

**THE BUNAKEN MANADO TUA MARINE NATIONAL PARK**

**PRE-PLANNING WORKSHOP AUGUST 27-31, 1990**

Report by Alan Robinson, PHPA Senior Conservation Advisor

A Field Activity of the  
Senior Conservation Advisor's Project  
with the

Directorate of Forest Protection and Nature Conservation

Sponsored by

US AID and the Conservation of Biological Diversity Program

Bogor, September 8, 1990

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### INTRODUCTION AND BACKGROUND

The PHPA Senior Conservation Advisor assisted PHPA Sub Balai Manado in organizing a pre-planning workshop for the Bunaken-Manado Tua Marine National Park (TNLB) August 27-31, 1990.

Specific objectives and goals are in the introduction to the final agenda (see attached). More generally, the workshop was intended to set the stage for the planning and implementation project for TNLB which is a part of the wider Natural Resources Management Project (NRM) sponsored by US AID. In addition to raising issues and identifying the various agencies who will be involved, the pre-planning workshop was conceived as a means of keeping up and stimulating interest in the planning process, which will not formally begin until mid-1991 when the NRM "umbrella" technical assistance contract is initiated. That contract will include the services of a marine park planning specialist (probably an expatriate) and one or more Indonesian consultants.

The following report has two objectives:

- 1) To summarize the results of the Workshop for the benefit of the Sub Balai and central offices of PHPA;
- 2) To provide analysis, comments and recommendations which may be of use to the future planning team and consultants.

The English and Indonesian press releases are attached. Two television spots were produced, one covering the opening on August 27, the other covering the Marine Clean Up (Sapu Laut) on August 31.

### RINGKASAN BAHASA INDONESIA

- 1) Counterpart dari Advisor, Ir. Wandojo Siswanto, M.Sc., telah mempersiapkan laporan tersendiri. Untuk lebih jelasnya, hal ini dapat ditanyakan pada yang bersangkutan.
- 2) Secara umum, lokakarya dapat dinilai sangat berhasil, terutama dalam mendemonstrasikan kepada para peserta bahwa proses pembuatan rencana yang dapat diterima oleh semua pihak terkait membutuhkan waktu dan musyawarah dari berbagai pihak.

3) Ada keinginan yang besar dari Pemerintah Daerah yang telah mempunyai gagasan dan saran mengenai apa yang seharusnya dikembangkan di Bunaken. Beberapa diantaranya mungkin bukan merupakan pemecahan terbaik dalam pemanfaatan kawasan secara berkelanjutan dalam jangka panjang. PHPA seyogyanya meminta Pemerintah Daerah untuk luwes dan berperanserta sepenuhnya dalam proses perencanaan. Ini adalah cara penyampaian lain agar Pemerintah Daerah mengerti bahwa mereka seharusnya berbagi tanggung jawab dengan PHPA dalam mengelola TNLB dan tidak melakukan apa yang mereka inginkan tanpa konsultasi dengan PHPA, instansi terkait dan masyarakat setempat. Karena hal ini sulit untuk dilakukan oleh Kepala Sub Balai, maka Direktur Jenderal atau direktur yang harus melakukannya.

4) Semua rekomendasi yang dihasilkan dari lokakarya cukup beralasan. PHPA tidak perlu ragu-ragu untuk membentuk Dewan Penasihat TNLB sepanjang secara jelas tidak bertentangan dengan otoritas PHPA dalam pengelolaan kawasan. Yang terpenting adalah mendapatkan rencana pengelolaan yang diterima oleh semua pihak terkait. Selanjutnya PHPA harus mengikuti rencana tersebut sehingga terlindungi dari tekanan Pemerintah Daerah dan Sektor Swasta.

5) Beberapa kegiatan sudah harus dimulai sebelum proyek NRM dimulai pada tahun 1991-lihat Rekomendasi No. 8 dan ulasan Advisor dalam Bahasa Inggris. Beberapa alat seperti perahu patroli, perlengkapan selam dan peralatan bina cinta alam harus sudah dibeli bahkan sebelum konsultan NRM ditetapkan. Kami menyarankan agar dilakukan negosiasi dengan US AID untuk mendapatkan panjar dana bagi keperluan ini.

#### **GENERAL COMMENTS**

Bunaken Manado Tua Marine National Park (TNLB) is a classic example of a small, easily accessible marine conservation area near a population center. Diagrams of TNLB's relationship to currents, river effluent, domestic and international tourist access and other factors are identical to textbook discussions of the interconnections of nearshore coral reef islands and the mainland. Because of these connections the planning issues are well known but by no means easy to resolve. Some of the major ideas and suggestions as given below.

#### **Previous work done**

Some excellent work has already been done on Bunaken, including that of Salm and Usher, Djohani, Soeharto, the Idacipta report of the early 80's and an FAO report in 1989. Most of these are now available in the KSB Manado office. These and other reports should be carefully examined before

launching the detailed planning effort. I think it is essential to PHPA's credibility to be familiar with previous work. However, at least in this Workshop we have stressed that these reports are surveys and background and none have been officially adopted as policy by PHPA. That is reserved as a product of the planning process.

### **Tourism Issues**

There are strong pressures for tourism development from the private sector as well as provincial government; big outside money and influence is just beginning to be felt in the tourism development sector. Keeping ahead of these pressures in the process of developing a management plan is probably the most urgent and difficult task facing PHPA.

Several tourist operators (i.e. diving centers) have a long history of investment and influence and are seeking to preserve that advantage; this complicates their motives for wanting to conserve TNLB, but I sense in most cases a genuine conservation concern.

No assessment of carrying capacity (for scuba, snorkeling or just beach recreation) of this limited resource has been made. If only the 5 islands of TNLB are considered I suspect the number of dive sites and beaches is quite restricted and would not support the type of expansion the most optimistic tourism planners envision.

Tourism (hotel development) is starting to use up available recreational beaches, forcing local recreational users to find other options, including Bunaken, even though it is relatively harder to get to. This creates competition with the specialist diving user. It is not yet clear whether a zoning system can be agreed upon which would accommodate both users.

### **PHPA Management Issues**

In spite of a very capable Kepala Sub Balai, PHPA's own capacity to manage TNLB is weak; this weakness will continue for some time and force PHPA to depend on the private sector and local government in various ways. This can be positive in developing community involvement but if allowed to go too far can lead to dominance of management by other agencies.

In the long term TNLB will probably develop its own Balai level administration (i.e. Balai Taman Nasional). This would mean the local manager (Kepala Taman Nasional) would have far higher status than the Kepala Sub Balai and therefore more influence with and even independence from the

Kantor Wilayah Kehutanan (Kanwil). Until such time, Kanwil will continue to exert very strong influence over PHPA activities. The Kepala Kanwil will remain a key leader in management and therefore be a key target for orientation and education to ensure he is capable of giving good direction.

### Zoning Issues

Suitability, attractiveness and conservation value of marine resources within the park are not uniform. This suggests a zoning system can be implemented. In general the citizens of Manado appreciate the need for zoning and are eagerly awaiting it--however, interest is greatest in an "intensive use zone" category which is seen as permission to develop physical tourism facilities. It should be appreciated immediately that PHPA does not control the terrestrial resources and therefore definition of development zones on the land is the responsibility of local government. It is not clear to what extent local government will be willing to share its authority to zone the land areas with PHPA. A goal of the planning process should **obtain a zoning plan that includes the land areas**, even though officially the TNLB zoning plan might only deal with marine resources.

Note: PHPA is not presently trying to include land portions of the five islands or the shore inside the park. However, I believe the planning process should attempt to define the land areas as functional parts of the park and therefore subject to controls set by the management plan.

### Local community use issues

Local people (both fishermen and farmers) live within or on the borders of the park, and their legitimate needs should be taken into account. There have already been suggestions that some or all of the villages within the park should be removed, and this issue is probably the most sensitive and controversial we have noted. My advice to workshop participants was to deal with this issue openly and to involve the affected communities directly. Certainly one alternative to consider is relocation, if adequate compensation and the provision of alternative land and retraining and better community services is actually provided. If this cannot be assured it would be both unjust and strategically an error for PHPA to support relocation. The worst outcome would be relocation (with inadequate support) followed by exploitation of the unoccupied lands on the islands for development by powerful private interests.

From a management point of view the best option would be direct purchase of all or some of the islands in conjunction

with fair relocation practices. This is probably unrealistic, but if one considers the long range economic implications and benefit that a well-managed park can bring to the area, the price of purchase and relocation is probably very small in comparison.

There seems to me no justification for a complete ban on continued fishing or collection of marine products by the people living on the islands or nearby shore. However there is evidence that a zoning system for fishing and collection should be implemented and certain restrictions on type of gear and fishing techniques will be needed. Outright prohibition of bomb fishing and some destructive net fishing should be enforced. There also may need to be restrictions on fishing within the area by people not resident in or near the borders. This is a very sensitive issue. But if restrictions could be implemented it would go a long way toward developing local fishermen's support for the park since they would see it as a resource of direct value to them.

Since it seems likely most of the people living on the islands will remain, the management plan should deal with their activities as much as it is allowed. It is generally accepted that if people living in enclaves and buffer zones of parks can be offered improved living conditions and training to sustainably use the limited resources on their own lands, their need to turn to and exploit park resources is lessened. I believe this approach should be tried in TNLB. It would include improved health and education services, access to agricultural extension (especially soil conservation and agroforestry for Manado Tua) as well as to fisheries extension services. Depending on the extent to which small scale tourism infrastructure is to be allowed on the islands (homestays, losman and warungs) training in mini enterprise development should be offered as a deterrent to exploitation of economic opportunities by outsiders.

#### SPECIFIC IDEAS

The following ideas are thoughts based on my experience in marine park planning. Some may prove unrealistic once more information is available, but perhaps they can be considered as alternatives.

##### Land ownership

Although I doubt the following suggestion would be immediately acceptable, if the management plan is truly trying to

be imaginative here is an idea. It might be possible to modify the western concept of Conservation Easements and purchase the development rights to land on Bunaken, Siladen and possibly Manado Tua. The idea would be to purchase these rights from virtually all owners, large and small, allow them to stay on their land, but place a majority of the funds provided in trust with an island-wide corporation. This corporation would be entrusted with management of the funds and provision of certain public service facilities (in conjunction with government departments). Limitations of development would be placed (see below) but traditional lifestyles and use of the land would not be restricted. Residents who decided they did not wish to live with such restrictions could apply to the cooperation and receive the full value of their lands and relocate off the island

### **Zoning and island activities**

With the diversity of island resources there should be ways to zone to avoid conflicts between the major users (i.e. the specialized scuba/snorkel tourist, the general interest "free-and-independent" tourist, local beach/picnic recreational visitors and local resident fishermen/farmers).

#### **1) Bunaken Island**

The diving center view seems to be the Bunaken resource is so fragile and specialized that it cannot be shared with local visitors (who come in large numbers, require many boats which may cause pollution and disturb habitat as well as the diving tourist). It believe this is too restrictive a view and that there should be a way to zone islands and parts of islands to deal with it. However, I think it is essential to provide some alternate beach recreation facilities on the mainland, and that this itself will decrease the number of local residents using Bunaken for this purpose. It would be quite wrong to provide restrictions which would tend to discriminate against local visitors using Bunaken in favor of the international diving tourist.

I would consider allowing a strictly limited number of losman type accommodations with a required minimum spacing only on the west of the current developed picnic area on Bunaken. These should be managed and owned by island residents, not absentee owners. If capital for development is a problem some advice on cooperatives and possibly rotating loan funds should be provided. Strict inspection of sanitary facilities and setbacks from the beach would be required. A ban on cutting of forest trees for construction should be enforced. A cooperative could provide a small electrical generating station above the beach and individual generators prohibited. Some action would have to be taken immediately to stop proliferation of these losmans in the next several months. Homestays could be allowed in the two

Bunaken villages but no buildings built specifically for rental; no cottages would be allowed here either.

PHPA should maintain a permanent staff on Bunaken, initially in the Pariwisata facilities at the picnic site. Pariwisata should be encouraged to let a local island family manage and profit from the Dinas Pariwisata's overnight accommodation at the picnic area. I don't believe Pariwisata should be in competition with island residents for these services. Instead, they should limit their role to maintenance and cleanup of the picnic area, for which an entrance fee could be charged. Alternatively, maintenance here could be funded from the tourism general tax that might be levied (see recommendations).

No diving facilities (i.e. no tank filling) would be allowed on Bunaken, which would serve independent tourists and local visitors. Divers would continue to be accommodated on the mainland and come in daily. The area inside the reef around the south shore picnic area would be restricted to non-motorized craft to encourage development of rented/guided locally-owned outriggers to take sightseers or snorkel tourists out over the reef, including evening/night when they are staying in the losmans. Dive boats would be restricted to fixed moorings off this reef (and elsewhere at anchor buoys). The north shore of Bunaken should be zoned no development so that it can continue to serve as a picnic beach area for dive boats and the independent tourist who might charter a paddled outrigger around from the south--trails could link it to the developed area also. No hard picnic facilities should be developed on this shore (this may require changing plans by Pariwisata for a second picnic site here).

## 2) Siladen

Siladen seems quite appropriate to cottage type accommodation, again with a prohibition on diving facilities, and a requirement that the facilities be simple and inexpensive. It is not intended to provide for the high-paying guest here, nor to encourage a stay of more than 3-4 nights. Freshwater availability is also a here and there is no reason to try to get around this limitation by importing water or developing sophisticated distillation facilities. A maximum of 20 or 30 beds in two widely-separated areas seems a good place to start. Activities from this island would include outrigger snorkeling around the island and motorized boat trips to the other islands for exploring and snorkeling.

## 3) Manado Tua

No overnight accommodation should be encouraged on Manado Tua. It should remain a day use destination, primarily for climbing to viewpoints to look back over Bunaken and the

mainland. Appropriate trails and overlooks should be constructed, and local guides encouraged. Loop trips with boat pickup at a different location are easily arranged.

There are excellent dive sites which should be provided with anchor buoys. No picnic facilities are necessary and no permanent PHPA resident is needed yet; later a PHPA staff or Agriculture staff for agroforestry extension may need to be resident.

#### 4) Montehage, Nain

I have not visited these islands. My information is that Montehage's mangrove forests are a very important resource and should be managed (as they are) as hutan lindung. If Dinas Kehutanan is unable to provide a management presence there, then PHPA should be delegated this responsibility and station a permanent guard there. I doubt that any tourist facilities should be provided at this time, but with some exploration I expect that very exciting day trips for independent tourists staying on Bunaken and Siladen could be worked out.

Nain's lagoon might have been an important marine sanctuary area, but the recent development of commercial sea grass operations brings this into question. Research into this issue is urgently needed, as well as clarification of whether the lagoon is truly inside the marine park. It would seem to me that it should be, but the option to manage it may already have slipped out of PHPA's hands.

Nain seems the most likely place that a shell-based handicraft industry might be sustainable, but the scale of this should not be overestimated. There must be some detailed survey work on where and how much harvesting should be allowed. If harvesting is going to proceed there must be some monitoring provision either by Dinas Perikanan or by PHPA itself.

#### 5) Mainland shore

The principal fishing villages seem to actually lie outside where the TNLB boundaries meet the shore. Field Trip Group D information on lifestyle and habits should be considered as a starting point for more investigation of social and economic links to the marine resources there. Only the Badjo villages of Kima Bajo and Tanjung Badjo seem to have motorized fishermen who venture out into the park area itself; the very limited scale of the other village fishing activities doesn't appear to warrant much limitation, but monitoring especially for pressure on Triton shell, mangrove cutting and live coral excavation are important. The same principles of providing better government service and agroforestry extension apply to these villages as a strategy to prevent their residents having a severe impact on the park.

PHPA is not yet known in these villages. The first step after getting proper boat transportation is to begin visiting these areas on a regular basis to provide conservation extension in general. This could include endangered species regulations and some stories about linking health of the reefs and mangroves to continued good fishing and coastal protection.

#### COMMENTS ON RECOMMENDATIONS

Basically I am in agreement with the recommendations, which are attached. Here are some observations.

##### No.1 (Creation of an advisory body-Dewan Penyantun TNLB)

The intent was not to create a management authority to which PHPA was subservient but to provide some sort of advisory committee which could assist PHPA in gaining consensus and setting priorities. Pak Romon Paléte KSB was uncomfortable with such a body, I think fearing that it would challenge PHPA's authority. I may have misread this, but it needs to be clarified.

##### No. 2 and 3 (Yayasan Pengelola and Pajak Turis)

I think this is a realistic alternative way of providing for funds for management. However it is unique in the PHPA system (perhaps in the country) and therefore there is little experience in implementing it. It would bypass the current problems PHPA has in collecting visitor entrance fees and applying them directly to the park. The Yayasan would of course have to be accountable to some other authority. Depending on the powers of the Dewan Pengelola it might be that body. PHPA may not wish to give up the opportunity to collect funds, but this system would be much better than system at Bromo Tengger, where local government collects all funds and gives little or nothing to PHPA for maintenance and operation.

##### No. 4 and 5 (Zonation)

Really 5 should come before 4 i.e. the zonation should be researched and approved before extension work to explain it to the local people. Of course in the process of research and approval the opinions of local people must be taken into account so the research, review, approval and then extension should be continuous.

I believe Workshop participants generally assumed the zonation being discussed included the land portions of the affected area, not just TNLB as officially declared. As noted elsewhere in this report I hope that this concept can be made more formal.

#### No. 7 (Placing buoys for dive boats)

This should be included in No. 8 below. We all agree that this is a critical step to take very soon--not only would having buoys in place reduce coral damage but also it would be a concrete sign that some sort of management action is actually taking place. This and other activities in No. 8 could have very great symbolic value and help the momentum of the planning and development.

One person who seems to have done a lot of thinking about buoys is Dr. Batuna of MUREX, although I'm sure Loki of NDC has also been concerned about it. Here are some of my views on how to actually install buoys:

One immediately sees a problem for buoys at the edge of vertical walls where the top of the reef is only 2-3 m below high tide. Here, where tidal range is 2 m or so, the system just doesn't work since the buoy chain will immediately drag on the top of the reef at lower tide; also at lower tides there is not sufficient depth for the boat to be over the top of the reef. The typical anchor buoy type (see Salm's work, which came partly from my experience in Bali Barat) works best in somewhat deeper water where even at low tide the chain doesn't swing down enough to destroy coral around the anchoring point.

Dr. Batuna has a suggestion worth trying and that is to drive a pipe into the coral at the top of a vertical wall and anchor boats off that. Of course that won't work at especially low tides but would solve the dragging chain problem. These pipes would have to be very well marked with a large orange sign since they would be much more hazardous than a floating buoy!!! Another thought Dr. Batuna has is to put in buoys with much deeper anchors some distance off the wall. I think this is impractical for maintenance and would rapidly get too expensive if the chains or ropes were lost in water too deep to safely retrieve with scuba (you want to avoid putting anything in deep water that people might dive on to retrieve or repair--too dangerous--this applies to buoys marking boundaries also).

I recognize the vertical wall problem, and suggest trying

the pipes. Another idea is simply to do better survey work to find good conditions for the more traditional type. I informally checked out areas near vertical walls that are favorite dive spots and usually found within a few tens of meters some areas where the top of the reef slopes more gently and where you could find sufficient space to put a buoy anchor and not worry about damage from the chain; and

also the boats could anchor here even at low tides. These places are often also attractive to snorkelers, whereas the top of a vertical wall, especially at low water, has limited potential for snorkelers who accompany divers.

Remember the other alternative for avoiding anchor damage is to insist that boats never anchor in these sensitive spots; drift dives ONLY would be required. This of course requires monitoring, but with increasing numbers of dive centers concerned about the problem it should be possible to self-police this kind of regulation.

**No. 8 (Increase PHPA capacity for security and patrol etc.)**

I had hoped that a more definite list of short term activities and purchases might come out of this recommendation. My personal suggestions are that PHPA negotiate immediately with US AID to

- 1) Purchase a fiberglass patrol boat and two outboard kerosene powered motors, appropriate spare tanks and life preservers; provide training in motor repair and operation.
- 2) Purchase several sets of mask, fins and snorkels. DO NOT purchase scuba equipment at this time, since maintenance and storage are serious problems. For scuba equipment to be used by qualified PHPA divers there should be a permanent arrangement made with NDC or other dive center for rental on a monthly basis.
- 3) Get additional scuba training for several PHPA staff.
- 4) Purchase simple audiovisual equipment and materials which can be transported by boat for conservation extension work in villages in the park and nearby. Battery powered solar recharged units are commonly used in extension work by Peace Corps, VITA etc. and can be purchased for less than \$500. This equipment could also be used during the planning process when visiting villages for input.

5) Produce a TNLB brochure or several brochures; one would be general information, the other on the planning process and the need for input from the various interest groups. PHPA Bogor should be capable to assist in this with their new Desktop Publishing capability.

6) Regarding guard posts I suggest proceeding with caution. First step might be to merely station a PHPA staff person at Bunaken picnic area in Pariwisata accommodations. Later,

staff could be assigned to local government facilities in other island villages, with Nain the next priority, then Montehage. I suggest avoiding construction of separate PHPA facilities except eventually at the picnic area. There may never need to be a single "visitor center" for TNLB; it may be better to spend development money on little stations in several locations; I am convinced it would be even better if adequate trained interpretive/enforcement staff could be provided who would spend most of their time outside any office circulating among visitors, fishermen and villagers just talking about the park.

#### **No. 9 (Conservation Education)**

Although it is possible the participants were only talking about TNLB, we should not forget that the mission of the KSB is much broader than just development of the park. I would hope that any time there are programs being developed for TNLB that there would also be messages included about endangered species, national parks in general etc. Equipment purchases (see 8 above) for TNLB purposes could certainly be used in more general programs as well.

#### **No. 10 (Increased government services in general)**

I think development of TNLB can be an excellent motivation to local government to increase their level of service. If these increases are linked to the park in the minds of villagers, then it is that much easier to demonstrate the park has specific value to them, and should be protected as a long-term resource. I do not agree with the theory that better services will automatically lead to greater demands for development in the park. I think if these improvements (which would include health and family planning service as well as those listed in Recommendation No. 11) are accompanied by careful planning for the park itself, then the relationship between improved village conditions and park management will remain positive not negative.

**No. 12 (Encouraging out-migration from Bunaken)**

This was easily the most controversial recommendation. There is a lot of history behind the opposing viewpoints. I can only urge caution in taking a PHPA stand (see Local Community Issues above). Although the final wording was deliberately kept vague it is possible this recommendation will be used as a support by proponents of moving people off Bunaken. This was not intended by most of the participants; rather I think most participants agreed with the need to open the issue with local people before decisions were finally made.

**No. 13 (Rehabilitation of critical lands)**

I think people were mainly concerned about Manado Tua in this context. It would be excellent if PHPA and other agencies could cooperate in model programs of agroforestry and even programs of native forest rehabilitation. This would be a good place to start for such programs on critical lands elsewhere in the province.

## PHOTOGRAPH ANNEX

### #1-4 The Opening Ceremonies

The Bunaken Manado Tua Pre-Planning Workshop took place at the Sahid Manado Hotel and in the field August 27-30, 1990. Approximately 40 official participants (#1) were invited (see attached invitation list). The staff consisted of three representatives from PHPA, Bogor, the KSB Manado, staff of the Kantor Kanwil Jakarta, a representative of Walhi and US AID NRM project.

Approximately 75 persons attended the opening ceremonies, which were officially led (#2) by the Wakil Gubernur Sulawesi Utara. Highest local Forestry Ministry official presiding was Ir. Pangebean, Kepala Kantor Kanwil Kehutanan. The Director General PHPA was represented by Ir. Toga Siallagan, Director of National Parks and Recreation Forests.

One special feature of the Workshop was the participation of Pencinta Alam and local NGO groups (#3). These groups have already shown strong support for the Sub Balai PHPA in the past, and seem prepared to provide input in planning for Bunaken from their special perspective. Although their participation was more enthusiastic and consistent than many government officials, they expressed a general feeling that there continues to be too much talk and too little action. This feeling lessened as the Workshop shifted into field work and working groups. But it is important to know there are elements in the community who are very impatient with the slow pace of official bureaucracy. Special efforts should be made to keep to promises and schedules and show commitment to these young people, or they may become discouraged with the process.

It was especially helpful that several US AID representatives attended (#4) including Jerry Bisson (2nd from left) who is the principal coordinator of the NRM project and Lee Twentyman (3rd from left) who, as overall Chief of the AID Mission, Jakarta, is responsible for approving the entire NRM program including the Bunaken component. Through this participation we feel they have a much more realistic view of both the problems and potential for this joint PHPA/AID planning and development project. We hope this will strengthen the interest and support of AID staff over the next several years as the program gets implemented. It would certainly be appropriate to continue extending invitations to these and other key AID officials in the future as various milestones are passed.



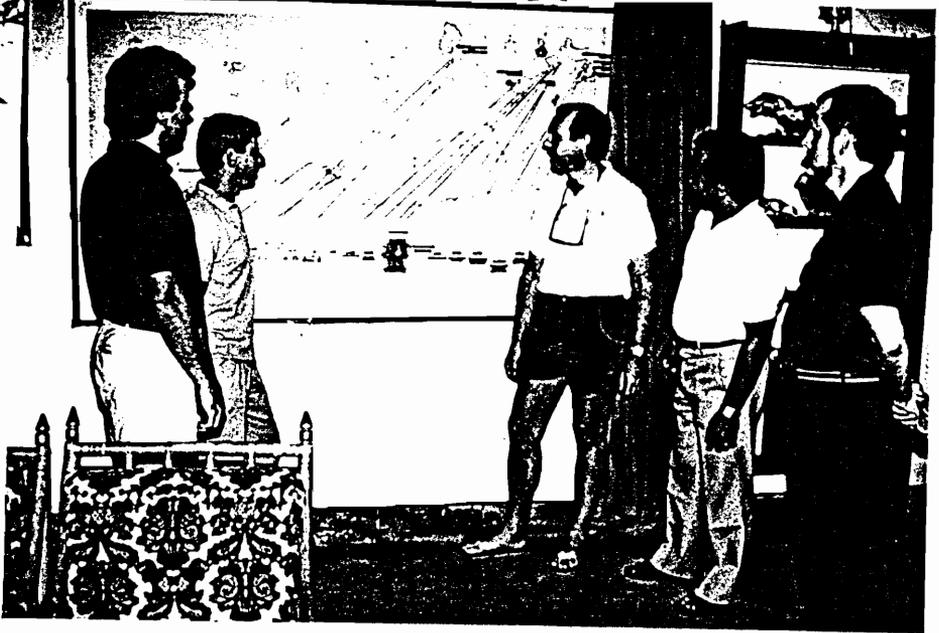
#1



#2



#3



#4

## #5-8 Field Trips

The Workshop was specifically designed to involve the participants in field work and later analysis, to provide an appreciation of the complexity of the issues as well as to actually collect field data. Approximately 50 participants and staff (#5, 6) attended the day-long field trips (see schedule and Terms of Reference for specific objectives of the four groups).

A common thread for the three groups visiting the shore and island communities was to investigate the relationship of these people to the resources of the park. Each group spent time in individual and group discussions with community leaders (#7). This was not meant to be a single interview upon which conclusions are to be drawn for the plan, but serve as an example of the hard work and interaction with local communities which will be needed to assess the opinions of this important group. At least one field trip group had participants (pencinta alam representatives) who seriously propose returning to these villages for several weeks of informal residence and discussions so as to provide the best possible information.

Care must be taken in generalizing attitudes and lifestyles of the villages. For example, some villages on the mainland east of the park are basically farmers who do little but seasonal fishing, without motorized boats, and concentrate their fishing effort very close to their villages i.e. they may exert little or no influence on the park itself. Other villages such as Tandjung Badjo (#8) and Kima Badjo are basically fishermen who do some farming; each village has many motorized craft which go far to sea into and around the islands of TNLB. Their gill net and drift or drag nets need serious evaluation for potential impacts, especially on coral reef species. Potential pollution effects of motor use need assessment as well.

#5



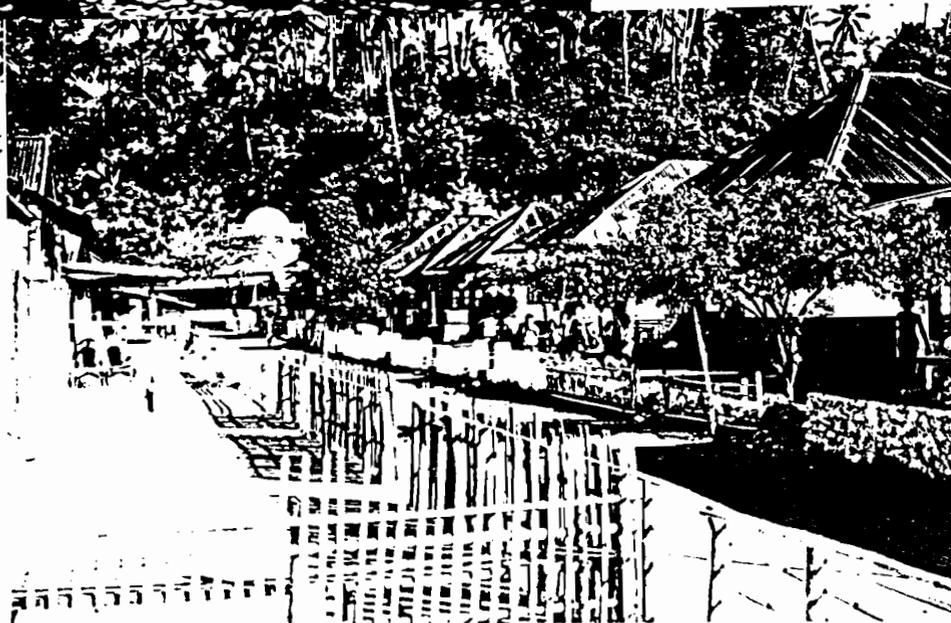
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#7



#8



## #9-12 Fishing and Other Impacts

Simple hand line fishing (#9) especially from non-motorized boats probably has no serious impacts so long as the number of fishermen is not very large. Restricting the handline fishing to fishermen resident within and very near the park may be one way to limit the expansion of this fishing effort.

There are some specific threats to TNLB resources from local villagers, for example, continued capture of the endangered mollusk Triton (#10). This could be approached through general conservation education by PHPA in the appropriate villages.

The rapid construction of losman and warungs on Bunaken (#11) near the Pariwisata picnic area is a serious problem which should be controlled even before the management plan is completed. This particular losman was constructed in the one month interval between my first and second visits. Particularly disturbing is the felling of large native trees (#12) on the beach edge for timber to construct these buildings. This destroys shade and the attractiveness of the beach and eliminates the little remaining native vegetation.

#9



#10



#11



#12

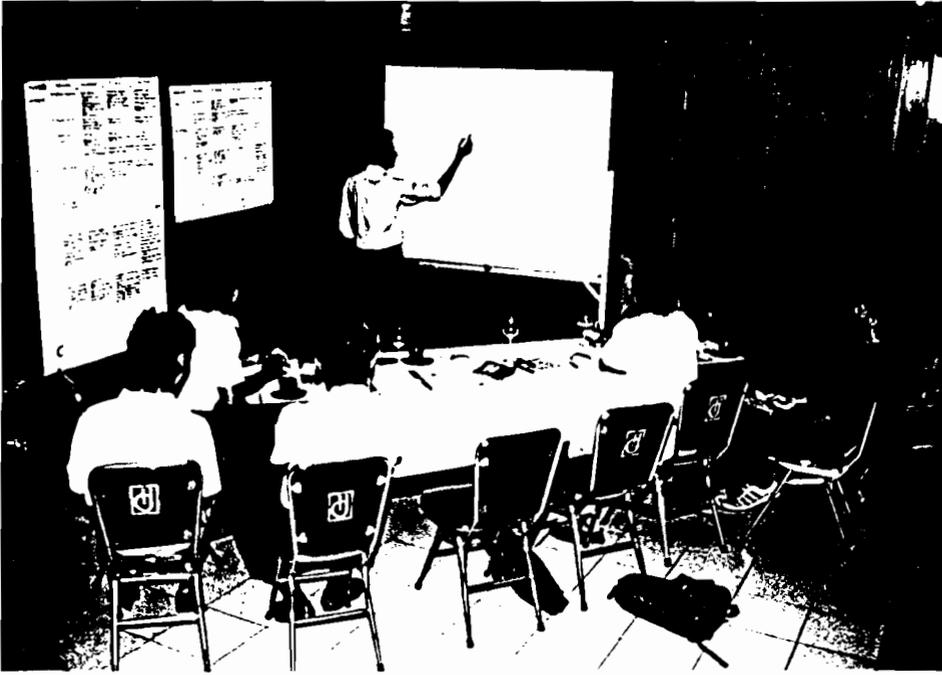
### #13-15 Working Group Discussions and Meeting Format

Each field trip continued as a separate Working Group to compile, discuss, analyze and report its findings to the larger group. Workshop staff participated in each group but only as facilitators. In most cases a natural leader was identified and helped guide the group to conclusions and consensus.

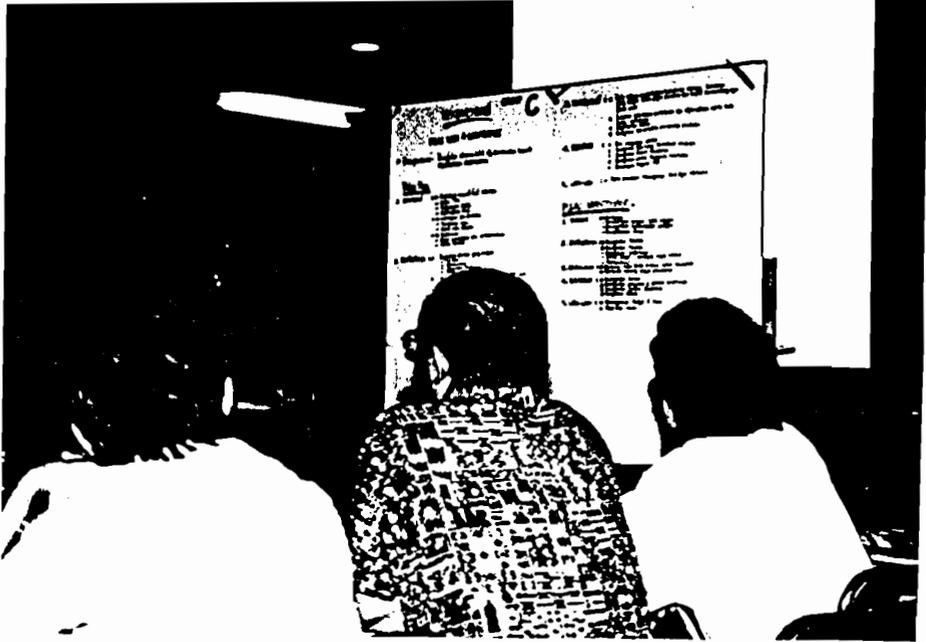
It is obvious that flip chart listing, sketching, brain storming and listening to ideas regardless of status of the speaker are new techniques. There are many cultural barriers to this more open way of working in groups, but there was excellent participation and acceptance of the new approaches. This, and the field trips themselves, seem very appropriate strategies to eliminate some of the strict formality which characterizes usual Indonesian group meetings.

In this Workshop we did have some misunderstandings and uncomfortable moments when the western-oriented staff insisted the format be kept informal. For various reasons the first day schedule simply could not be made less formal, primarily because the high status officials feel very strongly that they must uphold the traditional formality, and incidentally, gain political exposure they need. Advice for the future would be to accept this formality but try to limit it through very careful briefings of the high officials so that they can appreciate the specific objectives of the effort. These officials should be discouraged from making blanket statements of what should occur in the park, when in fact the planning process itself is supposed to determine this.

A specific error the staff made was in failing to involve staff of PHPA's Directorate of National Parks and Recreation Forests in the early planning of the Workshop. TNLB status as national park places it definitely within the jurisdiction of this Directorate. Unfortunately Director Toga, who attended only for the first few hours, did not become involved in any of the detailed objectives. It would have been more productive if a staff member from TNHWH had stayed with the Workshop all week, which could have been arranged if better planning had been done. In the future if there is a limited budget we should insist that a working participant or staff be provided with support and that protocol participants provide their own funds.



#13



#14



#15

## #16-19 Marine Clean Up

As a separate activity the Workshop sponsored a one-day Marine Clean Up at Bunaken Island.

Clean ups have routinely been sponsored in the past by Dinas Pariwisata, who has a budget for it. They have been limited to participation by the Diving Centers, Police and a few government officials receiving a small payment for their work.

In this case we invited participation of pencinta alam groups as well. In discussions with the newly formed Forum of Pencinta Alam Groups PHPA invited 50 volunteers to participate-41 eventually actually attended, coming from 5 or 6 of the 24 groups which are represented by the Forum. Transportation was provided by the Nusantara Diving Center for fuels costs only. NDC and Murex each provided one boat load of qualified dive guides to do cleanup in the deeper water. The volunteers concentrated on cleanup of the picnic area beach and in shallow water where snorkelers could reach.

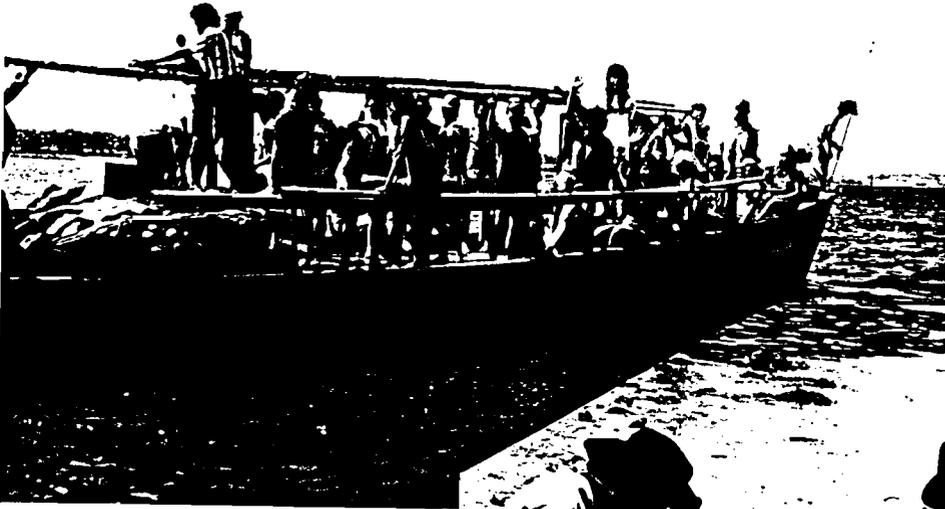
PHPA via the Advisor's budget provided lunch, fuel reimbursement and a contribution of Rp5,000 for each of the 41 pencinta alam volunteers who worked. Part of these costs were defrayed by personal contributions from the AID staff, who also participated. Total costs, including Rp120,000 for television coverage, were approximately Rp600,000.

Plastic trash which was collected (#20) is not immediately traceable as to origin. Some in fact may come from residents of Bunaken or even users of the picnic area; some may come from general ocean pollution. It is also quite possible that much of it comes from Manado itself. This problem does not seem to have an immediate solution, but it is certainly a very visible issue and can be used to continue to motivate cooperation between TNLB managers and the nearby towns.

It does not seem a very efficient way to do beach cleanup if it costs Rp500,000 every month or so. It would probably be much cheaper to increase the cleanup staff at the picnic area. Of course the principal value of periodic public volunteer cleanups is the public relations and the opportunity it provides to deliver messages about the relationship of Bunaken to other parts of the regional system.

In general the clean up was successful from a social and educational perspective. It would have been better if the schedule had been more controlled by PHPA itself, and certain times provided for discussion and an conservation education talk. As an agent for integrating the community in its interest in Bunaken the participation could be made broader, for example to include the Bunaken villagers, school children etc.

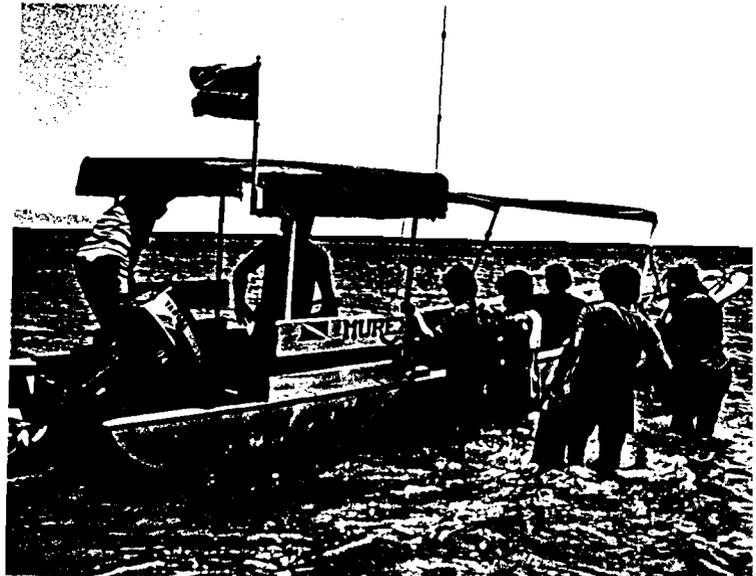
#16



#17



#18



#19

**PREPLANNING WORKSHOP  
BUNAKEN MANADO TUA MARINE NATIONAL PARK**

**Objectives and Final Schedule (as run)**

**Dates:** August 27 through 30, 1990

**Location:** Sahid Hotel, Manado, Northern Sulawesi

**General Theme of Workshop:** Begin Development of Management Plan  
for Bunaken Manado Tua Marine National Park

**Specific objectives of Workshop:**

Explain "management plan" and the "planning process"

Identify the major issues (problems, threats, activities, uses) at Bunaken which will be covered in a management plan

Identify the participants who will assist in planning

Explain the role of PHPA in planning and management

Identify financial resources available

Consider some temporary strategies until management plan approved

**Agenda and schedule of Workshop**

<b>AUGUST 27</b> Monday	10:00am Opening Ceremonies Wakil Gubernur, Kepala Kanwil Kehutanan, Director Taman Nasional/Hutan Wisata
	10:45-11:00am COFFEE BREAK
	11:00-11:40am Regional Land Use Pattern (Bappeda)
	11:40-12:30 pm Regional Tourism Planning (Kantor ParPostel)
	12:30-1:15pm LUNCH in Hotel
	1:15-1:30pm PHPA role in North Sulawesi and at Bunaken (KSBSDA Romon Palete)
	1:30-1:40pm US AID assistance at Bunaken (Natural Resources Management Project leader Jerry Bisson, US AID Jakarta)
	1:40-2:20pm PHPA role in marine conservation in Indonesia (Achmad Abdullah, SubDit Konservasi Alam Laut PHPA-pusat)

2:20-3:00pm What is a national park management plan (Alan Robinson, PHPA Senior Advisor)

3:00-3:30pm COFFEE BREAK

3:30-4:00pm Objectives of field activities  
Jerry Bisson/Agus Widlanto

4:00-4:30pm Organization of Field Trips and  
Schedule for remaining Workshop  
activities

Evening and dinner FREE (Staff daily evaluation)

**August 28**  
Tuesday

8:00am-5:00pm Field Activities

Group A: Tourism interests and facilities-visit  
local diving clubs and other hotel and  
tourism facilities (Staff: Bisson, Abdullah)

Group B: Role of Local People in Bunaken National  
Park-visit to Bunaken and Manado Tua island  
communities (Staff: Siswanto, Halim)

Group C: Role of Local People in Bunaken National  
Park-visit to Nain, Siladan and Montehagi  
island communities (Staff: Palete, Lester)

Group D: Role of Local People in Bunaken National  
Park-visit Badjo fishing community and  
inspection of other fishing issues  
(Staff: Djohani, Robinson)

Evening and dinner FREE

**August 29**  
Wednesday

Group activities at Sahid Hotel

9:00-9:40am Outline of coral reef ecology and some  
marine park activities outside  
Indonesia (Rob Lester, Marine  
Conservation Consultant, WAHLI,  
Jakarta)

9:40-10:25am Participation of local people in  
planning and management (Rili  
Djohani, World Wildlife Fund,  
Indonesia)

10:25-10:40am COFFEE BREAK

- 10:40-11:20am Concept of zoning in marine parks  
(Matheus Halim, Kantor Wilayah  
Kehutanan, Jakarta)
- 11:20-11:35am Preliminary zoning plans for Bunaken  
(KSB Romon Palete)
- 11:35am-12:30pm Environmental Education,  
University linkages (PSL), NGOs and  
youth groups-individual  
presentations and discussion of  
cooperation with TNLB
- 12:30-1:15pm LUNCH at Hotel Sahid
- 1:15-5:00pm Working Groups
- Group A: Bunaken and Tourism Development
- Groups B and C: Local community participation  
the national park
- Group D: Fishing and other activities
- 5:00-7:30pm free time
- 7:30-8:00pm dinner in Hotel Sahid
- 8:00-9:30pm Slide presentation: Marine Park  
examples Australia, Philippines,  
Komodo Island
- August 30**  
**Thursday**
- 9:00am-12:00noon Cont. working groups Sahid Hotel
- All groups continue discussions and draft  
recommendations
- 12:00noon-1:00pm LUNCH in hotel
- 1:00-3:00pm presentation of working group reports
- 3:00-3:15pm COFFEE BREAK
- 3:15-5:30pm Formulation of recommendations and  
temporary strategies
- 5:30-6:00pm Closing ceremonies  
(Kepala Kanwil Kehutanan, Robinson)

**August 31**  
**Friday**

All Day-Marine Clean Up at Bunaken Island  
(Pencinta Alam, Workshop, PHPA, US AID Staff, Periwisat)

## DAFTAR PESERTA WORKSHOP

1. Bappeda Tkt. I Sulawesi Utara
2. Biro KLH Tkt. I Sulawesi Utara
3. Biro Perekonomian Tkt. I Sulawesi Utara
4. Kantor Wilayah Departemen PARPOSTEL Propinsi Sulawesi Utara
5. Kantor Wilayah Departemen Perhubungan Propinsi Sulawesi Utara
6. Kantor Wilayah Departemen BPB Propinsi Sulawesi Utara
7. Kantor Wilayah Departemen Kehutanan Propinsi Sulawesi Utara
8. Kantor Wilayah Departemen Pertanian Propinsi Sulawesi Utara
9. Dinas Pariwisata Propinsi Sulawesi Utara
10. Dinas Perikanan Propinsi Sulawesi Utara
11. Dinas Kehutanan Propinsi Sulawesi Utara
12. Dinas Perkabunan Propinsi Sulawesi Utara
13. Balai Inventarisasi dan Perpetaan Hutan Wilayah VI
14. Balai Reboisasi, Lahan dan Konservasi Tanah X
15. Balai Konservasi Sumber Daya Alam VI Palu
16. Sub Balai Konservasi Sumber Daya Alam Sulawesi Utara
17. PSL Universitas Sam Ratulangi
18. KADIN Propinsi Sulawesi Utara
19. PUTRI
20. Asosiasi Industri Pariwisata Sulawesi Utara
21. PHRI
22. Camat Molas
23. Nusantara Diving Center
24. Tirta Satwa Diving Center
25. MUREX Diving Center
26. Wartawan dan TV Manado
27. Perwakilan Lembaga Swadaya Masyarakat Sulawesi Utara
28. FKPA Propinsi Sulawesi Utara
29. PPA Andarynowo (NGO)
30. Mapala Equil
34. Mapala Payagaan
35. Mapala Asteroida
36. Mapala A. Vestiaria & Zostera Diving Club
37. Dekan Fakultas Perikanan Unsrat
38. Kanwil DepDikBud Propinsi Sulawesi Utara
39. NGO Forum

NOTE: Please also see actual list of delegates and addresses

REKOMENDASI LOKAKARYA PRA-PERENCANAAN  
TAMAN NASIONAL LAUT BUNAKEN TANGGAL 27 - 30 AGUSTUS 1990

1. Membentuk Dewan Penyantun Taman Nasional Laut Bunaken Manado Tua (TNLB) dimulai oleh PHPA, Kanwil Kehutanan dan Dinas Pariwisata Propinsi Daerah Tingkat I Sulawesi Utara, persetujuan dan pengesahan oleh Pemda.
2. Membentuk Yayasan Pengelola TNLB dengan bantuan dari sektor swasta: pusat selam dan perusahaan kepariwisataan lainnya.
3. Meneliti kemungkinan pengenaan pajak turis dalam usaha mengumpulkan dana konservasi (pelestarian), misalnya 1.5 % dari biaya penyelaman, mencoba menentukan sistem pengelolaan dana dan siapa yang bertanggungjawab.
4. Melakukan program penyuluhan tentang sistem zonasi kepada para masyarakat setempat oleh tim terpadu.
5. Mempercepat penelitian dan penetapan zonasi dengan melibatkan masyarakat setempat.
6. Mengadakan percobaan pemasangan rotary net untuk penyaringan sampah di sungai Jengki, melakukan program penyuluhan tentang kebersihan disekitar sungai, dan meneliti sampai sejauh mana limbah dari sungai Tondano mempengaruhi kehidupan karang di TNL Bunaken.
7. Mengadakan percobaan pemasangan bui-bui untuk keperluan tempat-tempat penyelaman.
8. Secepat mungkin mengadakan peningkatan pengamanan kawasan oleh PHPA: pengadaan kapal patroli, pendirian pos penjagaan di pulau-pulau serta bekerjasama dengan instansi terkait.
9. Pengembangan dan percobaan program penyuluhan/kegiatan pendidikan lingkungan.
10. Peningkatan pelayanan pemerintah daerah dalam pengembangan sarana dan prasarana masyarakat setempat, misalnya: transportasi darat, dermaga, listrik, air bersih, puskesmas, pendidikan, dsb.
11. Mengadakan penelitian untuk meningkatkan pendapatan masyarakat setempat: peningkatan teknik pemancingan ikan, home industri, dan masalah-masalah ekonomis terutama pengolahan sumberdaya alam.
12. Perlu diadakan pengaturan membatasi pendatang-pendatang baru ke TNLB serta pengembangan wilayah pesisir barat Sulawesi untuk merangsang perpindahan penduduk TNLB ke daratan.
13. Meningkatkan kegiatan konservasi alam dan rehabilitasi lahan-lahan kritis di kawasan TNLB dan sekitarnya.

PRESS RELEASE LOKAKARYA PRA-PERENCANAAN  
TAMAN NASIONAL LAUT BUNAKEN TANGGAL 27 - 30 AGUSTUS 1990

Dewasa ini, terutama dalam menyambut Tahun Kunjungan Wisata 1991, arah perkembangan sektor pariwisata laut di Manado diutamakan pada pemanfaatan keindahan alam laut Bunaken. Di lain pihak

keindahan alam laut tersebut harus dijaga kelestariannya sesuai dengan SK Menteri Kehutanan tanggal 1 April 1990 tentang deklarasi penetapan status Bunaken sebagai Taman Nasional Laut. Untuk mempertemukan kedua kepentingan tersebut, maka Kanwil Departemen Kehutanan dan Sub Balai Konservasi Sumber Daya Alam (SBKSDA) Ditjen PHPA telah mengadakan lokakarya pra-perencanaan pengelolaan Taman Nasional Laut Bunaken Manado Tua pada tanggal 27 - 30 Agustus 1990 di hotel Sahid Garden, Manado. Lokakarya tersebut melibatkan berbagai kantor pemerintahan, pihak swasta, kelompok universitas, konsultan, para kelompok pecinta alam, USAID, WWF (World Wide Fund for Nature), WALHI (Wahana Lingkungan Hidup Indonesia), dan lainnya. Pembukaan dilakukan oleh A.T. Dotulong, Sekwilda Tk. I Sulawesi Utara.

Tujuan utama lokakarya adalah untuk meletakkan dasar disain dan pelaksanaan rencana pengelolaan untuk Taman Nasional Laut Bunaken Manado Tua. Pada hari kedua, para peserta lokakarya dibagi menjadi 4 (empat) kelompok untuk mengadakan peninjauan ke pulau-berbagai daerah di dalam Taman Nasional dan di kota Manado. Berdasarkan pengamatan dan wawancara yang mereka lakukan, para peserta mengembangkan pemahaman yang lebih menyeluruh tentang berbagai tantangan dan peluang dalam pengelolaan Taman Nasional. Salah satu keluaran penting dari lokakarya tersebut adalah rekomendasi tentang pelibatan sektor swasta dan masyarakat setempat dalam pengelolaan Taman Nasional Laut. Kelompok pengelola ini akan bekerja dibawah pimpinan dan pengarahan dari pihak pemerintah (terutama PHPA dan Dinas Pariwisata).

USAID (United States Agency for International Development) akan membantu PHPA dalam mengelola Taman Nasional dengan memberikan bantuan berupa penasehat teknis, pelatihan, sarana lapangan, beberapa kemudahan (fasilitas), serta program-program penyuluhan konservasi sumber daya alam. Proyek bantuan dari USAID yang bernama Natural Resources Management (NRM) diharapkan mulai dilaksanakan pada tahun 1991. Bantuan ini mempunyai tujuan membantu Propinsi Daerah Tingkat I Sulawesi Utara dalam meningkatkan pertumbuhan ekonomi yang berkelanjutan melalui pembangunan sektor kepariwisataan yang berorientasi kepada pelestarian lingkungan. Diharapkan bahwa pengelolaan Taman Nasional Laut Bunaken dapat digunakan menjadi model pengelolaan taman nasional laut lainnya di Indonesia.

PRESS RELEASE, dilanjutkan

Para peserta lokakarya memahami bahwa sampah merupakan ancaman utama dalam usaha pelestarian Taman Nasional, dengan demikian, pada hari Jumat 31 Agustus, PHPA mengadakan kegiatan sapu laut di Pulau Bunaken. Kegiatan ini termasuk dalam program kesadaran pelestarian alam laut. Dalam acara sapu laut tersebut, para peserta mengumpulkan plastik dan sampah-sampah baik yang berada di pantai maupun yang di taman kerumbu karang. Ada beberapa kegiatan lain yang diusulkan diantaranya: program kesadaran lingkungan bagi masyarakat yang hidup di sepanjang sungai, dan pemasangan rotary net dan alat lain untuk menangkap sampah yang mengalir dari sungai Jengki.

# PROSES PERENCANAAN UNTUK TAMAN NASIONAL

oleh:

ALAN H. ROBINSON

LOKAKARYA PRA-PERENCANAAN TAMAN NASIONAL LAUT  
BUNAKEN MANADO TUA

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Untuk memulai presentasi ini, saya ingin mempertimbangkan langkah-langkah yang biasanya dilakukan dalam pembangunan sebuah taman nasional baru. Saya yakin bahwa pada umumnya langkah-langkah tersebut sama dengan yang telah anda bantu untuk Taman Nasional Laut Bunaken Manado Tua

## TRANSPARANSI 1: BAGAIMANA SEBUAH KAWASAN KONSERVASI DITETAPKAN

### SEJARAH, GAGASAN DAN USULAN

Pada umumnya terdapat sejarah yang panjang mengenai ketertarikan masyarakat setempat pada suatu kawasan, disamping gagasan, saran, dan usulan yang dibuat.

### STUDI AWAL DAN SURVEI

Studi dan survei baik resmi maupun tidak dilakukan--kadang-kadang menghasilkan rekomendasi yang sangat berlainan--dan kontroversial.

### PERSETUJUAN MENGENAI PENTINGNYA PERLINDUNGAN

Walaupun tidak semua orang benar-benar setuju mengenai bagaimana kawasan dikembangkan, setidaknya mereka setuju bahwa kawasan tersebut perlu dilindungi.

### KEPUTUSAN PEMERINTAH MENGENAI PENUNJUKKAN

Pemerintah Pusat memutuskan untuk menunjuk sebuah kawasan lindung

### TAMAN NASIONAL DIUMUMKAN

Akhirnya kawasan tersebut diumumkan sebagai sebuah taman nasional

## PERTANYAAN MENGENAI JENIS PENGELOLAANNYA

Tetapi kemudian kita harus kembali pada pertanyaan mengenai jenis pengembangan dan pengelolaannya.

## PROSES PERENCANAAN

Biasanya kita menyebut semua diskusi ini sebagai suatu "proses perencanaan".

## RENCANA PERTAMA

Dan sebenarnya hal ini akan menghasilkan sebuah "rencana pengelolaan".

## PERBAIKAN RENCANA PENGELOLAAN

Kemudian, dimungkinkan perbaikan terhadap rencana yang pertama berdasarkan pengalaman.

Menurut saya, pada saat ini kita berada pada titik dimana taman telah diumumkan. Sekarang kita harus memulai langkah berikutnya, yaitu mengembangkan RENCANA PENGELOLAAN.

Tetapi apa yang sesungguhnya saya maksudkan dengan rencana pengelolaan? Itu biasanya merupakan dokument terpenting yang akan digunakan oleh pengelola taman sebagai arahan dalam pengambilan keputusan bagi pembangunan dan kebijaksanaan tentang kegiatan selama 5 atau bahkan 10 tahun mendatang. Apabila itu telah disiapkan dan ditandatangani, RP akan menjadi suatu pedoman resmi yang tidak dapat diubah oleh pengelola kecuali melalui proses revisi. Khususnya, rencana pengelolaan tersebut akan berisi:

## TRANSPARANSI 2: RENCANA PENGELOLAAN

### DASAR HUKUM DAN BATAS KAWASAN

Pada dasarnya, hal ini merupakan pernyataan yang menjelaskan hak dari Pemerintah Pusat untuk menetapkan dan mengelola Bunaken. Seperti kita ketahui bahwa RUU mengenai sumberdaya alam hayati dan ekosistemnya baru-baru ini telah disetujui. Kenyataan ini akan lebih memudahkan pemerintah dalam menentukan dan menetapkan berbagai kategori kawasan lindung. Di masa datang, Bunaken mungkin akan ditunjuk atau ditetapkan kembali sebagai sebuah Taman nasional berdasarkan Undang-undang yang baru. Hal ini mungkin tidak akan merubah pengelolaan

Bunaken secara lokal, tetapi akan membuat dasar hukum dari taman akan menjadi lebih kuat, misalnya kategori taman nasional akan ada secara resmi sehingga kawasan tersebut akan dilindungi oleh satu seri peraturan pemerintah yang selanjutnya akan memudahkan pekerjaan pimpinan PHPA setempat dalam menanggulangi tekanan dan melakukan kerjasama dengan hakim dan polisi setempat.

Peta batas resmi dari kawasan juga akan dibuat dalam rencana pengelolaan. Peta ini mungkin akan mirip dengan peta yang telah diterbitkan, tetapi apabila terdapat pertentangan diantara pernyataan resmi dengan penggunaan lahan oleh masyarakat atau pemilik tanah setempat, akan lebih mudah untuk dipecahkan. Adanya peta batas resmi kawasan, terutama bila sangat jelas, merupakan sesuatu yang penting bagi pemantapan peraturan di masa datang karena peta tersebut mungkin akan digunakan untuk membuktikan apakah suatu kegiatan dilaksanakan di dalam atau di luar batas resmi kawasan.

#### DESKRIPSI SUMBERDAYA ALAM DAN BUDAYA

Tim perencanaan akan bertanggung jawab untuk mengumpulkan dan menganalisis data biologi, sosial dan fisik yang menyangkut kawasan, dan mengidentifikasi beberapa kesenjangan diantara data tersebut yang mungkin perlu didapatkan sebelum keputusan penting diambil. Di samping itu, tim diharapkan juga akan membuat beberapa tujuan jangka panjang untuk kepentingan pemantauan dan riset.

Rencana pengelolaan tidak akan mencakup semua informasi ini, tetapi lebih merupakan ringkasan mendalam yang jelas sehingga beberapa keputusan pengelolaan dapat dibenarkan. Apabila muncul pilihan atas beberapa alternatif, maka informasi yang disajikan harus cukup untuk melakukan evaluasi dari alternatif tersebut. Informasi yang diperlukan antara lain adalah peta-peta berbagai tipe habitat yang terdapat di dalam taman, tempat jenis-jenis langka atau tempat sarang atau tempat berbiak, atau tempat-tempat lain yang cukup rawan dan tidak boleh diganggu baik oleh wisatawan maupun masyarakat setempat. Di samping itu, juga melakukan identifikasi terhadap tempat-tempat terbaik bagi penyelaman, pantai berpasir, masalah kawasan lego jangkar, arus yang berbahaya, tempat-tempat dimana perahu kecil dapat dengan mudah mendarat di pantai atau tempat yang tidak boleh didatangi, dan hal-hal lain seperti sumber-sumber air. Dalam kasus Bunaken, yang kawasannya telah dihuni oleh masyarakat, dan banyak masyarakat di luar kawasan yang secara tradisional memanfaatkan sumberdaya di dalam kawasan, informasi yang lengkap mengenai sosial-ekonomi dan budaya jelas perlu untuk dimasukkan dalam rencana pengelolaan sehingga keputusan yang beralasan mengenai peran masyarakat setempat dalam taman di masa datang dapat ditentukan.

## TUJUAN UMUM PENGELOLAAN KAWASAN

Karena Bunaken-Manado Tua telah ditunjuk sebagai satu taman nasional, maka tujuan umum dari rencana pengelolaan akan sejalan dengan batasan yang digunakan oleh Indonesia untuk kategori tersebut. Secara umum, adalah mengutamakan prioritas dalam pelestarian habitat alam dan ekosistem, tetapi juga tetap mengizinkan pemanfaatan secara terbatas untuk kepentingan rekreasi dan pendidikan. Ini merupakan konsep "pemanfaatan ganda" yang agak berbeda dengan kategori lainnya, misalnya cagar alam yang sama sekali tidak diperbolehkan adanya campur tangan manusia kecuali untuk kepentingan pengelolaan dan penelitian.

## TUJUAN KHUSUS

Tujuan khusus dari taman cukup banyak. Diantaranya adalah

Menyediakan tempat yang relatif tidak terganggu untuk snorkeling dan scuba diving.

Memberikan kesempatan untuk melanjutkan beberapa kegiatan pemanfaatan secara tradisional dengan azas kelestarian (misalnya: penangkapan ikan lepas pantai, penangkapan ikan karang di beberapa tempat tertentu, pertanian seperti perkebunan kelapa) di dalam kawasan berdasarkan peraturan perundang-undangan yang berlaku.

Menyediakan program penerangan dan interpretasi yang baik untuk pendidikan dan kepentingan masyarakat.

Menyediakan perlindungan dan pengelolaan bagi jenis-jenis langka yang terdapat di dalam kawasan dan melindungi tempat pembiakan atau pembesaran jenis-jenis komersial.

## KEGIATAN-KEGIATAN YANG DIIJINKAN DAN SISTEM ZONASI

Banyak kegiatan yang secara tradisional dilakukan di dalam kawasan Bunaken-Manado Tua. Rencana pengelolaan seharusnya menelaah kegiatan-kegiatan tersebut dan memutuskan apakah semua atau beberapa diantaranya dapat dilanjutkan. Apabila beberapa kegiatan betentangan, maka perlu diputuskan mana yang diutamakan, dan memberikan izin bagi beberapa diantaranya secara terbatas--ini adalah cara lain untuk mengatakan bahwa dalam upaya memenuhi berbagai jenis kegiatan diperlukan sistem zonasi/pemintakatan yang akan dijelaskan kemudian oleh Pak Halim--atau mungkin melarang sama sekali beberapa kegiatan (misalnya pemboman dan peracunan ikan). Beberapa kegiatan yang perlu dipertimbangkan adalah:

penelitian ilmiah

rekreasi dan wisata (kegiatan seperti menyelam tidak mengambil apapun dari taman)

penangkapan ikan lepas pantai dan karang

pertambakan dan penangkapan nener

pengumpulan kulit loka/kerang dan karang

pengambilan karang hidup atau mati (atau pasir pantai) untuk kepentingan konstruksi

pembangunan fasilitas wisata

sampah dan buangan dari kampung dan kota

## STRATEGI PENGELOLAAN

Karena PHPA telah mempunyai beberapa strategi pengelolaan taman nasional, maka untuk Bunaken akan didasarkan pada strategi tersebut dengan beberapa modifikasi. Rencana pengelolaan dimaksud akan memperjelas dan menerangkan strategi ini. Bagi beberapa kasus yang keadaannya berbeda, akan diperlukan pengembangan strategi pengelolaan tertentu.

Hal-hal yang paling sering muncul adalah:

Pengembangan pegawai

Fasilitas dan peralatan

Pelatihan

Anggaran

Bina cinta alam

Pengawasan dan keperluan penelitian

Dasar hukum

Kegiatan harian dan administrasi

Bagaimana mengevaluasi kemajuan dari rencana pengelolaan

Bagaimana merevisi rencana pengelolaan bila perlu

## PERAN SEKTOR SWASTA

Apabila sektor swasta akan mempunyai peranan baik dalam mendatangkan wisatawan dan pengunjung maupun dalam pembangunan atau perusahaan akomodasi, maka hal tersebut perlu dijelaskan dalam rencana pengelolaan. Jika beberapa perusahaan akomodasi atau jasa direkomendasikan, maka rencana pengelolaan akan menerangkan kondisi yang harus dipenuhi oleh pihak swasta agar memenuhi persyaratan untuk menawarkan jasa perusahaan tersebut. Kondisi dimaksud diantaranya akan didasarkan atas kebijaksanaan umum PHPA bagi penanaman modal swasta, namun sayangnya beberapa diantaranya masih dalam tahap persiapan.

## ANGGARAN, PENJADUALAN DAN PRIORITAS

Hal yang paling penting dalam penganggaran adalah membuat daftar dari berbagai usulan pembangunan fisik serta pendugaan biayanya, sumber biaya yang memungkinkan dan saat penyelesaian yang diharapkan. Bagian ini harus membahas secara khusus penyediaan dana pembangunan dan pelaksanaan, serta tuntutan pembangunan sehingga pembangunan/konstruksi tidak akan dilaksanakan sebelum adanya kebutuhan atau program yang jelas.

## KOORDINASI ANTARA PHPA DENGAN INSTANSI TERKAIT

Walaupun jelas bahwa PHPA mempunyai tanggung jawab utama atas pengelolaan Taman Nasional Laut Bunaken Manado Tua, namun pengalaman menunjukkan bahwa pekerjaan akan menjadi lebih mudah apabila ada suatu dewan penasihat atau dewan pengarah yang memberikan nasihat/arahan dan dukungan kepada PHPA untuk melaksanakan beberapa kegiatan. Rencana pengelolaan seyogyanya memberikan garis besar tentang jenis dewan penasihat yang diperlukan serta kemungkinan peran dan wewenangnya.

Akhirnya saya ingin menyampaikan bagaimana PHPA akan mengantisipasi proses pengembangan suatu rencana pengelolaan.

## TRANSPARANSI 3: PROSES PERENCANAAN

**LANGKAH KE 1:** Pertemuan dan workshop semacam ini untuk menentukan:

- apa yang dianggap penting
- siapa yang seharusnya disertakan dalam perencanaan
  - Pemerintah Pusat dan Daerah
  - sektor swasta
  - masyarakat setempat
  - Lembaga Swadaya Masyarakat (LSM)
  - LSM internasional
- jenis keahlian yang diperlukan
- bagaimana pemerintah melakukan review
- apa perlu dibentuk suatu dewan penasihat

LANGKAH KE 2: Susunan kelompok perencana

wakil PHPA/TNL

ketua tim perencana

ahli ekologi laut

ahli AMDAL

ahli ilmu sosial

ahli ilmu kepariwisataan

ahli lansekap arsitektur

LANGKAH KE 3: kegiatan kelompok perencana

- Survei tambahan yang menyangkut aspek-aspek biologi, sosial dan ekonomi.

- Pertemuan dan pembahasan lanjutan dengan badan-badan dan perorangan yang akan mendapatkan keuntungan dari taman, masyarakat setempat dsb.

- studi-studi khusus.

LANGKAH KE 4: Menganalisis informasi dan menyusun konsep awal rencana pengelolaan

LANGKAH KE 5 : Mempresentasikan konsep rencana tersebut kepada

instansi pemerintah

dewan penasihat

penyajian informasi lingkungan

LANGKAH KE 6: Penyusunan konsep kedua

LANGKAH KE 7: Perbaikan konsep

LANGKAH KE 8: Pengesahan rencana

LANGKAH KE 9: Penerapan rencana secara bertahap

LANGKAH KE 10: Penilaian dan perbaikan rencana pengelolaan jika perlu