

Spatial Planning Processes In The Provinces:

Gaps and Opportunities for the NRM Program

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Technical Report

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The NRM Program's Policy and Planning Group supports cross-cutting policy analysis and institutional development and provides economic and quantitative policy analysis services to all project components and partner organizations. Working with BAPPENAS and its provincial government counterparts, NRM Policy and Planning Group works in three main subject areas: spatial and land use planning; environmental economic valuation; economic analysis/impact assessment. In addition, policy issues related to community-based resource management and land use issues are supported in collaboration with the Forestry Management Group.

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TABLE OF CONTENTS

1.	SUMMARY	1
1.1	Spatial Planning on the ground	1
1.1.1	Past support for the BAPPEDA	2
1.1.2	Variation between the BAPPEDA	2
1.1.3	Future outlooks: Decentralization	3
1.2	The NRM Program and strengthening the spatial planning process	3
1.2.1	Recommended activities	3
1.2.2	Provincial liaison specialists	4
1.2.3	Leverage with other donors	4
2.	BAPPEDA AND SPATIAL PLANNING	5
2.1	Objective	5
2.1.1	The survey	5
2.2	Results	6
2.2.1	BAPPEDA and decentralization	6
2.2.2	Self-perception of roles	8
2.2.3	Provincial perceptions of BAPPEDA	9
2.2.4	The role of consultants	10
2.3	MREP, LREP-1 and LREP-2	12
2.3.1	Perceptions about how these projects arrived	13
2.3.2	Training provided and the fate of trainees	13
2.3.3	Equipment provided	13
2.3.4	Relevance of products	14
2.3.5	Follow-up	14
2.4	Assessment	14
2.4.1	Human resources	14
2.4.2	Data and spatial planning	16
2.4.3	Wants	17
3.	DISCUSSION	20
3.1	Why support provincial spatial planning?	21
3.2	Helping strengthen provincial spatial planning	21
3.3	NRM and potential activities in spatial planning	22
APPENDICES:		
Appendix 1	Structure of BAPPEDA	29
Appendix 2	Areas of discussion with BAPPEDA	31
Appendix 3	Principal People met during surveys	34
ABBREVIATIONS & ACRONYMS		38

Spatial Planning Processes in the Provinces: *Gaps and Opportunities for the NRM Program.*

1. SUMMARY

An exploratory survey looking into provincial planning capacity for managing natural resources was carried out among the Regional Development Planning Agencies (*Badan Pembangunan Perencanaan Daerah* or BAPPEDA) in the six provinces where NRM operates (Irian Jaya, East and West Kalimantan, North and Central Sulawesi, Maluku). Similarities and differences among the BAPPEDA are discussed, and opportunities for NRM to provide appropriate interventions presented.

Spatial planning should be a coordinated, forward planning process. Land use planning in Indonesia is regulated under the Spatial Use Management Law (Act No. 23 of 1992). This act and some aspects of its implementation have been reviewed elsewhere by the NRM Program (*Review Of Spatial Planning Process*, Brown and Jarvie, paper delivered at the Indonesian Regional Science Association Conference, Jakarta, October 1998) and by others, such as projects funded by the Asian Development Bank. This paper focuses on BAPPEDA capacities and needs in the context of NRM Program planning, not on the authorities for or implementation of spatial planning rules. Each province has a BAPPEDA responsible for development of spatial plans. Spatial planning is coordinated on two levels. The first is a single *Tingkat I* located in the provincial capital and responsible to the governor. The second is the *Tingkat II*, with an office in each *Kabupaten* answering to the *Bupati*, plus one in the mayoralty office of the provincial capital. Provincial or local government institutions are collectively termed *Pemerintah Daerah*, or PEMDA.

Neither *Tingkat I* nor *Tingkat II* has direct authority over any other agency. While they coordinate development of spatial plans, they have no enforcement authority concerning implementation.

1.1 Spatial Planning on the Ground

The process of provincial spatial planning is institutionally weak. Available spatial plans are vague. Strong sectoral interests, including ministries and private interests, are reported to be able to overturn provincial spatial plans either directly from Jakarta or through provincial offices. Unless there is a strong enough lobby to reject these sorts of interventions locally, spatial plans are either ignored or redesigned to fit around the intrusion.

Complicating matters further is a lack of agreement between agencies involved in spatial planning over base maps. For example, most local government agencies use maps based on RePPPRoT whereas Regional Offices of the Forestry Ministry (*Kantor Wilayah Kehutanan*, or *Kanwil Kehutanan*) and forest concessions base their maps on the *Tata Guna Hak Kehutanan* (TGHK) system. These are not the same. In the case of a land dispute, the map accepted as correct is the one with the most powerful lobby supporting it. The actual situation on the ground is rarely a consideration.

In addition to conflicts between provincial and national agencies over spatial planning development and implementation, disputes also occur between local government institutions at the provincial and *Kabupaten* level. Indeed, in one province visited, it was clearly stated that if a changes, the spatial plans for the district change too. What appears to be more often the case is that agencies work in isolation from each other with little integration or coordination.

1.1.1 Past Support for the BAPPEDA.

The largest projects aimed at developing better capacity in the BAPPEDA for provincial spatial planning were the Asian Development Bank sponsored Land Resources Evaluation Project (LREP) and the Marine Resources Evaluation Project (MREP). Each had a mix of successes and failures. A comment regularly heard during the survey was that these projects and others have been directed from central government and did not consider specific needs within each BAPPEDA. This led to situations where training opportunities have been passed to honorary staff who, after training was completed, would not be working for the BAPPEDA. Some now absent trainees' even received MS degrees. All stressed the need for locally relevant capacity building projects.

What appears not to have been addressed in BAPPEDA capacity building is the question of what a strengthened BAPPEDA would actually mean. Any BAPPEDA can be strengthened internally, but unless the planning process itself has greater authority, then the rationale for developing skills should be called into question.

Many donors and projects assisting the BAPPEDA have made the false assumption that it is BAPPEDA staff who research and write spatial planning documentation. In the majority of the BAPPEDA surveyed consultants are hired for these tasks. Some BAPPEDA thus function in the roles of contracting, management and review. In these cases it appeared that a core group of key people coordinates the spatial planning functions of BAPPEDA, and is generally dismissive of the competence of, and usually the need for, other staff. Within these BAPPEDA, the value of investment in supporting staff technical training is currently low. Funds would be better targeted at developing management and contracting capacity within BAPPEDA and strengthening skills of consultants.

1.1.2 Variation Between the BAPPEDA.

The BAPPEDA vary greatly. Whereas there are common needs to be supported, most capacity development efforts will need to be site-specific and conducted through real life planning exercises.

Some BAPPEDA are effective at providing some degree of coordination and development of spatial plans; others are not. Effective roles appear to be due to the presence of a key person or group connected to the governor. The connection can be direct or indirect. This means that the strength of the provincial spatial planning process has more to do with personality than institutional arrangements and legally prescribed functions. In essence, BAPPEDA functions best when there are competent staff that work well together and have the respect of other agencies, further backed by gubernatorial support.

This is often true in many sectors in Indonesia. The laws and rules and enforcement of them don't necessarily determine the results.

Project, not process, mentalities prevail among the weaker BAPPEDA. They are not involved in coordination of spatial planning, but within boxes of project activity that do not overlap or otherwise threaten strong sectoral interests. Whereas donor support can strengthen capacity in such BAPPEDA, outside political leverage will be needed to develop a framework in which enforceable, cross-sectoral, spatial planning is able to operate.

1.1.3 Future Outlooks: Decentralization.

All BAPPEDA were asked how they perceived their roles changing should their province become more autonomous. Answers varied.

Most BAPPEDA are optimistic about the role for all local government agencies to be stronger in the future, yet the grounds for optimism differ. The currently more effective BAPPEDA think that decentralization will be a process shifting power to the population of the province who will then be in a position to scrutinize their local government agencies and affect the positions of unpopular civil servants. In one BAPPEDA this has already led to a request for assistance in developing facilitation skills with communities. Two BAPPEDA have requested assistance in developing a coordinated cross-sectoral vision for sustainable natural resource management.

In the less effective BAPPEDA decentralization is seen as a transfer of power from the current political center to provincial government. The role for the population of the province would be at best, consultative.

All BAPPEDA expressed hopes that decentralization will diminish the role of strong sectoral influences, and that it would allow spatial planning to become truly a pro-active management and coordination tool.

1.2 The NRM and Strengthening the Spatial Planning Process

1.2.1 Recommended Activities.

Following discussion with the BAPPEDA, NRM could support activities in the following three areas:

- *Provision of cross-BAPPEDA support:* This can be conducted by providing forums for discussion between the BAPPEDA and supporting training of trainers within this network. This will support individual BAPPEDA and foster inter-BAPPEDA information flow. Additionally, the more effective BAPPEDA may provide good examples to their weaker counterparts.
- *Development of within province networks:* BAPPEDA cannot spatially plan alone. Intra-provincial networks to strengthen spatial planning need to be developed that include local and national

government agencies, NGOs and communities if planning and implementation are to become more transparent and effective.

- *A series of real-life planning exercises in provinces that accomplish goals and provide training and support:* Various activities have been identified for real-life planning exercises that will augment technical and facilitation skills among the BAPPEDA and other partners in spatial planning.

1.2.2 Provincial Liaison Specialists (PLS).

The success of NRM activities with BAPPEDA will rely on the PLS'. Their full support and assistance will be needed to ensure that regular communication and feedback between all relevant parties is in place.

1.2.3 Leverage with Other Donors.

Various needs identified in the survey are too large for NRM to take on alone. These include long-term training, development of biodiversity centers and raising GIS human and hardware capacity. Given that other donors are targeting some of these requirements NRM could play a role in supporting and advising on the best uses of these efforts

2. BAPPEDA AND SPATIAL PLANNING

The BAPPEDA are the provincial government planning development boards. Each province has a single BAPPEDA *Tingkat I* (T1) office based in the provincial capital, responsible to the governor. Within provinces, each *Kabupaten* has a BAPPEDA *Tingkat II* (T2) responsible to the *Bupati*. The relationship between T1 and T2 is indirect and consultative.

Among BAPPEDA responsibilities are the development and coordination of regional spatial plans and their five-yearly revision. This is supposed to involve close coordination of local government and central government (*KANWIL*) agencies. Data are to be collected from these agencies, gaps identified and primary data gathered to fill them. Spatial plans are then drawn up. Spatial plans have the potential to affect the allocation of land and resources to alternative development purposes. For this reason, spatial planning is an important issue and by venue for improving decentralized and strengthened NRM.

The BAPPEDA have no enforcement authority. They function by advising the governor, either directly or through the office of the provincial secretary. When spatial planning conflicts occur, the spatial planning process calls for them to be brought to the attention of the BAPPEDA for resolution. When these cannot be resolved through consensus under a BAPPEDA umbrella, a gubernatorial decision then adjudicates.

2.1 Objective

The BAPPEDA of six provinces (Irian Jaya, East and West Kalimantan, North and Central Sulawesi, Maluku) working with NRM were visited to identify needs and opportunities to provide appropriate interventions in spatial planning relating to natural resource management.

2.1.1 *The Survey.*

Discussions were held with the head of *Bidang Fisik dan Prasarana*, the section involved in spatial planning, and staff (Appendix 1). Wherever possible the head of the BAPPEDA was visited and in one province, West Kalimantan (*Kalbar*), the governor. The discussions were based around a series of questions (Appendix 2) based on experience with the BAPPEDA of Irian Jaya and a background review of spatial planning issues and past projects. Visits were also made to other agencies involved, interested in or affected by provincial spatial planning. These included in governmental and non-governmental organizations (Appendix 3).

Each trip resulted in a trip report. This summary report combines and synthesizes the individual trip reports, providing an overview of how spatial planning processes pertaining to natural resources happen across six provinces. The major commonalties and differences found among the BAPPEDA and the institutions they work with suggest priority areas that the NRM Program could potentially be involved in.

The results presented here are exploratory. The findings described and recommended actions will develop further, particularly where there is PLS involvement developing and strengthening partnerships with the BAPPEDA.

2.2 Results

There were significant differences among the BAPPEDA in terms of their self-perception, and significant variation in how their provincial partners see them. These differences affect operational methodologies and determine whether a BAPPEDA is proactive or passive, and the utility of BAPPEDA products. The variation encountered has important ramifications for how donor-funded programs like the NRM Program should collaborate with BAPPEDA.

2.2.1 *BAPPEDA and Decentralization.*

The ramifications of decentralization were discussed with every BAPPEDA (Table 1). Two important types of relationship are expected to change, that between government and communities and then within government, between provincial and central agencies. Perceived as being of less significance were expected changes between the T1 and T2 levels of PEMDA. The BAPPEDA recognize that decentralization will mean bottom up planning in the future, but there appears to be variation in how seriously local communities are going to be taken.

North Sulawesi (*Sulut*), with numerous BAPPEDA staff being from the province, are the keenest to develop a dialogue with communities and to learn appropriate techniques and appear to want to listen. Here also, the relationship between T1 and T2 was closest.

In other provinces, local communities as well as T2 staff members are not accorded the level of confidence found in North Sulawesi (*Sulut*). Differences between the local communities and government staff were brought up in several discussions in different provinces. A need was often felt for educating communities before allowing them to participate in bottom-up planning. Somewhat paradoxically, the BAPPEDA generally recognize that local communities and government representatives in the districts have a better knowledge of local conditions. Communities are generally thought of as useful to consult about on-the-ground conditions. The conduit for this exchange of information between BAPPEDA T1 and communities is expected to be the BAPPEDA T2, at the same time, though, T2 staff members seem to be little respected in terms of ability and education by T1. Developing T2 abilities is seen as a future priority by all BAPPEDA T1 interviewed. Decentralization is generally discussed as a process in which the local government would take the leadership role, as opposed to central government and local *KANWIL* agencies.

Table 1 - BAPPEDA PERCEPTIONS OF DECENTRALIZATION

Province	THE BAPPEDA AND DECENTRALIZATION
IRJA	Decentralization will lead to greater responsibility for BAPPEDA to plan and coordinate land use decisions in Irian Jaya, with less interference from outside. BAPPEDA will take on a stronger coordination role under which other agencies will operate.
KALBAR	BAPPEDA has great self-confidence. Jakarta is not perceived as having too great an influence in the province. Decentralization will lead to further self-reliance in BAPPEDA.
KALTIM	Decentralization will lead to participative planning. Through facilitation and mediation, BAPPEDA T2 will feed community information to T1. BAPPEDA T1 will then allocate funds to communities, according to their needs. Local communities will still need to be guided by BAPPEDA T1 planners.
MALUKU	If decentralisation moves ahead, BAPPEDA hope that the various KANWIL they deal with will become responsive to local government. There are worries that decentralization will lead to Jakarta dealing with the T2 level, by passing T1.
SULTENG	No feedback has been sought from local communities or people in the past. This is a new need that has been recognised because of current movements toward reform. The BAPPEDA is willing to start this process but would prefer to exclude NGO and LSM representatives from consultation processes.
SULUT	Regional spatial planning should be the decentralization process itself. Whereas provincial voices have been weak and informal in the past, the future should be led through a participatory approach with district and village levels providing input. An obstacle is that until now people have been watching the government operate without input.

2.2.2 Self-perception of roles.

Among the provinces surveyed the role of BAPPEDA and spatial planning was understood differently (Table 2).

Table 2 - BAPPEDA SELF-PERCEPTIONS OF ROLE

Province	SELF PERCEPTION OF ROLE IN SPATIAL PLANNING
IRJA	BAPPEDA produces spatial plans. It provides an umbrella for communication and coordination of land-use plans from other agencies. It sets a direction for others to follow.
KALBAR	BAPPEDA acts as a forum to bring together government agencies and produce an integrated land-use plan.
KALTIM	BAPPEDA compiles decisions already made by other agencies. Agencies report to BAPPEDA, and BAPPEDA transmits these to the governor. BAPPEDA sees itself as an information funnel, not a proactive planning body.
MALUKU	BAPPEDA functions as an advisory agency to the governor, reporting either directly to him, or indirectly through the provincial secretary.
SULTENG	BAPPEDA produces spatial plans that represent a choice framework for resolving land conflicts via the governor's office. The spatial plans are general because there is little field detail available highlighting natural and human resources that have to be coordinated.
SULUT	BAPPEDA reports to the governor and attempts to provide a framework for managing the resources of the province.

In more proactive BAPPEDA (Irian Jaya, West Kalimantan and North Sulawesi) spatial planning is perceived as a forward planning process, spatial planning documentation providing a basis for regional development. Yet these same provinces are aware that sectoral agencies can easily overturn plans. The result is that spatial plans are ultimately perceived as lobbying tools with a legal basis. In North Sulawesi BAPPEDA is aware of the arenas where spatial plans are useful for lobbying, such as coastal resource management and in agriculture, and where they are not, particularly concerning issues surrounding mining.

Other BAPPEDA may be so institutionally isolated or weak in comparison to sectoral agencies that their involvement in spatial planning is the reporting of decisions made by other agencies. In such provinces land-use decisions are perceived by BAPPEDA as being made on an *ad hoc* basis by powerful agencies and private industrial groups, implemented through provincial government agencies at T1 or T2 level.

Spatial plans are not understood as definitive documents that government and businesses will follow. Most BAPPEDA, and their partners from government and non-government agencies, stressed that most land-use decisions are decided by a specific permit issued near the time of the beginning of a project.

Land use conflicts are won by the most powerful actor in the dispute, and in the case of a dispute between powerful actors (such as forestry and mining) final decisions are made in Jakarta ministry offices. Whereas conflict resolutions are meant to be dependent on a governor's decision and signature, governors are often seen as being influenced by powerful interests.

Conflicts that do not involve powerful interests can sometimes be resolved through BAPPEDA-facilitated discussion or meetings. The effectiveness of these depends more on influence of personalities rather than the roles of the positions they fill.

There are numerous cases where obvious conflicts are simply ignored. As illustrations, an example in North Sulawesi concerns Bunaken National Park. Technically, the Bunaken PHPA UPT (National Park technical management team) manages the islands and ocean of Bunaken within the park boundary. Yet *Dinas Parawisata* (the local government tourism authority) provides permits to hotels and developers to build cottages on the islands, and these projects go ahead. This happens without any consultation of the park management team, and Bunaken being a famous park. In East Kalimantan, Samarinda zoning rules designed by BAPPEDA are openly flouted by the *Kotamadya* (mayorality), which issues its own permits for construction of shops in areas that the spatial plans designate as green zones.

2.2.3 Provincial Perceptions of BAPPEDA.

The source of described conflicts, and many others, often lies in how a BAPPEDA is viewed by the institutions it is meant to be coordinating. Where BAPPEDA are strong, spatial plans are understood to be lobbying documents for use in inter-agency disputes, and a basis for regional development planning. Where BAPPEDA are weak, spatial plans are not consulted by other agencies (and in Center Sulawesi spatial planning documents have yet to be finalized and distributed to other agencies).

Numerous provincial BAPPEDA expressed concerns at the low level of detail in spatial plans and the data quality (discussed below) used in their development. Conversely, BAPPEDAs expressed the same concerns about the data provided by their partners. Perceptions about the BAPPEDA are described in Table 3.

Table 3 – PERCEPTION OF BAPPEDA PARTNERS CONCERNING THEIR LOCAL BAPPEDA

Province	PERCEPTION
IRJA	BAPPEDA is the coordinating body for spatial planning and provides an effective umbrella. Spatial plans are coordinating plans and reference points for discussion among agencies about land-use. These agencies include government and non-government institutions.
KALTIM	Regional plans have to fit around plans from above. BAPPEDA is not, in reality, a coordinating agency. Agencies recognise that BAPPEDA faces interference from conflicting interests, especially forestry and mining. Additionally, whereas BAPPEDA accept the forest TGHK maps as a standard, mining and other groups use their own mapping system. If there is a land-use conflict over an area, BAPPEDA invites those parties to present their case. After considering the information and seeking further input from the relevant <i>Tingkat II</i> office, BAPPEDA reports the situation to the governor. The governor then reports to Ministry of Home Affairs and to the relevant ministers. The goal is to get an agreement between the parties in the form of a <i>Surat Keputusan Bersama</i> . BAPPEDA's role in this process is unclear. The winner in a true conflict is most likely to be the strongest ministry or strongest backer.
KALBAR	Other agencies work closely with BAPPEDA. Land-use conflicts between agencies are resolved at the BAPPEDA office, with final decisions being approved by the governor.
MALUKU	The spatial plans from Maluku are distributed and known, yet are thought to be of little importance – sectoral agencies regularly override PEMDA plans. The BAPPEDA do work with the LSM community. The LSMs see BAPPEDA as passive, although it can be encouraged to lobby for better land-use decisions. Informally, BAPPEDA staff members encourage the stands various LSMs take against central government sectoral decisions affecting Maluku.
SULTENG	BAPPEDA can work on small matters directly with ministries and other agencies in Jakarta. Issues of any importance are taken up directly with the governor, who then administrates through SEKWILDA.
SULUT	Provincially, the KANWIL agencies – transmigration, mining and forestry in particular – have been major players. At any one time the most active of these three rich agencies

	<p>in North Sulawesi (<i>Sulut</i>) has been the one with the most powerful minister. Combining data from different agencies is difficult, if not impossible. Provincial Forestry offices use TGHK maps. BAPPEDA maps are based on RePPPRoT. This leads to conflicts that are adjudicated by the governor, who responds to a combination of the strongest agency lobbying and benefits to the province. Mapping battles can last a long time, during which contesting parties sometimes use the same land at the same time.</p>
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2.2.4 *The Role of Consultants.*

In the provinces that do have spatial plans and revisions it is often consultants who prepare spatial planning documentation by the following steps:

1. BAPPEDA hires consultants.
2. Consultants gather data and prepare an inception report.
3. Inception report is distributed to other government agencies and feedback is received.
4. A draft final report is prepared, presented to other government agencies and feedback is received.
5. Final spatial planning documentation is issued.

Consultants must be registered with a national association called INKINDO. This is based in Jakarta and has chambers in the provinces. Consultants are categorized as "A", "B" or "C" depending on experience, qualifications, manpower, and physical resources. The grading reflects the size of budget any consultant can tender for:

- An "A" consultant can bid for projects more than Rp 100,000,000.
- A "B" consultant can bid for projects less than Rp 100,000,000.
- A "C" consultant can bid for projects less than Rp. 50,000,000.

BAPPEDA with a history of consultant contracting recognize quality differences among consultants in each category and pick those that operate best. In Irian Jaya during 1997, several sets of consultants were brought in from Jakarta to prepare the spatial plans for different districts. These were of varying quality. Some reports were rejected and another consulting unit brought in to pick up the pieces.

Generally, consultants are not from the area they are developing spatial planning for, with the exception North Sulawesi. There, consultants are from the local university and university PSL, but because of regulations cannot be hired directly. They are subcontracted through local firms at extra cost.

Consultants interviewed expressed opinions that good planning work gets done when a consultant has a positive history with partners in BAPPEDA. There is a strong awareness that outside of these good partners, BAPPEDA staff feel left out of the planning process. Yet the consultants and BAPPEDA partner-staff feel that other BAPPEDA staffers are not sufficiently trained to warrant their providing

input. Even in meetings reviewing the consultant documentation, comments from non-involved BAPPEDA staff may not be treated seriously.

A senior Indonesian planning consultant with experience of numerous BAPPEDA and different consulting firms opined that many less-thorough consultants are not in the process of planning, but the process of "book" development. They know that in the weaker BAPPEDA (and included here are provinces outside of those interviewed in this scope of work), consultants know that the quicker they produce a spatial planning "book", the quicker they can leave, fully paid. Such scenarios result in production of spatial planning documentation with little emphasis, if any, on data quality, quantity and analysis presented.

There were differences among the provinces in how consultants were hired, if at all, as summarized in Table 4.

Table 4 – CONSULTANT HIRING PRACTICES ACROSS PROVINCES

Province	CONSULTANT HIRING PRACTICE
IRJA	Consultants are hired from Jakarta or the local branches of Jakarta consulting companies. They are selected by the BAPPEDA, which has had a long history with them.
KALTIM	Since 1992, local consultants with the capacity to develop acceptable regional spatial plans have emerged in the province. They open local branch offices of major holding companies and are hired from there.
KALBAR	The BAPPEDA has sufficient human and other resources to produce spatial plans themselves. Consultants are not used.
MALUKU	Consultants, picked and sent by BAPPENAS, were used to develop the spatial plans for Maluku. They came from UGM and ITB. They developed a good relationship with the staff of BAPPEDA, and will be invited by the BAPPEDA to prepare future spatial planning revisions.
SULTENG	PU provided consultants years ago to write spatial plans. BAPPEDA – Center Sulawesi (<i>Sulteng</i>) have never hired consultants themselves.
SULUT	Consultants are hired from local firms, the consultants often being university staff members with a good knowledge of the province. Because of regulations meaning that consultants cannot be contracted from the university, they are sub-contracted through firms.

Most consultants are trained at one of three universities in Bogor (IPB), Bandung (ITB) or Yogyakarta (UGM). A few come from the University of Indonesia (UI) in Jakarta. ITB trained planners are generally members of the Indonesian Planners Association (IAP). This professional association has until now admitted members based on their education and experience. BAPPEDA claim that starting next year IAP will introduce a certification process, by which members can obtain better-qualified standing by passing examinations. BANGDA will, in partnership with this process, be mandating that BAPPEDA consultants must have minimum qualifications approved by IAP. This claim was not investigated further, but could be in a later scope.

2.3 MREP, LREP-1 AND LREP-2

Over the last 10 years, three large multi-year projects funded by ADB loans attempted to increase the planning abilities of various BAPPEDA across Indonesia. These were the first and second phases of the Land Resources Evaluation Project (LREP), and the Marine Resources Evaluation Project (MREP). The latter may be succeeded by a second phase, the Marine Resources Management Project (MAREMAP). This is currently in a six-month Asian Development Bank (ADB) pre-project technical assistance phase that may lead to a funded project in the year 2000. It will concentrate on four provinces (East Kalimantan, Maluku, Northern Sumatra and Aceh), two that were covered by MREP and two that were not. MAREMAP will be coordinated with “BANGDA”, the Division of the Ministry of Home Affairs that deals with regional government.

Focus on these projects is warranted because unlike other donor/loan inputs, LREP & MREP targeted a broad range of BAPPEDA, intending to develop their capacity to work efficiently on their own. Any attempts that NRM makes in furthering BAPPEDA spatial planning capacity should consider the lessons learned from these projects first. The successes and failures of the LREP and MREP are best described in “*Lessons Learned - an assessment of performance. Project Secretariat, MREP – Jakarta, 1998.*” MAREMAP recognizes problems in training and trainees highlighted by LREP & MREP (discussed later) and will focus on training trainers.

The BAPPEDAs have their own perceptions, summarized in Table 5, about the effectiveness of LREP and MREP. They can be summarized in five broad categories:

2.3.1 *Perceptions about How these Projects Arrived.*

In every BAPPEDA visited, LREP & MREP were felt as well intended but imposed from above. It was felt that they would have been more effective if greater consultation with the provinces had taken place before project inception. Each BAPPEDA felt that its specific needs were not addressed. There was frustration that training took good staff away from their regular tasks.

2.3.2 *Training Provided and the Fate of Trainees.*

Training was provided on a scale that would take vital human resources away from the BAPPEDA for an unacceptably long period. Thus in some BAPPEDA trainees were drafted in from outside BAPPEDA, temporary staff hired on soft money, so that staff needed in-house would not have their routine work disrupted. In other words, some training provided deliberately bypassed BAPPEDA key staff on their own instructions.

Training courses were conducted both in country and overseas. Courses were short and long-term, but mainly short courses for data entry operators. A few staff members were trained to MS level, overseas. Overall, a very considerable number of man months (thousands) of training was provided to a large number of staff (hundreds).

The majority of staffers in Indonesia trained by LREP & MREP have moved to other positions, usually through promotion, both within BAPPEDAs and within other institutions. Relatively few staffers remain in positions they were trained for.

2.3.3 *Equipment Provided.*

The MREP lessons-learned document describes in detail how funding and contracting delays caused out-of-date equipment to be provided to the BAPPEDA. Currently a lack of institutional support to LREP and MREP facilities often means that the buildings housing the equipment are locked and rarely used. Where LREP & MREP equipment is used, the monetary crisis's effect on raising the costs of printer ink and other miscellaneous equipment is reducing equipment use.

In one BAPPEDA, staff members complained that while they had been taught to digitize maps and input data, there had been no training in basic equipment maintenance and repair. As a result, good equipment is idle for want of basic software configuration or minor spare parts.

2.3.4 *Relevance of Products.*

Consultants from Jakarta, it was often reported, made the initial data surveys for MREP & LREP products in the provinces. Maps and data sets were of limited geographic scope and sectorally focused. Maps produced were made without consultation about local needs.

In some BAPPEDA, LREP & MREP equipment is used to produce the maps used in spatial planning documentation, although without exception these maps are based on secondary data. In the majority of BAPPEDA, the consultants hired to produce spatial plans make their own maps with their own equipment, and it is generally in these provinces that the LREP or MREP rooms are little used.

2.3.5 *Follow-Up.*

The LREP and MREP projects provided opportunities for data collection within provinces. It was hoped that this would spur further data collection and that new primary data would relate directly to spatial planning. Yet a regular comment from the BAPPEDA was that not enough data was collected to provide a solid baseline for spatial planning.

2.4 *Assessment*

2.4.1 *Human Resources.*

Every BAPPEDA was concerned about the level of human resources at T1 and T2 levels. A common theme reported was that BAPPEDA, like other civil service institutions, is overstaffed with low-quality people. The view was often expressed that if BAPPEDA key people were able to have a small and effective group around them the rest of the staff could be dismissed without loss.

A reported anecdote heard on two occasions was that in 1992 various consultants were appointed to the BAPPEDA of East and West Kalimantan, North and Center Sulawesi by BANGDA to strengthen resources. The placements worked well in West Kalimantan and North Sulawesi. In West Kalimantan, two appointed staffers were accepted as well qualified, and one already knew the governor well. In North Sulawesi the placements worked because they came originally from the province. Placements failed to achieve results in Center Sulawesi and East Kalimantan because the BAPPEDAs there were closed to outsiders. The new staff survived a few months in administrative positions before departing.

Table 5 – PERCEPTIONS CONCERNING LREP/MREP AMONG BAPPEDA VISITED

Province	PERCEPTIONS OF LREP/MREP
IRJA	<p>The projects were not well integrated into BAPPEDA spatial plans for Irian Jaya. Data sources are limited. Future activities of MREP & LREP staff will focus on KAPET planning, and overlap with the new BAPEDAL/DA.</p>
KALTIM	<p>MREP is under the natural resources and conservation section. LREP is under the spatial planning section. No overseas graduate-training opportunities were available. Short-term, one to three months, overseas and local, training opportunities were provided.</p> <p>Overall, MREP and LREP had good results, yet funds were limited for data collection and collation. The East Kalimantan (<i>Kaltim</i>) DPR-D is unaware of the importance of providing support to collect further data. The DPR-D instead focuses on infrastructural projects, such as roads and bridges, which provide better opportunities for getting funds.</p> <p>The lack of data from MREP and LREP projects mean that other map sources have to be accessed. Forestry and mining agencies are the ones normally tapped.</p> <p>In terms of training, MREP and LREP are perceived as less effective. Only computer operators were trained, not people to S2 or S3 levels. The <i>Fisik</i> and <i>Tata Ruang</i> sections are unsure of what it is that trained staffers do in the LREP/MREP units, except that they have mapped out a 400 ha area somewhere in East Kalimantan (<i>Kaltim</i>).</p>
KALBAR	<p>MREP did not operate in West Kalimantan (<i>Kalbar</i>).</p> <p>LREP trained one person to S2 level, in Bangkok. On his return he was promptly transferred to Jakarta. Numerous staff members were trained in short-term courses. Only one trainee remains in position.</p> <p>LREP data sets were limited. Data sets and equipment supplied by LREP are, however, utilised by non-LREP trained staff members who are motivated and competent.</p>
MALUKU	<p>MREP is now in its fifth year. There is a 200-m³ room, plenty of computer equipment, a server and GIS support. Computer training was provided for more than ten staff at T1 and T2 levels, and all staffers remain in their positions. Finances are still available for running the unit, although the post-KRISMON costs of ink and parts are becoming prohibitive.</p>

	<p>LREP and MREP used different sorts of maps. LREP base theirs on RePPProT. MREP use the BAKOSURTUNAL-based, national standard, LEMBAH PANTAI INDONESIA (LPI).</p> <p>The weakness of the legacies of LREP and MREP is their sectoral foci (LREP was biased towards agriculture). Spatial planning is a cross-sectoral activity, yet both projects ignored this fundamental issue.</p>
SULTENG	<p>MREP did not operate in Center Sulawesi (<i>Sulteng</i>).</p> <p>LREP trained 52 staff, all on a short-term basis. Four were trained overseas in Australia, Holland, New Zealand and Thailand. The remaining staff members were trained in Indonesia. Very few (the number is unclear) remain in BAPPEDA, most were promoted in other institutions. Of the remainder, two are currently at UGM, Yogyakarta, for MS training.</p>
SULUT	<p>MREP and LREP staffers gathered no data. Rather, Jakarta based agencies gathered data from North Sulawesi (<i>Sulut</i>), conducted analyses and then developed maps. The maps were provided to North Sulawesi (<i>Sulut</i>) in hardcopy and digital form, and these are available for those who want them. There was no prior analysis of what BAPPEDA or other agencies actually wanted.</p> <p>During MREP, 30 – 40 people were trained to operate GIS. About 10 of these remain. They work as needed on various projects within BAPPEDA. MREP II will be accepted if, unlike MREP, it listens to the needs of BAPPEDA. There is a feeling that money and resources are held back in Jakarta, where the decisions are made.</p>

In addition to LREP and MREP training for capacity building, PEMDA, BANGDA and UNDP (and possibly more) are currently funding training opportunities within Indonesia. Across provinces, there is considerable enthusiasm for short-term and S2 courses in local universities, particularly IBP, ITB, UGM and UI. Popular programs relate to plannology, transport planning and policy, environment, and AMDAL training.

2.4.2 *Data and Spatial Planning.*

Spatial planning in the provinces appears to be based on secondary data of generally dubious quality. Yet good data are recognized as necessary for effective spatial planning. The LREP and MREP projects attempted the ambitious task of trying to raise awareness of data quality, and develop capacity for data collection and analysis. Yet the BAPPEDA comment that the projects did not collect enough data. BAPPEDA, their consultants and other agencies uniformly reported that most BAPPEDA staff members involved in spatial planning generally do not recognize the unique quality of primary data, and do not recognize the need for field monitoring and data collection. Furthermore, many appear not to be able to analyze data.

Each BAPPEDA complained about the quality and quantity of data available for spatial planning. Whether a BAPPEDA or its consultants develop spatial plans, they rely on secondary data from a variety of sources. The greatest amount of data is obtained from other agencies in the provincial capital. BAPPEDA T2 provides input, yet all BAPPEDA T1 and various consultants stated that because

BAPPEDA T2 are so poor in human resources their data are not perceived as important. In Maluku, *Kecamatan*-level data were suspected as often being artificial.

All BAPPEDA except Center Sulawesi (Sulteng) and East Kalimantan (Kaltim) were concerned that human resources at BAPPEDA T1 were insufficiently strong to assess data quality. Furthermore, budgetary constraints limit opportunities to field-check data quality.

It appears that whereas many BAPPEDA staffers are competent in GIS and map production, institutionally there is little critical thought given to reviewing the content, gaps and errors of maps. Maps are seen as an end product, not the start of an analytical process. Whereas an awareness of these problems does exist within and among the various BAPPEDA, this disconnect is accepted as a current reality and an open secret.

The main reasons provided for not addressing this problem were:

- A lack of concern from the local DPR-D and top management about spatial planning quality.
- A general lack of funds to collect more data.
- The failure of donors and other agencies to provide data.
- That data do not really matter, planning decisions are made by powerful agencies.

Despite this obvious weakness in the spatial planning process, capacity for data collection and raising data-analysis abilities is seen as a priority by few BAPPEDA staff. Non-key staff members usually place more emphasis on wanting AMDAL certification, and being provided with data from projects and other agencies.

Responsibility for data collection and analysis generally seems not to be wanted. As one consultant described the situation, data provision and analysis is a process that individuals can be held accountable for. It serves a primary role. Rather than accept this responsibility, it is easier to receive reports and maps and then critique them.

2.4.3 Wants.

Wants identified vary among the BAPPEDA (Table 6). Within provinces, there were differences between needs identified by BAPPEDA for institutional strengthening, and needs identified for BAPPEDA by the other institutions they work with.

Project-oriented BAPPEDA want activity and training modules that are generally unrelated. Process-oriented BAPPEDA have key people who lead spatial planning development and have key processes that require strengthening through input and advice. Two emerging themes were development of a planning vision for their provinces and facilitation skill development to make spatial planning more participative, focusing on bottom-up planning. The specific wants and requests are organized into thematic areas: Partnerships, Training, Project and Legal

Table 6 – PERCEIVED NEEDS OF BAPPEDA

X = identified by BAPPEDA, O = identified by one or more provincial partners

		ADVICE SOURCE								
	SPECIFIC WANTS	J A K A R T A	I R J A A	K L B A R	K L L T I M	M A L U K U	S U L T E N G	S U L T E N G	COMMENT	
Partnerships	Develop better links between agencies within a province	X	X	X O	 O	X O	X O	X O	This is the fundamental need for good spatial planning development and implementation.	
Partnerships	Provide a forum so that BAPPEDA planners across provinces can get together to compare notes.		X	X		X		X	The NRM/EPIQ invitation to BAPPEDA staffers to come to Jakarta for the IRSA conference was very popular. Representatives enjoyed this opportunity to compare notes about their activities and current changes and would like to repeat this regularly.	
Partnerships	Develop a working group to better integrate talented people <i>across</i> agencies within the province.			X					A strong and useful theme: will need gubernatorial support and set up closer links between institutions. It will develop a cross-sectoral overview within and among institutions. Potential concerns are setting up a powerful clique and causing jealousy in institutions that team members come from.	
Training	Develop ability to assess options and impacts of development plans.	X	X O	X O	X O	X O	X O	X O	Every BAPPEDA expressed this need. It is unclear how much of this interest is genuine and how much is competition with BAPPEDAL/DA. Some BAPPEDA, and many NGO organisations, recognise that if spatial plans are kept to, the plans themselves become the basis for threat analysis. It is widely felt that current assessments of land-use option treat blocks of land independently. Interactions between blocks, and hence likely impacts of planned activities are currently not considered in spatial planning.	
Training	BAPPEDA needs to update, upgrade and detail its plans and then transfer these to the <i>Bupati</i> levels.							O	This need was recognised by one perceptive party. Most BAPPEDA T1 have little respect for their T2 counterparts, yet this seems like a good concept to encourage better and necessary cooperation, especially given a current donor focus to the T2 and community	

	BAPPEDA should integrate these maps with local regulations.								level.
Training	Develop human resources at T2 level.	X	X	X	X	X	X	X	This is a worthwhile theme. Developing site-specific, activities will need research and substantial resources, however.
Training	Teach BAPPEDA staff how to understand maps and data.	X	X	X				X	Basic skills are needed for under-qualified staff.
Training	Develop appropriate training curricula, or augment existing curricula.	X	X	X	X			X	Basic skills are needed for under-qualified staff.
Training	Develop facilitation skills to raise political awareness and confidence in local communities, and to encourage local rule making and enforcement to manage villages and towns more efficiently.							X	This was most strongly felt in North Sulawesi (<i>Sulut</i>). Other BAPPEDA felt this was important, but lower priority. North Sulawesi (<i>Sulut</i>) BAPPEDA staff felt strongly that if local people in the future elect PEMDA officials, including the governor, that the positions of civil servants will be affected by their own performance. Recognition of this possibility leads some key figures to think that responding to people's aspirations would enhance their likelihood of employment-survival in the future.
Training	Develop in-house training curriculum.				X				An attainable goal. This activity could be addressed as part of a wider theme incorporating a survey of curricula taught at national universities.
Training	Comparative studies are also required. Study tours to well-managed sites elsewhere might be useful				X				This request reflected a desire for greater involvement in AMDAL. What might be more useful is arranging BAPPEDA cross visits to exchange lessons learned as the reform process moves forward.
Training	Provide GIS training to staff.							X	This should remain in the remit of long-term and large projects such as MREP and LREP. GIS training should not be given in isolation, but with training in data capture, analysis and use in spatial planning.
Training	Provide a biodiversity data centre.		X	X				X	This is outside the normal BAPPEDA remit. This is a need in all provinces, but there is little hope that BAPPEDA staff would be able to develop one of these.
Training	Provide resources to assist development of a natural resource vision for the province.		X	X					Development of a coherent cross-sectoral overview of provincial resources is a fundamental need for wise spatial planning. This process will be long and involved. It may be best to approach this through a few, real, working exercises.
Training	Send one person per <i>Bidang</i> per				X				Training in general is needed for people who are going to use it. This activity would be

	year for training in AMDAL at UGM.								best served by looking at curricula currently being taught at national universities and see if strengthening is needed there.
Training	Improve Center Sulawesi (<i>Sulteng</i>) human resources and development of natural resources. This might include ensuring mining practices become environmentally friendly.						X		This is an activity of limited scope.
Project	A need is for a funded mapping <i>Lembaga</i> in BAPPEDA, which can transparently demand cash for maps, and run itself.				X				This is part of this BAPPEDA's wider management issues.
Project	Do road planning in the Toli-Toli area.						X		This is an activity of limited scope.
Legal	Change law such that local planning documentation has authority.	X	X	X	X	X	X	X	An absolute essential, and needing major political intervention.
Legal	Force all agencies in provinces to use standard maps.	X	X	X	O			O	Needs major political intervention.
Legal	Streamline rules for hiring consultants so that hiring mechanisms become more transparent							X	This needs minor political intervention and a change in attitude.

3. DISCUSSION

The BAPPEDA are coordinating and advisory institutions without enforcement authority. Among the BAPPEDA visited, any influence they possess relies primarily on one or more strong BAPPEDA staffers having good standing within the institution and an influential relationship with the governor, directly or indirectly. During the course of interviews where the above-described relationships existed, it appeared strong staffers need not be in a position of formal power.

If this pattern is consistent, then regional development planning under the auspices of BAPPEDA are not reliant upon the institutions themselves, but a few strong individuals within them. This is an inherently unstable foundation for development of spatial planning capacity in the future.

Across all provinces visited, the historical role of spatial planning in regional planning was weak to non-existent. Spatial plans are currently, at best, lobbying tools. Generally they are ignored. Sectoral or well-connected private interests easily override provincial spatial plans.

If decentralization and transparency do become the norm for the provinces in the future, the role of spatial planning needs to be nurtured. In the stronger BAPPEDA visited, there were clear statements from key staff that spatial plans should be enforceable, proactive, documents. This is seen as part of a process in which sectoral influences are reduced, especially this influence of the KANWIL agencies. In West Kalimantan (*Kalbar*) and North Sulawesi (*Sulut*) decentralization is seen as leading to a bottom-up planning process that has to meet community aspirations. Indeed, in North Sulawesi (*Sulut*) it is thought that open elections may lead to positions in BAPPEDA being influenced by the electorate. As a matter of job-survival, changes in attitudes and attention to work quality are seen as important. In BAPPEDA such as these, capacity-building projects such as NRM can make a good and rapid contribution to change.

The situation is different in the weaker and isolated BAPPEDA. They view local populations and T2 levels of provincial government as needing to be led by T1 provincial government well into the future (indeed, frustration is expressed that some donors are providing support via BANGDA or BAPPENAS straight to the Bupati and T2 levels). Decentralization is hoped to bring more power to the BAPPEDA T1, and enforceable spatial planning documentation is seen as a potential empowerment tool. BAPPEDA staffers in East Kalimantan (*Kaltim*) hope to see provincial government becoming stronger and perceive little need for delegation of power to lower levels or local communities. In Center Sulawesi (*Sulteng*), decentralization is hoped to be a process through which the BAPPEDA will have control of all other PEMDA agencies (particularly *SEKWILDA* and *BAPEDAL/DA*).

In terms of natural resources and the BAPPEDA, there were commonalties in perceptions of management roles of natural resources in the provinces. Ministries in Jakarta and their KANWIL representative offices in the provinces are seen as controlling revenue-rich resources. In Maluku it was noted that in current discussions with the ministry for mining in Indonesia, oil and gas and precious metals would remain under the purview of central government. Provincial government will only be allowed to control mine resources such as sand and clay. There appeared to be considerable resentment

inspired by such policies. Another commonality was how protected areas such as national parks are viewed by PEMDA. They are seen as having been mandated by central government, who continue to manage them. There is rarely a local pride in a protected area that results from top-down planning - it simply becomes more land taken away from provincial control. If decentralization does later include providing a management role in parks to provincial governments, there is a need to encourage a conservation interest among PEMDA partners.

3.1 Why Support Provincial Spatial Planning?

Provincial spatial planning in Indonesia during and after the current reform era is a fundamentally important issue. Unless there is a cross-sectorally integrated process of land-use planning and implementation that is accepted as legally binding, spatial planning will continue to be a largely chaotic process based on sectoral strengths. BAPPEDA is the only local institution that is truly multi-sectoral and with a current legal basis to spatially plan, flawed as the current system is. Whereas the current status of the BAPPEDA and their planning documentation is weak, the BAPPEDA are the only foundation to build upon. For this reason, BAPPEDA should be helped, yet not in isolation.

Among the BAPPEDA, a fundamentally important question arises about the point of strengthening the BAPPEDA that have little or no functional importance. It is argued here that there is little point in strengthening an organization's ability to plan spatially if its products are not used or otherwise taken seriously. Assisting a weak BAPPEDA is unlikely to be of much help in the long run unless its role in the wider world of partners and stakeholders is developed.

With few exceptions, the needs of each BAPPEDA are particular to itself. Should the provinces become autonomous in any degree this will probably be even more the case.

Given that spatial planning documentation currently seems to be a lobbying tool, then the stronger the partnerships among organizations supporting enforcement of spatial planning rules, the better chance there is of wise use of resources. BAPPEDA cannot work in isolation, as the more effective ones realize. Thus whereas technical assistance can be provided to BAPPEDA to devise and interpret plans carefully, support for the spatial planning process will need facilitation help to develop effective networks. Given the variation encountered in how spatial planning processes operate between provinces, targeted support should be provided to spatial planning processes in each.

3.2 Helping Strengthen Provincial Spatial Planning

Two areas for support of spatial planning processes emerge from this survey that need to be addressed together. The first is strengthening the BAPPEDA themselves at T1 and T2 levels. The second is developing the partnerships needed for good communication and planning. How these are implemented, the degree of emphasis on each area and the type of activity required will vary according to province.

The principal common needs of the stronger BAPPEDA are to:

- Develop capacity to collect data, analyze and use it.
- Develop management capacity to manage themselves and their consultants, and to coordinate better with partners.
- Develop facilitation skills to create new and better partnerships with stakeholders including non-governmental agencies. Listen to communities and start bottom-up planning.
- Provide a forum where key BAPPEDA personnel from the different BAPPEDA can get together to compare notes. It is felt that this will be ever more important if decentralization becomes a reality.

Some of these will require long-term support with large sources of funding. Others can be tackled usefully in the shorter-term by smaller projects. The rest of this discussion will focus on activities and areas that the NRM Program could consider for involvement.

3.3 NRM and Potential Activities in Spatial Planning

Table 7 provides a review of the strengths and weakness of each BAPPEDA visited pertaining to potential future NRM support. Given the strengths and weaknesses of the various BAPPEDA, the wants identified by them and those who work with them, and the resources of NRM/EPIQ, three broad areas of involvement are suggested:

- Provision of cross-BAPPEDA support.
- Development of within province networks.
- A series of real-life planning exercises in provinces that accomplish goals and provide training and support.

There are good synergies to build upon within the NRM Program umbrella and potentially with other partners. There are good possibilities of building upon the work with BAPPEDA and coastal resources planning accomplished by CRMP. KEMALA has strong LSM partners in various provinces where BAPPEDA - NRM collaborative activities might be promising. The PAM involvement in some protected areas could also provide useful synergies.

It is likely that the cross-BAPPEDA support activities (Table 8) will be of use to all BAPPEDA staffers involved in different ways. What is important is that all BAPPEDA can be involved, and materials developed and lessons learned will be of use to other BAPPEDA and projects working with them.

Table 7 – STRENGTHS AND WEAKNESS OF BAPPEDA PERTAINING TO SPATIAL PLANNING AND POSSIBLE NRM INPUT

Province	STRENGTHS	WEAKNESSES
Irian Jaya	<ul style="list-style-type: none"> • Forward looking spatial planning section and able to work well with government and non-government sectors. • Wants to be proactive in setting up a vision for the management of the province’s natural resources, and 	<ul style="list-style-type: none"> • Spatial planning section has few strong and well-trained staff. • Strongly reliant on consultants. • Not inclined toward full participation with communities. • BAPPEDA leadership is in an unstable political climate.

	<p>wants to work with partners to accomplish this.</p> <ul style="list-style-type: none"> • NRM already has a good relationship with the BAPPEDA. 	
KALBAR	<ul style="list-style-type: none"> • A large and highly qualified critical mass of staffers is present in the planning section. • Outward looking, and wanting to develop new partnerships. • Works well with other government agencies. • Develops spatial plans without recourse to consultants. • Strong relationship with the governor. • Wants to develop a vision for managing the province's natural resources. • Excellent relationship with NRM/EPIQ PLS. 	<ul style="list-style-type: none"> • Strong relationship to the governor is built around one individual.
KALTIM	<ul style="list-style-type: none"> • Some individuals have a good relationship in place with the NRM/EPIQ PLS. • Willingness to discuss ideas with outside partners. • Strong personalities on staff. 	<ul style="list-style-type: none"> • The organisation is very bureaucratic. • Internal management appears to be more dictatorial than most. • Sectoral agencies are very strong, so comparatively the BAPPEDA is weak. • Lacks a vision of where it wants to go. • Has little respect for communities and bottom-up planning. • Possesses a strong project orientation.
Maluku	<ul style="list-style-type: none"> • Possesses good relationships with other PEMDA agencies. • Willing to work with LSMs. • Works well with donors. 	<ul style="list-style-type: none"> • Sectoral agencies ignore the BAPPEDA. • Timid and reclusive. Needs to be prodded into actions that may upset other agencies or interests. • Possesses a strong project orientation.
SULUT	<ul style="list-style-type: none"> • Politically very progressive. • Wants to engage local communities fully in bottom-up planning. • Good communications within the department. • It recognises its own strengths and weaknesses. • Strong planning team. • Whereas consultants are used, they are local and work on various projects with BAPPEDA. • Excellent relationships with NRM/EPIQ PLS. 	<ul style="list-style-type: none"> • Relationships with KANWIL agencies are poor. • Does not respect national parks, seeing these as impositions from central government.
SULTENG	<ul style="list-style-type: none"> • Unclear. 	<ul style="list-style-type: none"> • Of the six BAPPEDA visited, viewed as the weakest. • Isolated. • Weak human resources. • Closed.

Development of within-province networks (Table 9) and case studies (Table 10) to support spatial planning and natural resource management are going to have mixed approaches and success. In terms of BAPPEDA-developed networks, West Kalimantan (*Kalbar*) is moving quickly to form these and it may be a challenge for NRM to keep up with it. North Sulawesi (*Sulut*) has identified specific needs in this regard and NRM can make definite contributions in this area, building upon the successes of CRMP. WWF in Irian Jaya has developed a positive and informal forum with BAPPEDA. The resource-rich environment and bureaucracy around East Kalimantan (*Kaltim*) will make partnerships slow to develop in the context of BAPPEDA support. In Maluku, aside from current strife, given timidity in BAPPEDA yet good relationships with relatively strong NGOs, partnerships may be potentially developed outside of BAPPEDA. Center Sulawesi (*Sulteng*) needs further observation.

Table 8 - Cross-BAPPEDA support

Activity	Rationale & Comments
<p>Provide support for key BAPPEDA personnel to get together on a quarterly basis along with NRM/EPIQ PLSs. The objectives are to 1) provide a mechanism for information exchange among the BAPPEDA and 2) to try and catalyze a situation where BAPPEDA staff help each other across provinces.</p>	<p>The IRSA conference provided a first opportunity for BAPPEDA NRM/EPIQ works with to get together with superiors in BAPPEDA or from political powers in Jakarta and appeared to have delivered the first informal cross-province working level for the participants. Each BAPPEDA's exchanges of information are thought to be of value as decentralisation becomes a reality. There are currently no BAPPEDA information flow. There are unlikely to be any in the future.</p>
<p>Arrange cross-BAPPEDA visits for key staffers, especially between the stronger and weaker institutions. Attempt to set up mentor relationships in this process.</p>	<p>As described in this report, there are significant differences visited. The strongest in planning aspects was West Kalimantan in community aspects was North Sulawesi (<i>Sulut</i>). They visited one another, and also passed on to weaker BAPPEDA to follow on from the forum described above.</p>
<p>Investigate quality and relevance of short and long-term courses in Indonesian universities and institutions such as IAP that are used or otherwise subscribed to by the BAPPEDA. Identify areas that could be strengthened by NRM/EPIQ.</p>	<p>The BAPPEDA are utilising training resources available so far long after NRM/EPIQ is finished. MAREMAP is to function among the BAPPEDA. An obvious gap is courses. Potential outputs are numerous. Two obvious materials that BAPPEDA T1 and T2 could disseminate are strengthening of courses by bringing in technical assistance with overseas institutions who could bring required skills. A significant need recognised by all BAPPEDA for training is recommended that any activities in this area be discussed with the World Bank and ADB BAPPEDA-intensive projects such as C...</p>
<p>Develop a series of web pages about planning issues on the NRM web-site and encourage key BAPPEDA staff and planning partners to view it.</p>	<p>Most of the BAPPEDA staffers have internet access at home to do. Among key staff there is a crying need for information on areas and techniques to think about and/or develop. The ability for staff to access the internet resources to tap. The ability for staff to access the internet to provide exchanges of ideas and information flow.</p>

Table 9 – Development of within province networks

Province	Activity	Rationale & Comm
Irian Jaya	After the appointment of a PLS, that person should become involved in the Jayapura Informal Meeting between BAPPEDA and NGO/LSM organizations such as WWF and YPLHC.	This activity was catalysed by NRM/EPIQ, and has network that could be widened to include more g partners.
KALBAR	BAPPEDA has plans to develop a forum dedicated to natural resource planning for the province and also a bridge to local LSMs. The PLS has excellent working relations with the BAPPEDA and further involvement should be encouraged.	Opportunities to develop model examples of spatial p natural resources should be encouraged. Key BAPPI areas for possible activity and are going to go ahead. ideal opportunity for NRM/EPIQ to assist with techni
KALTIM	Potential for better networking exists within the BAPPEDA spatial planning group, but is constrained by real or perceived administrative barriers. Networking may be encouraged around specific technical issues and informal activities, rather than formal institutional backing. Networking with LSMs and organizations outside of BAPPEDA must begin informally.	In contrast to West Kalimantan (<i>Kalbar</i>), where networks institutionally from the top, in East Kalima likely form practically from the bottom up. NR providing venues for diverse groups to come toget Sebuku-Sembakung, Mahakam Lakes). NRM can a case studies with BAPPEDA staff that provide an networking with other GOI agencies or LSMs.
Maluku	After appointment of a PLS, that person should investigate how BAPPEDA partnerships can be developed to strengthen spatial planning.	The workings of BAPPEDA T1 in spatial planning elusive until NRM/EPIQ has a PLS. It appears that d through the economic section of T1. The role exploration.
	Develop dialogue with LSMs and fora.	The LSMs contacted appear to like BAPPEDA and f action by their lobbying. Maluku appears to offer a u planning strengthened at the community level (see ac with potential for leverage from World Bank pro donors. KEMALA is working with some BAPPE synergy in both Jakarta and Maluku should be investig
SULUT	Provide facilitation training to the BAPPEDA.	This is the most community-aware BAPPEDA amon between CRMP and BAPPEDA appears to have positive state of affairs. Assistance in developing fa could easily be provided.
SULTENG	Watch the BAPPEDA and wait to see what opportunities are available.	There appears to be very little that can be acco BAPPEDA, currently. Spatial planning appears to be
	Maintain the current PLS involvement with other groups interested in spatial planning and natural resources.	There are strong NGOs and a planning-sensitive together. It is recommended that the PLS continue h and monitor developments.

Table 10 - Real-life planning exercises

Province	Activity	Rationale & Comment
Irian Jaya	Develop a regional spatial plan for the Cyclops and its environs.	<p>NRM/EPIQ has good working relations with BAPPEDA and other PEMDA, KANWIL and network overlaps usefully with KEMALA.</p> <p>The BAPPEDA wish to develop a vision for managing natural resources in the province and is biologically important, provides the water supply for the provincial capital, Jayapura, and donors (although none are currently active).</p> <p>A thorough participative analysis of the Cyclops area involving stakeholders, economic and conservation knowledge of the area would serve to make an excellent and local model developed for other areas from this activity.</p>
KALBAR	The PLS should assist facilitation of a cross-institutional spatial planning group and work with the Jakarta office in finding options for assisting an attempt to set up a working group, possibly a UPT, that directly advises the governor on planning issues.	The hope is that if decentralisation does move forward, this would provide an opportunity rather than focusing on one or few institutions with obvious sectoral biases. By doing this mass of people is supported among institutions, rather than the usual donor focus of assisting
	Assist BAPPEDA with a workshop, or process leading to a workshop, aiming to develop a concept of participatory natural resource management in KALBAR.	<p>Development of a process to develop a cross-West Kalimantan (<i>Kalbar</i>) action plan for natural wide stakeholder base is a process being pushed by BAPPEDA and supported by the gov NRM/EPIQ to assist a decentralisation process in action and it already is moving forward.</p> <p>This process should be documented carefully – it will certainly produce “<i>lessons learned</i>” self-determined and sustainable directions, perhaps becoming a model for other provinces competent and motivated staff working in spatial planning. This is the ideal province to model PLS reports for full details).</p>
	Based on lessons learned from workshop activity above, conduct a spatial planning survey similar to the model proposed for Irian Jaya.	This activity has been requested by BAPPEDA in association with the PLS. Various sites workshop should be final selection.
KALTIM	East Kalimantan (<i>Kaltim</i>) wants to improve mission, vision, and management in its mapping and data center. To improve ability to analyze data and produce summaries and recommendations, could provide on the job training (maybe with some practical class room sessions). Could use a consultant to work directly with the staff on a specific issue or problem of spatial planning.	<p>This resonates with a staff suggestion to collate all sectoral maps into one master map for working group. Later could form the basis for wider cooperation on mapping and planning</p> <p>East Kalimantan (<i>Kaltim</i>) is also interested in zoning issues in the coastal region. This is CRMP.</p>
MALUKU	Appoint a PLS who should then become involved in	This BAPPEDA has potential for collaboration with NRM/EPIQ in spatial planning and na

	local networks and investigate opportunities for interaction with the BAPPEDA.	to partnerships. It is, however, weak and there is no PLS in the province. Once a PLS is in place, opportunities for interaction with BAPPEDA should be looked for activity via Hualopu, below.
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Maluku	<p>Conduct a model spatial planning survey by facilitating development of Hualopu skills in spatial-planning, augmenting KEMALA based activities for community mapping and planning for the islands Nusa Laut, Separua and Haruke.</p>	<p>A KKN related mining operation is reported to be starting soon on these islands. PEMDA want to reject the process. Local communities are extremely upset.</p> <p>Hualopu (see Maluku trip report) wants to develop a proposal for work with NRM/EPIQ. T1 is doing community mapping on Nusa Laut, sponsored by KEMALA. It wishes to branch out into up planning to reject the mining project.</p> <p>Maps are provided BAPPEDA T2. T2 will sponsor provision of maps to T1 and lobby the process would encourage bottom-up planning from outside BAPPEDA to the BAPPEDA elsewhere in Maluku and perhaps other provinces.</p> <p>Also of interest is that on the legal front, Hualopu works closely with legal faculty at the local legal bases for recognising community resources described in the maps at the DPR-D and el local spatial plan with legal backup. It is recognised that in some cases, such as proposed these maps will not automatically be seen as a fundamental point of reference. However, lobbying tools. With these maps, signed off by villagers and already in the PEMDA system face future interventions.</p>
SULUT	<p>Provide training in workshop facilitation and community participation.</p> <p>Facilitate a workshop concerning TN Bunaken under the auspices of BAPPEDA – North Sulawesi (<i>Sulut</i>) and the UPT for the park, bringing together parties involved in operating management systems, rightly or wrongly, in the park. Outputs should be development of a common understanding of the management system, and actors’ roles, in the park. Follow-up activities and communication lines will be decided.</p> <p>Agencies and organisations should include:</p> <ul style="list-style-type: none"> • BAPPEDA • Balai Taman Nasional • Local community representatives • Dinas Pariwisata • Representatives of the dive industry • Representative of the hotel industry • Police • KSDA • BAPPEDAL/DA – SULUT • NGO community • CRMP 	<p>The BAPPEDA have clear desires to continue bottom-up planning, building on experiences</p> <p>Bunaken National Park is a world famous dive site and an asset to North Sulawesi. The producing a management plan. Yet whereas the park is recognised nationally, local government North Sulawesi is providing documents permitting development of cottages for personal use. The local population feels it is not benefiting from the park, that outsiders accumulate resources concern for the park UPT and commercial dive operators, therefore the private tourism industry. This is a clear resource conflict between PEMDA and central government agencies that the probably goes on elsewhere, and may well increase if provinces decentralise.</p> <p>Support for this activity would be beneficial for the area proposed and produce useful “lessons</p>
SULTENG	PLS monitoring and information gathering.	Given the weakness of the BAPPEDA and the murkiness surrounding spatial planning pro

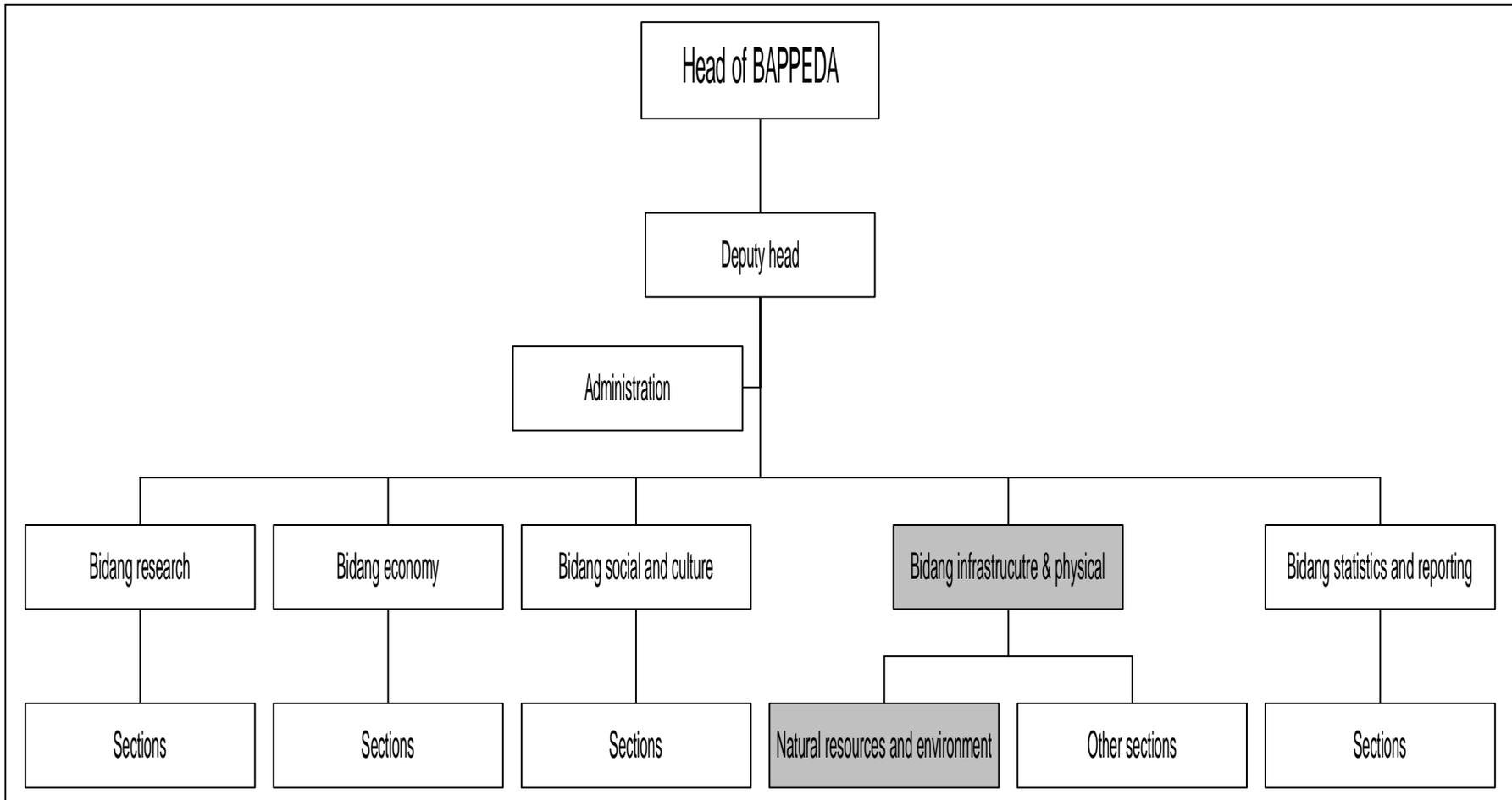
		that the PLS' observations and reports are carefully reviewed to look for opportunities.
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APPENDIX 1

STRUCTURE OF BAPPEDA

Appendix 1 – Structure of BAPPEDA

Grey boxes indicate foci of interview



APPENDIX 2

AREAS OF DISCUSSION WITH BAPPEDA

Appendix 2 – Areas of discussion with BAPPEDA

No.	Topic	Rationale	Questions
1	Natural resources definitions	What is the view of natural resources, and the role the BAPPEDA feel they have in managing them, between and among individual BAPPEDA?	<ul style="list-style-type: none"> - How do concepts such as “sustainable”, “renewable”, “conservation” and “preservation” get interpreted among BAPPEDA departments? - What are the natural resources of the province that are the major priorities? - Are the different sorts of natural resources seen as individual commodities, or is a more holistic, perhaps landscape view, taken of the province’s resource base? - What is the level of interaction between agencies managing the resources, i.e. relevant agencies in forestry for timber and plantations and mining for mines, and BAPPEDA?
2	Conservation	Beneath the “infrastructural and physical” section is one for natural resource and environment. What does it do?	<ul style="list-style-type: none"> - What staff does the section have, and what is their level of training? - What training have these people had from projects such as LREP and MREP? - What overlap or coordinated activities does the staff have with NRM or conservation staff within other government agencies (like BLH), as well as other partners? - How will their functions change with the onset of BAPPEDAL/DA?
3	Manpower	Who works in natural resources in the BAPPEDA – where are they from and where are they going?	<ul style="list-style-type: none"> - How many staff members work in natural resources? - What is their education level, and experience? - How long do staff members stay in a position – what is the turnover time? - What are the needs? - How can they be hired? - What training is perceived as being needed now? - What training have staff received, both locally and internationally
4	Capacity	A lot of assistance has been poured into the BAPPEDA. Was it well channelled and was lessons have been learned that would indicate where NRM would have its most effective input?	<ul style="list-style-type: none"> - How many BAPPEDA staff members are actually involved in planning? - Do these people understand all the data they have? - Do they have sufficient time and resources to accomplish their tasks? - In the case of BAPPEDA where large, externally funded, projects have operated, was there, in hindsight, the capacity to absorb the incoming budgets? - What capacity is there for absorbing large aid/loan inputs again? - Specifically in the case of MREP and LREP, were data requests to agencies who provide data to BAPPEDA, like PHPA/KSDA and so forth, realistic given their past and current capacity?
5	History with other projects	MREP and LREP and their post-	<ul style="list-style-type: none"> - Did MREP/LREP cause closer relations to develop with BANGDA?

		<p>incarnations, in particular, have provided a lot of money to the BAPPEDA. What were the results of such projects, and what are their expectations of future projects?</p>	<ul style="list-style-type: none"> - What has happened to the people that MREP/LREP trained? - What other external fund have/do/will they receive? - Overall, have projects led to change, or run a course and then stopped? - Have project effected-changes been positive? - How might past projects have been run more efficiently? - What are BAPPEDA now looking for from future project involvement with old and new partners, especially in the new political context? - In the light of past projects, where to now?
6	Partners	<p>BAPPEDA is not a data provider, but a data user. As such, it needs inputs from partners. These partners may not all be in accord on land allocation.</p>	<ul style="list-style-type: none"> - Who are the major data providers to BAPPEDA? - How is information, and opinion, solicited? - Is feedback given to partners about their input? - How much of the final planning decision process results from consensus, and how much is mandated from BAPPEDA, or even elsewhere? - How are conflicts between partners – borders between land use units, for example, resolved? - In the case of conflicts among partners, are conflict resolution techniques used to develop consensus, or is arbitration dependent on a decision from “above”? - Are planners members of the Indonesian association of planners?

7	Bosses	Where are decisions made – in the province or Jakarta, or both?	<ul style="list-style-type: none"> - What is the role of central government in provincial planning of natural resource allocation? - What is the role of private enterprise in provincial planning of natural resource allocation? - What is, or is anticipated to be, the effect of the monetary crisis on decision-making processes?
8	Clients & users	Why is BAPPEDA doing this stuff, anyway? Who is it serving, and why?	<ul style="list-style-type: none"> - Who are the primary users of regional spatial plans, with special regard to natural resources? - Are the users consulted in the planning process? - Do the users lobby during the planning process? - If an area of land has useful natural resources desired by a user, yet the land is also useful in providing non-revenue generating benefits – biodiversity and beauty – how are these competing factors resolved?
9	Consultants	How much NRM work do BAPPEDA themselves do, and how much do they put out to consultants?	<ul style="list-style-type: none"> - If consultants are used, in any way, then why? - How are consultants contracted? - How is performance measured? - Do the consultants need further assistance or training?
10	Spatial plans	How do spatial plans get there, anyway?	<ul style="list-style-type: none"> - Who writes the spatial plans? - Who reviews the spatial plans? - Who accepts or rejects the spatial plans? - What experience have the reviewers had in hands-on spatial planning themselves?
11	Data	MREP literature states that BAPPEDA should become, to a large degree, have to become data and information self-sufficient. This makes obvious sense and is also in line with the push to greater autonomy in the provinces.	<ul style="list-style-type: none"> - What data sources does BAPPEDA use? - Does BAPPEDA have confidence in its data sources? - What access do other parties have to BAPPEDA data (if they exist)? - What is, was, and will be the role of MREP/LREP? - What is the role of the provincial PSL? - What is the role of databases and GIS systems in BAPPEDA work, especially with regard to natural resource management? - Are maps or images from BAKOSURTANAL or LAPAN available? - What map scales are used? Are the maps the same as those used by other agencies in the province? - What role does remote sensing play? - Are base-line data out of date (RePPProT, etc.)? Are hindrances to the overall planning process perceived?
12	Information flow	Indonesia is notorious for having	<ul style="list-style-type: none"> - Are land-use classifications, and other data types, harmonious with supposed partners?

		bad information flow. Would BAPPEDA agree or not with this statement, and does the answer matter?	<ul style="list-style-type: none"> - How does this answer affect planning processes? - Is it easy to get desired data from central agencies such as BAKOSURINTAL? Have potential data sources even been tapped? - How are regional plans floated for comment? - To what agencies, NGO/LSM, communities are asked for input? - How is information from BAPPEDA transmitted to implementation agencies? Is feedback from implementation agencies, and monitoring of their activities, thought to be important in the process?
13	Equipment	Experience shows that government offices either have outdated equipment. Computers are ill-used and often virus infected. On the other hand, many have brand new, state-of-the-facilities, but with few able to use them.	<ul style="list-style-type: none"> - What equipment do the BAPPEDA have to assist them in their works? - Of what they have, what works? - Of what works, what is effective? - Of what is effective, who can use it? - Of those that can use it, how many do so for BAPPEDA business?
14	The crisis	What is the effect of the crisis?	<ul style="list-style-type: none"> - What is the effect of the crisis? - Why?

APPENDIX 3
PRINCIPAL PEOPLE MET DURING
SURVEYS

Appendix 3 – Principal People met during surveys

Province	Institution	Address	Position	Person
Irian Jaya	BAPPEDA - Irian Jaya	Jl. Sumatera Jayapura Irian Jaya	Ketua	Rince Kawengian
Irian Jaya	BAPPEDA - Irian Jaya	Jl. Sumatera Jayapura Irian Jaya	Ketua MREP	Michael Mantiri
Irian Jaya	BAPPEDA - Irian Jaya	Jl. Sumatera Jayapura Irian Jaya	Planner	Bangun Manurung
Kalimantan Barat	BAPPEDA – KALBAR	Jl. Sultan Sayhrir No. 3 Pontianak Kalimantan Barat	Urban and regional planner	Rusnawir Hamid IAP
Kalimantan Timur	BAPPEDA – KALTIM	Jl. Kusuma Bangsa No.2 Samarinda Kalimantan Timur	Ketua	Asli Amin
Kalimantan Timur	BAPPEDA – KALTIM	Jl. Kusuma Bangsa No.2 Samarinda Kalimantan Timur	Kepala Seksi Tata Ruang	Ichwansyah
Kalimantan Timur	BAPPEDA – KALTIM	Jl. Kusuma Bangsa No.2 Samarinda Kalimantan Timur	Ketua Bidang Fisik	Iskandar
Kalimantan Timur	BAPPEDA – KALTIM	Jl. Kusuma Bangsa No.2 Samarinda Kalimantan Timur	Staf - LH - MREP	Kasmawaty
Kalimantan Timur	BAPPEDA – KALTIM	Jl. Kusuma Bangsa No.2 Samarinda Kalimantan Timur	Staf - LH - MREP	Nazly
Kalimantan Timur	BAPPEDA – KALTIM	Jl. Kusuma Bangsa No.2 Samarinda Kalimantan Timur	Kepala Sumber Daya Alam dan Lingkungan Hidup	A. Pirade
Kalimantan Timur	BAPPEDA – KALTIM	Jl. Kusuma Bangsa No.2 Samarinda Kalimantan Timur	Sekretaris	Eko Soekaswanto
Kalimantan Timur	CARE – KALTIM	Jl. S. Musi 42 Samarinda Kalimantan Timur	Project manager	Maurice Bowen
Kalimantan Timur	CARE – KALTIM	Jl. S. Musi 42 Samarinda Kalimantan Timur	Consultant	Alison Tuffs
Kalimantan Timur	WWF – KALTIM	Jl. Gatot Subroto No. 53 Samarinda		Agustinus Taufik

		Kalimantan Timur		
Kalimantan Timur	WWF – KALTIM	Jl. Gatot Subroto No. 53 Samarinda Kalimantan Timur	Project executant Kayan Mentarang project	Dale Withington
Maluku	BAPPEDA – MALUKU	Jl. Raya Patimura No. 1 Ambon Maluku	Kepala subseksi - Lingkunan hidup	G. Gainau MS
Maluku	BAPPEDA – MALUKU	Jl. Raya Patimura No. 1 Ambon Maluku	Kepala sub-seksi Tata Ruang	Anwar Kotahatuhaha MSP
Maluku	BAPPEDA – MALUKU	Jl. Raya Patimura No. 1 Ambon Maluku	Kepala Bidang Fisik Prasarana	A. Taslim

Maluku	BirdLife – Maluku	Jl. Kapt. Tendean No. 36, Galala, P.O. Box 1097 Ambon Maluku	Maluku project secretary	Lambert Louis
Maluku	Hualopu Foundation	Jl. Dr. Leimena HT. Besar Ambon Maluku		Justus Pattipawae
Maluku	SBKSDA – MALUKU	Jl. Kebun Cengkeh, Batu Merah Atas Ambon Maluku	Kepala Balai	B. Resubun
Maluku	SEKWILDAH TK I Maluku	Kantor Gubernur Maluku, Jl. Pattimura Ambon Maluku		Jappie Sahetapy
Maluku	UPT Taman Nasional Manusela	Jl. Iman Bonjol 27A Masohi Maluku	Kepala Unit	Sahulata Yohana
Sulawesi Tengah	Balai Taman Nasional Lore Lindu	Jl. Tanjung Manimbaya 144 A Palu Sulawesi Tengah	Staff	Helmi
Sulawesi Tengah	Balai Taman Nasional Lore Lindu	Jl. Tanjung Manimbaya 144 A Palu Sulawesi Tengah	Kepala	Hudiyono
Sulawesi Tengah	BAPPEDA – SULTENG	Jl. Prof. Moh. Yamin Palu Sulawesi Tengah	Kepala Bidang Fisik dan Prasarana	Uhra Kadir
Sulawesi Tengah	BAPPEDA – SULTENG	Jl. Prof. Moh. Yamin Palu Sulawesi Tengah	Ketua	Yahya Ponulele
Sulawesi Tengah	BAPPEDA – SULTENG	Jl. Prof. Moh. Yamin Palu Sulawesi Tengah	Kepala Seksi Tata Ruang & Tata Guna Tanah	Sofyan Rukama
Sulawesi Tengah	CARE – SULTENG	Jl. Nokilalaki No. 28 Palu Sulawesi Tengah	North and Central Sulawesi Regional Chief Rep.	Anton Probiyantono
Sulawesi Tengah	KSDA – SULTENG	Jl. Prof. Moh. Yamin No. 19	Ketua	Banjar Laban MM

		Palu Sulawesi Tengah		
Sulawesi Tengah	Yayasan Pusaka Alam Nusantara	Jl. Keranja Lemba Palu Sulawesi Tengah	Conservation Awareness Program Officer	Bahar Umar
Sulawesi Tengah	Yayasan Pusaka Alam Nusantara	Jl. Keranja Lemba Palu Sulawesi Tengah	Ketua	Agung Wibowo
Sulawesi Utara	Balai Taman Nasional Bunaken	Jl. Babe Palar No. 68 Manado Sulawesi Utara	Pimpro (before)	Robby Piiai
Sulawesi Utara	BAPPEDA – SULUT	Jl. 17 Agustus Manado Sulawesi Utara	Subseksi Lingkungan	Ferdinand Pua
Sulawesi Utara	BAPPEDA – SULUT	Jl. 17 Agustus Manado Sulawesi Utara	Ketua	J. Saruan
Sulawesi Utara	BAPPEDA – SULUT	Jl. 17 Agustus Manado Sulawesi Utara	Staff - FISIK section	Togas
Sulawesi Utara	BAPPEDAL/DA – SULUT	Jl. 17 Agustus No. 69 Manado Sulawesi Utara	Kepala	S. Kindangen

Sulawesi Utara	Manado Dive Association	Sulawesi Utara	General manager and PADI course director, Hotel Santika	Simone Gerritsen
Sulawesi Utara	Proyek Pesisir	Jl. Wolter Monginsidi No. 5 Manado Sulawesi Utara	Technical Advisor	Brian Crawford
Sulawesi Utara	PSL – SULUT	Kampus Unsrat, Bahu Manado Sulawesi Utara	Ketua PSL	L. Waworuntu - Wewengkang
Sulawesi Utara	Universitas Sam Ratulangi	Jl. Kampus – Bahu Manado Sulawesi Utara	Lecturer	Sangkertadi

ABBREVIATIONS & ACRONYMS

ABBREVIATIONS & ACRONYMS

BAPPEDA	Provincial development planning agency
BAPPEDAL/DA	Regional environmental impact management agency
CA	Strict nature reserve
Dinas	Regional government sectoral agency
DPR/DA	Provincial house of representatives
IAP	Indonesian Association of Planners
IPB	Bogor Agricultural Institute
ITB	Bandung Technical Institute
Kabupaten	An area covered by a second tier of provincial government, led by a <i>Bupati</i>
KANWIL	Regional office of a central government ministry
KKN	Collusion, corruption and nepotism
Kotamadya	Mayoralty, equivalent in status to a <i>Kabupaten</i>
LREP	Land resources evaluation and planning project
MREP	Marine resources evaluation and planning project
PDC	Provincial data centre
PEMDA	Provincial governor
PERDA	Provincial regulations
PLS	NRM/EPIQ provincial liaison specialist
RePPPRoT	Regional physical planning project for transmigration
TN	National park
UGM	University of Gadjah Mada, Yogyakarta