore has to deal with issues of power and policy. During the process, the research and mediation team gained power from the stakeholders and actively used this power to move the process forwards. The team not only warned participants when they were entering into less than optimal agreements, but even prevented them from doing so by manipulating the process. Such "activist mediation" was considered necessary as a balancing factor to move the process along and to achieve optimal solutions beneficial to all the parties.
- The use of PAR in the context of conflict resolution. The use of PAR within the conflict resolution process served many purposes. It:
  - educated the parties about the issues and about each other;
  - helped participants learn to appreciate each other's viewpoints and interests and to develop a common focus;
  - offered sufficient information on the issues needed for negotiation, decisionmaking, planning and subsequent monitoring and evaluation;
  - provided opportunities for parties to become better organized and develop internal consistency, resolve internal differences, solidify power, strengthen their negotiating positions and balance power at the negotiation table;
  - created a climate of cooperation necessary for later stages of negotiation and collaborative planning;
  - prepared the researchers for their roles as mediators. Team members gained new understanding about the issues and the parties; in turn, the stakeholders also became familiar with the team, and as a consequence accepted them as mediators.

While arguments for the use of PAR within the conflict resolution process are certainly convincing, several problems must also be considered in applying this methodology:

 Information bias. Many participants, anticipating that the research findings might either strengthen or weaken their bargaining position, attempted to influence the outcome of the research by providing false or misleading information. Careful triangulation and the use of multiple methods are needed to validate information.

- Confidentiality. Not all information can be obtained in public fora a main feature of PRA techniques. Individual interviews are helpful in gaining information considered personal and confidential. In conflict situations, people often have unspoken motives; others may be reluctant to disagree publicly, especially with powerful opponents.
- Group dynamics. In all groups there are less outspoken people who nevertheless have valuable information to share. This information can be more effectively obtained through personal or small group interviews.
- ◆ Agreements as mid-points. Many participants in dispute resolution processes regard the agreement as the ultimate goal. Follow-up visits eight months after the formal signing of the 62-point agreement in Riung suggest that there are important elements to be included in the agreement that go beyond substantive matters. Clustering agreements into operational plans is an important step in ensuring implementation, as is the creation of an institutional mechanism (and criteria) for enforcement and for accountability.

Other lessons learned in crafting the Riung agreement:

- Agreements must incorporate adequate knowledge and skills in planning methods and techniques, including familiarity with formal government planning and budget allocation procedures.
- Agreements must allow enough time to develop detailed plans, including the assignment of specific and clear responsibilities to each of the parties. These plans must be reviewed and updated regularly to accommodate important changes.

Finally, it is important to recognize some of the basic constraints in pursuing this approach to conflict resolution. Some of the more obvious limitations included:

- Time and funding constraints. A formal project proposal was requested before sufficient knowledge about the situation was available. At a later stage, the process design had to be developed and implemented within a predetermined time frame and within strict funding limits, compromising flexibility and adaptability. Even though some additional time and funding were found during the process, the participants ran out of time during the final stage of negotiation and the operational plans for the implementation of the agreements were not prioritized or worked out in sufficient detail.
- Human resources. There was also limited time to train the members of the research and mediation team. Ten days' training was not adequate to provide them with the tools and understanding to conduct the process. In addition to "learning by doing", many of the team's meetings became informal in-service training sessions.

- ◆ Insufficient information. The effort suffered from limited ecological and biological baseline information. Such information could not be gathered during the process owing to lack of time, technical limitations of available staff and obvious limitations of the more socio-economic-oriented research methodology. For this reason, some of the agreements will necessarily remain conditional and temporary; they will need to be revised when relevant information becomes available.
- ◆ Bureaucratic constraints. Beyond the common cultural problems within a large public bureaucracy, the effort suffered from many practical problems of dealing with busy and otherwise occupied public officials. Despite the official decree from the District Head, the research and mediation team experienced numerous problems in seeking support and coordination from their government colleagues.

In closing it can be said that the effort in Riung was indeed a rather ambitious initiative at conflict resolution. While many have applauded the innovative procedural aspects, the broad historic agreements reached and the model this offers to local government decision-making, the conflict resolution effort in Riung remains a work in progress. Recent visits to the region have highlighted the importance of institutionalizing these agreements, prioritizing actions, outlining accountability mechanisms and establishing regular monitoring procedures. It is clear that the process described here was merely the beginning of a longer-term effort to achieve both the attitudinal and structural changes necessary to resolve longstanding, complex, natural resource-related conflicts.

