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**DETERMINATION OF DEVELOPMENT FEES
FOR TOURISM ESTABLISHMENT LOCATED IN
EL NIDO MARINE RESERVE¹**



**Department of Environment
and Natural Resources**

*Philippine Economic – Environmental
and Natural Resources Accounting System*



***Environmental and Natural Resources
Accounting Project***

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**DETERMINATION OF DEVELOPMENT FEES
FOR TOURISM ESTABLISHMENT LOCATED IN
EL NIDO MARINE RESERVE¹**

ENRAP IV TECHNICAL PAPER

by

ENRAP-PAWB-PPSO Team

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² The ENRAP-PAWB-PPASO team is composed of: Jose E. Padilla, ENRAP Deputy Project Leader, Rina Maria P. Rosales, ENRAP Research Associate; T. Blastique, Sr. EMS, PAWB; S. Cabrera, CP II, PAWB; E. Corquera, Statistician I, PAWB; R. Buen, DMO III, PPSO-DENR; and I. Matubis, DMO II PPSO-DENR.

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EXECUTIVE SUMMARY

This study estimates the development fees for resorts and tourism establishments located within the El Nido Marine Reserve. It is one of the pilot-testing activities for the proposed Fee System Guidelines for protected areas. The draft guidelines recommend that the PAMB appropriate part of the excess profit derived by the resort owners. The excess profit is attributable to the natural attractions of the reserve that are captured by the owners. The collection of development fees is intended to contribute to the Integrated Protected Area Fund (IPAF). The IPAF will be one of the sources of funds to protect and enhance the natural features of the reserve in light of the increasing pressure from tourism.

This report presents the results of a survey in May 1999 of four island resorts and 15 cottages. The cottages are those found in the town center and adjacent villages. Based on 1998 data, excess profit for island resorts was negative but for the smaller cottages, it was positive. The negative excess profit in 1998 was attributed to the "soft" opening of one big resort and the decline in tourist arrivals due to the regional currency crisis. However, the projected higher number of tourists in 1999 would increase revenues significantly that would result in a positive excess profit. On the other hand, the small cottages with lower costs managed to weather the downturn in tourism and stand to benefit further with the projected upturn in the industry.

The results showed that there is scope for the collection of development fees based on projected excess profits for the island resorts and on current excess profits for the cottages. Targeting a 25 percent share in the excess profits will result in potential annual revenues of PhP400,000 in development fees from the 19 resorts and cottages. Partial expropriation of excess profits is recommended to maintain incentives for resort owners to be efficient in their operations.

An alternative basis for setting the development fee is Commonwealth Act 141 of 1936. Based on this law, the rental of government land shall be equal to 3 percent of the re-appraised value of the land plus 1 percent of the value of land improvements. Basing only on the value of improvements in the absence of data of land values, the development fee could reach up to PhP2.4 million per year.

1. Introduction¹

The El Nido Marine Reserve has a total area of 89,140 hectares. Thirty eight percent of this area is considered as mainland, 59 percent marine waters, and 3 percent are composed of small islands. The mainland component covers most of the water catchment areas and other rainforest areas that drain into the marine component of the reserve. The marine component encloses all the major islands off the western mainland coast of El Nido. There are 39 "small islands" covered by the reserve, 17 of which are over 10 hectares while 7 are over 100 hectares.

The Reserve (*Figure 1*) is one of the two protected areas in Palawan. It comprises a substantial representation of the most species-rich habitats in the province. Its lowland evergreen forest extends from near sea level to 590 meters in altitude. Other forest areas include beach forest, semi-deciduous forest, mangroves, and those over limestone. Fine sand beaches are nesting areas for four species of marine turtles while sea grass meadows are the habitats of dugong. The Reserve has some of the most diverse coral species in the world.

Tourism in El Nido started with the opening of a SCUBA resort on Miniloc Island in 1983. This Resort was developed by Ten Knots Philippines, a Philippine-Japanese joint venture company. The company built an airstrip on the mainland to serve mainly foreign tourists. In 1984, a second resort was built on Pangulasian Island. By 1986, small lodging facilities were built on the mainland as well as on the islands. The biggest island resort, however, was set up also by Ten Knots in Lagen Island in 1998. In that same year, its Pangulasian Resort was destroyed by fire. To date, there are five resorts on the islands and fifteen cottages on the mainland. There are still a few more under construction at the time of the survey (*Figure 2*). With this pace of development, it can be said that the development of El Nido proceeded rapidly to accommodate the growing tourism industry.

The peak season for tourism is from December to April, coinciding with winter and spring in countries where most of the El Nido foreign visitors come from. From May to November, foreign tourists hardly come by, and some business establishments either close shop or substantially reduce their operations.

Direct access to the Reserve is very limited. Direct flights from Manila are available only via one airline (Soriano Air), costing higher than comparable domestic flights. Furthermore, bookings are not assured until three days before the flight schedule for passengers who are not guests of Ten Knots resorts. The alternative routes to the reserve is through Puerto Princesa City, either by air or by ship, from where one can take a seven-hour jeepney ride direct to the reserve or a shorter ride to Taytay followed by a pumpboat ride. The costs of these alternative routes are listed in *Appendix A*.

2. Objectives of the Study

This study aims to estimate appropriate development fees for resorts and tourism establishments located within the El Nido Marine Reserve. The assessment and collection of development fees are intended to contribute to the Integrated Protected Area Fund (IPAF). The IPAF will be one of the sources of funds to protect and enhance the natural features of the El Nido Marine Reserve in light of the increasing pressure from tourism.

The study is part of ENRAP's activities to pilot-test the Fees System Guidelines drafted by the ENRAP-PAWB-PPSO team (*Appendix B*) in the nine protected areas in the country.

LEGEND

-  Primary forest
-  Secondary forest
-  Forest over limestone
-  Semi-deciduous forest
-  Reproduction brushland
-  Agricultural crops
-  Mangrove
-  Paddy field
-  Settlement

Source: Dept. of Tourism (DoT), 1997.

-  Municipal boundary
-  Barangay boundary
-  River
-  Road
-  El Nido Marine Reserve (DAO 14)

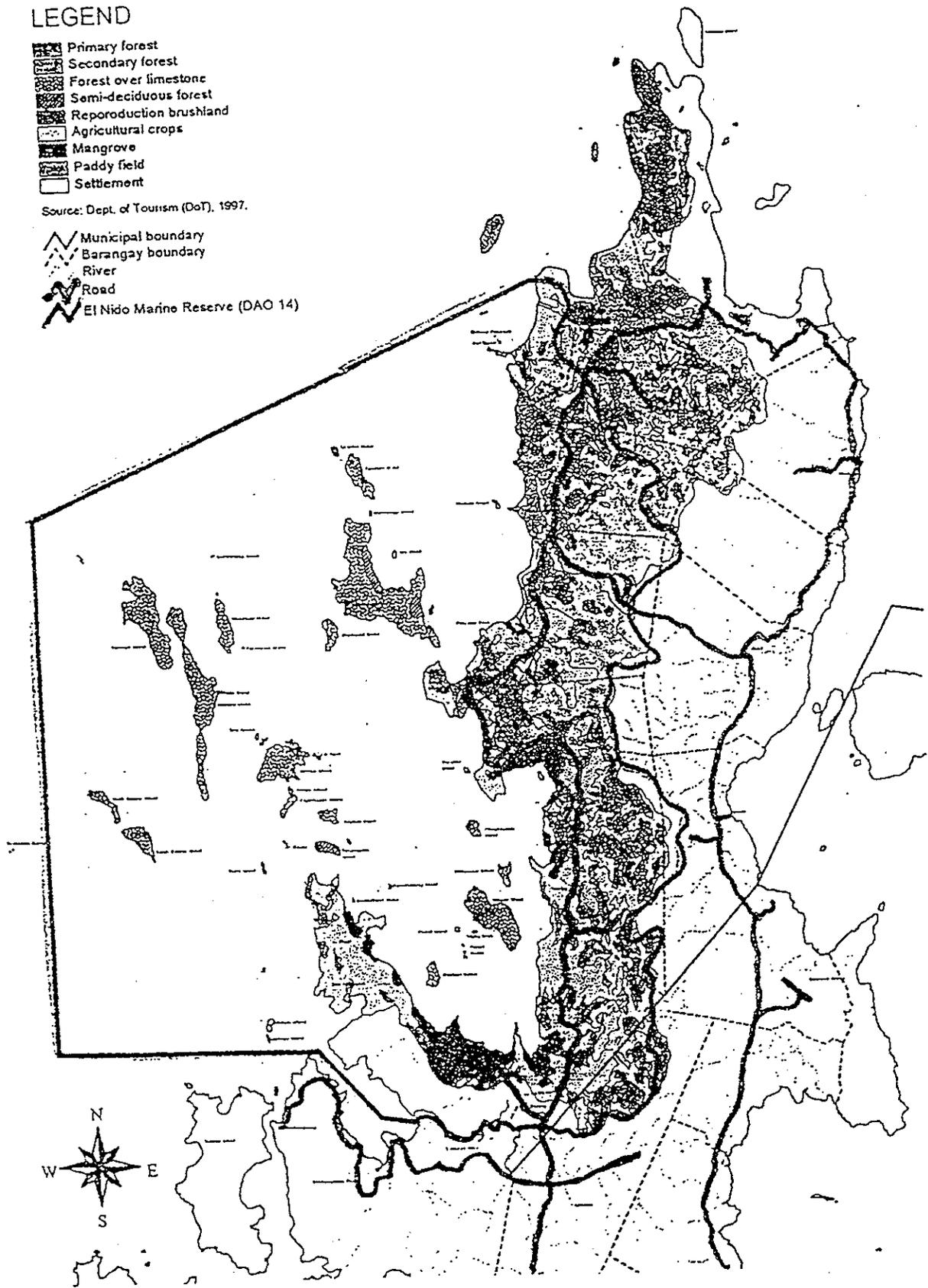


Figure 1. Land Cover Map of El Nido Marine Reserve, Palawan

Source: National Integrated Protected Areas Programme (NIPAP), DENR, NAPWNC, Diliman Quezon City

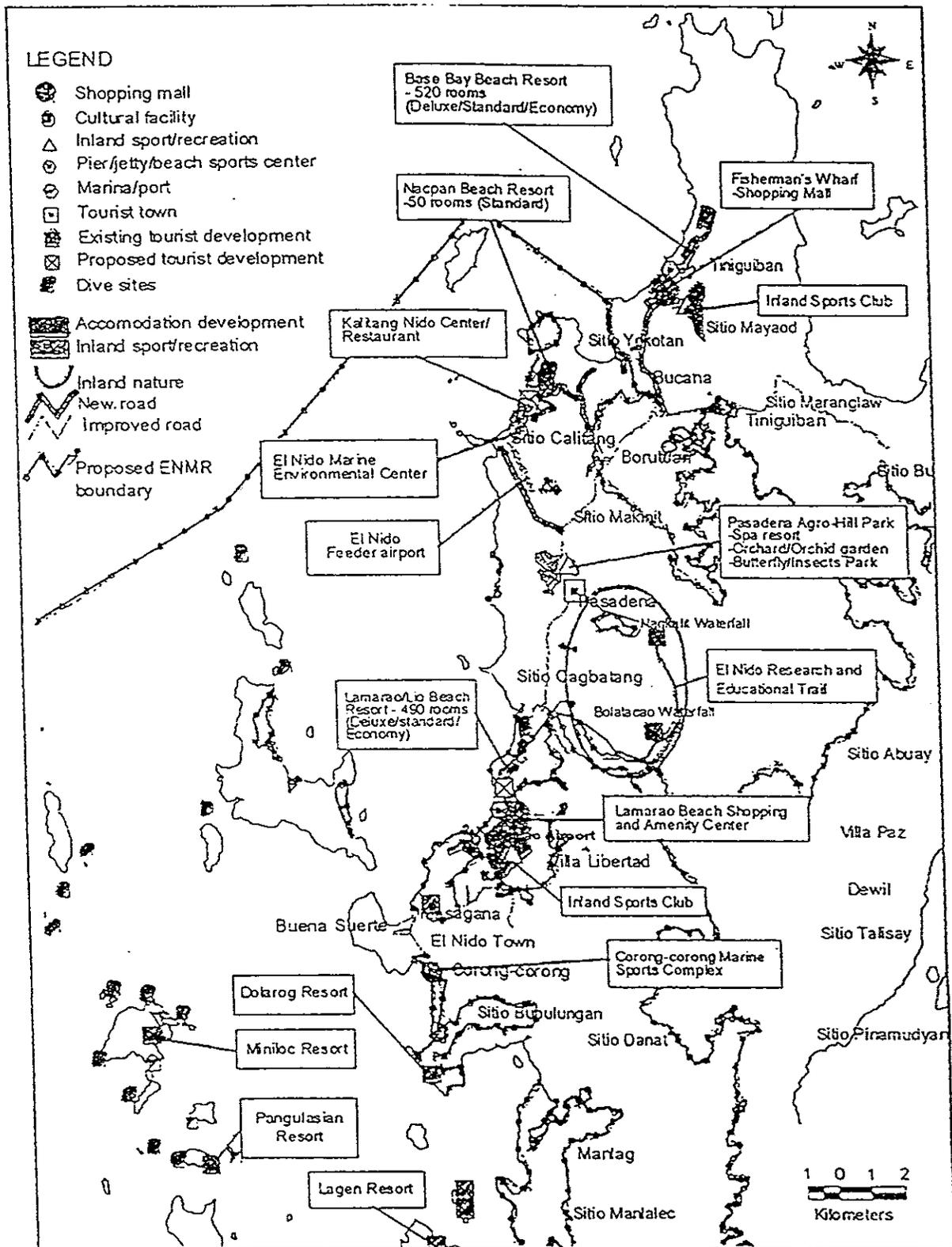


Figure 2. Tourism Establishments (established and proposed) and Dive Sites in El Nido Marine Reserve

Source: National Integrated Protected Areas Programme (NIPAP), DENR, NAPWNC, Diliman Quezon City

3. Framework of the Study

3.1 Legal Framework

In 1992, the Philippine Congress enacted Republic Act No. 7586 establishing the National Integrated Protected Areas System (NIPAS). The NIPAS law mandates the creation of a system of protected areas to conserve biodiversity. Provision is made for the establishment of an Integrated Protected Area Fund (IPAF) for purposes of financing the management of the system. All funds generated from and by the protected areas shall accrue to the IPAF. Seventy-five percent of IPAF accrue to a sub-fund while the remaining 25 percent is accumulated in the central fund. The former is for the exclusive use of the protected area generating the revenues while the latter is shared with other protected areas without a sub-fund.

The NIPAS law and its Implementing Rules and Regulations outline the process in the formulation of economic instruments in protected areas to generate revenues for the IPAF. Section 10 (f) states that the Secretary of the DENR is empowered to "... fix and prescribe reasonable NIPAS fees to be collected from government agencies or any person, firm or corporation deriving benefits from the protected areas." Further, he/she is also empowered to "... accept in the name of the Philippine Government and in behalf of NIPAS funds, gifts or bequests of money for immediate disbursement or other property in the interest of the NIPAS, its activities, or its services."

3.2 Proposed Fee System Guidelines

To implement the provisions of the NIPAS law, guidelines for setting fees in protected areas were drafted. Also, the types of use of protected areas and its resources were identified. A typology of fees that may be charged for the different uses of protected area (PA) resources was developed. The development fee is applicable to the establishment of lodging facilities within the El Nido Marine Reserve. The development of land and space includes establishment of shops for rental or recreational equipment such as boats, fishpens and fishcages; tapping of geothermal energy; impounding of water for electric power generation and for any other purpose; construction of lodging facilities for tourism; and construction of highways and relay stations. Commercial development activities are categorized in terms of capital investment of each development project in accordance with the Department of Trade and Industry (DTI) guidelines.

Based on the above, it is proposed that a fee should be assessed as outlined by the following guidelines and principles:

- a) Development fees shall cover the use of land or other resources or the privilege of undertaking small-scale, medium-scale and other bigger scale development in protected areas for whatever purpose. The fee is for a specified period of time and for a specific nature of development. The privilege is granted to a person or entity.
- b) Any development of land and other resources in a protected area shall not alter the landscape and shall not significantly disrupt normal ecological functions and processes.
- c) All types of development are required to undergo an EIA as prescribed by PD 1586 and other pertinent laws and regulations.

- d) The PAMB shall, to the extent feasible, enter into co-production, joint venture or production-sharing agreements with interested parties in the commercial extraction and/or development of resources in protected areas.
- e) The government share in these agreements shall be a reasonable proportion of the excess profits derived from the commercial extraction of these resources.

The guidelines are anchored on the principle of sustainable use of resources within protected areas. Sustainable use is defined as the rate of extraction that is lower than either the rate of regeneration or the rate that shall not endanger life forms inside the protected area. This explicitly requires all development activities to observe the carrying capacity of the area. Development fees and other types of fees therefore should be formulated in such a way as to contribute to the attainment of the carrying capacity.

While the fee system guidelines remain unsigned to date, their pilot-testing was endorsed by DENR. The lessons learned from the pilot-testing activities are envisioned to contribute to the refinement of the guidelines.

3.3 *Economic Framework*²

The proposed Fee System Guidelines for protected areas recommend willingness-to-pay (WTP) as the basis of all fees for resource users. For recreational users their WTP is primarily determined by the recreational benefits derived from visits to the protected area. The WTP is estimated through appropriate surveys. In the case of the development of land and space such as for tourism establishments, the WTP may be determined by the net benefits derived by the resorts from their operations. An indicator of the net benefits is the excess profit. In the case of El Nido, excess profit (also called economic or resource rent) realized by the resorts is attributable to the Park's location and unique features for water-based activities, particularly scuba diving and snorkeling. The estimation of the excess profit may be based either on surveys of the operations of the resorts or from a hypothetical firm that is operating at an efficient level.

Hartwick and Oleweiler (1998) provide a good definition of economic/resource rent or excess profit. "Rent is a surplus - the difference between the price of the good produced using a natural resource and the unit costs of turning that natural resource into the good. The unit costs include the value of labor, capital, materials, and energy inputs used to convert the natural resource into a product. What remains after these factor inputs are netted out is the value of the natural resource itself - the land, water... fish, minerals, forests, and environmental resources such as air and water."

The above definition of excess profit is estimated from revenues and costs of resource users. The following formula is used:

$$EP = GR - CP \quad (1)$$

$$CP = W + RM + TrC + \sum K_i (\delta_i + r) + r*WC \quad (2)$$

where: EP = economic rent
 GR = gross revenues
 CP = costs of production
 W = wages
 RM = raw materials

TrC = transport costs
K_i = fixed capital investments
δ_i = depreciation rate of K_i
r = discount rate
WC = working capital

The depreciation rate is specific to each type of investment and depends on the economic life of that particular fixed investment being measured. On the other hand, the discount rate can be represented by the official social discount rate used in government project evaluation procedures. At present, this rate is set at 15 percent. Finally, working capital refers to the variable expenses borne by the producer, i.e., wages, raw material expenditures, and operating and maintenance expenses.

The draft guidelines propose that the PAMB may opt not to collect the entire excess profit, although it is by nature, a surplus. The portion of the surplus going to the developers serves as an incentive for technological and other innovations that would increase the surplus.

Furthermore, the draft guidelines do not include a provision for damages as basis for fees to be collected from users of PA resources. As PAs are environmentally critical areas, all activities within them are subject to the Environmental Impact Assessment (EIA) system. It is assumed that the negative impacts of development activities are properly mitigated; hence, no damage to the environment results therefrom. Nevertheless, if violation to the conditions of the Environmental Compliance Certificate (ECC) is observed, then development fees should include internalization of external costs as well as the original rent transfer provision. Inclusion of such should be addressed in future iterations of this study.

4. *Survey Approaches and Methods*

Several presentations were made by the team (see *Appendix C* for the complete list of the team members) to get the necessary endorsements in the conduct of the study. However, it was not presented to the PAMB because the Board was still being organized at the time of the survey. Instead, the team consulted with the Multi-Sectoral Tourism Council composed of the various stakeholders and developers directly operating within the Park. The National Integrated Protected Areas Programme (NIPAP), a project of the DENR with funding from the European Union provided logistical support.

The team obtained the endorsement of the Palawan Council for Sustainable Development (PCSD) during its presentation to the Council in a meeting held in April 1999 in Coron, Palawan. The PCSD Staff issued endorsement letters to facilitate the conduct of the survey, which were distributed to the owners of establishments prior to the interviews by the study team.

The interviews of resort owners and operators were conducted in May 1999. It covered all operating tourism establishments with lodging facilities. Operators were requested to fill out a matrix of revenues and expenses for the year 1998 (*Appendix D*). Some of the data were obtained through the Manila liaison offices of the large-scale island resorts. Respondents were assured that any data gathered would be treated with confidentiality. Hence, the data are presented in summarized and aggregated format, without direct reference to any individual resort or cottage operating in the area.

Data on visitor arrivals were likewise collected from the Department of Tourism (DOT) central office in Manila and from the Provincial Tourism Office of Puerto Princesa, Palawan. The information was used to determine the trend of visitation rates from local and foreign visitors in the country and in Palawan. Finally, analysis was done to determine the number of tourists required by resorts to break even.

5. Study Results

The classification of tourism establishments with lodging facilities used by the El Nido Multi-Sectoral Tourism Council was adopted in this study:

- a) Island resorts - those establishments located outside the town center and its suburbs
- b) Cottages - all other establishments within the town center

An exception to the classification is the categorization of one establishment as an island resort even though it is located at the tip of the mainland. This was done because although this resort is located in the mainland, it can only be accessed by boat, just like the other island resorts. There are no roads existing from the main town to the resort.

In general, island resorts are larger in scale than cottages. However, there is one cottage that is larger than the two smaller island resorts, in terms of capacity and revenues.

Due to the huge variance in key performance indicators of the island resorts and cottages, the survey results are presented in both per establishment and per room levels. Another possible presentation would be based on the rating of establishments by the Department of Tourism, i.e. Class AAA, Class AA or Class A. However, this was not attempted as not all establishments are rated.

5.1 Assessment of Performance in 1998

5.1.1 Revenues and Costs

The survey covered three of the four island resorts and all fifteen cottages/tourist establishments in the main town of El Nido. As mentioned earlier, the establishments are grouped into island resorts and cottages. An average of 6 rooms per cottage exists in the area (*Table 1*). In island resorts, the number of rooms per establishment is 32. This shows that the average number of rooms per cottage is only 19 percent of the average number of rooms per island resort. However, the average visitor nights per cottage is only around 13 percent of that for island resorts. Therefore, the average occupancy rate for all lodging establishments within the Reserve is only 28 percent.

Table 1. Number of Rooms and Occupancy Rate of Lodging Establishments at the El Nido Marine Reserve in 1998

Resort Type	No. of Establishments	No. of Rooms		Visitor Nights		Occupancy Rate
		Total	Average ^{1/}	Total	Average ^{1/}	
Island Resorts	3	97	32	23,703	7,901	33%
Cottages	15	93	6	15,402	1,027	23%
All Establishments	18	190	11	39,105	1,295	28%

^{1/} Average per establishment

Notes:

1. Occupancy rate = Total visitor nights divided by maximum occupancy
2. Maximum occupancy = total no. of rooms * 365 days * ave. of 2 beds per room
3. Visitor nights = average of 3 nights per visitor

Table 2 summarizes revenues gathered from the survey and from those reported by the establishments to the Municipal Treasurer's Office in El Nido for tax assessment purposes. For island resorts, most of the revenues come from lodging fees (99.6 percent); while for cottages only 88 percent of the total revenues are from lodging fees. The remaining 12 percent of revenues for cottage type establishments are mostly from boat rentals for trips from the main town to the nearby islands and vice-versa.

Table 2. Annual Gross Revenues of Lodging Establishments in El Nido Marine Reserve, in PhP, 1998

Resort Type	Average Revenues from Survey			Ave Reported Revenues to Municipal Treasurer's Office ^{1/}	% Difference of Gross & Reported Revenues ^{2/}
	Lodging	Other Facilities	Total		
PER ESTABLISHMENT					
Island Resorts	66,938,101 <i>(113,770,661)</i>	276,189 <i>(252,538)</i>	67,214,290 <i>(114,008,641)</i>	66,498,404 <i>(114,654,735)</i>	1.1
Cottages	211,650 <i>(274,444)</i>	56,672 <i>(72,192)</i>	241,875 <i>(284,214)</i>	82,445 <i>(109,468)</i>	82.4
All Establishments	11,332,725 <i>(46,665,033)</i>	71,219 <i>(138,748)</i>	11,403,944 <i>(46,785,073)</i>	14,314,437 <i>(53,124,730)</i>	2.7
PER ROOM					
Island Resorts	2,070,251	8,542	2,078,792	2,056,652	1.1
Cottages	34,137	4,875	39,012	9,752	75.0
All Establishments	1,073,627	6,747	1,080,374	1,054,748	2.4

1/ Four cottages did not report revenues to the municipal treasurer's office

2/ If positive, resorts are underreporting their revenues to the municipal treasurer's office

Notes:

1. Figures in italics are standard deviations from the mean.
2. One island resort did not provide data

For the revenues reported to the municipal treasurer's office, the figures for island resorts did not differ much from the values computed from the survey there being a mere 1 percent difference. For cottages, there was gross underreporting of revenues, with an average of 82 percent difference on a per establishment basis, or 75 percent on a per room basis. In fact, only

73 percent of the cottages had reported revenues to the municipal treasurer's office. Only one resort reported to the municipality higher revenues than those obtained from the survey.

With respect to costs, 13 percent of the total for island resorts were accounted for by fixed costs— mostly from depreciation of fixed assets. Operating and maintenance costs accounted for the bulk of total costs (71 percent) while labor costs had a 15 percent share. Meanwhile, cottages have a different average cost structure. Fixed costs have the same proportion as operating and maintenance costs (20 percent), with labor costs making up for most of the total costs (59 percent). *Table 3* contains the average cost figures for each resort type.

Table 3. Annual Average Costs of Lodging Establishments in El Nido Marine Reserve in PhP, 1998

Resort Type	Fixed Costs	Variable Costs			Total Costs
		Operating & Maintenance Costs	Labor Costs	Taxes/ Other Fees	
PER ESTABLISHMENT					
Island Resorts	7,796,848 <i>(12,940,392)</i>	41,684,549 <i>(71,458,493)</i>	9,023,132 <i>(15,063,843)</i>	462,368 <i>(786,915)</i>	58,966,897 <i>(100,248,447)</i>
Cottages	32,618 <i>(53,338)</i>	32,667 <i>(55,349)</i>	94,186 <i>(36,266)</i>	790 <i>(657)</i>	160,261 <i>(136,191)</i>
All Establishments <i>(Std. Dev.)</i>	1,326,656 <i>(5,344,901)</i>	6,974,647 <i>(29,255,340)</i>	1,582,344 <i>(6,198,540)</i>	93,143 <i>(353,523)</i>	9,961,267 <i>(41,120,589)</i>
PER ROOM					
Island Resorts	241,140	1,289,213	279,066	14,300	1,823,718
Cottages	5,261	5,269	15,191	127	25,849
All Establishments	125,683	660,756	149,906	7,353	943,699

Notes:

1. Fixed costs include acquisition costs depreciated by lifespan of facility;
2. Operating & Maintenance costs include annual repairs, electricity, water, and other operating & maintenance costs;
3. Labor costs include salaries, cash and non-cash benefits, and imputed family labor where relevant;
4. Taxes include all tax payments directly attributable to lodging facilities made to municipal treasurer's office, primarily associated with operations;
5. Figures in italics are standard deviations from the mean;
6. One island resort did not provide data.

Looking solely at acquisition or construction costs on a per room basis, acquisition costs for island resorts reached an average of PhP2,421,289 per room (*Table 4*). For cottages, acquisition costs averaged at PhP55,675 per room. On a per establishment basis, the average value of initial investments was PhP78,288,329 for island resorts, and PhP345,187 for cottages. Without the distinction between the two types of establishments, investment costs for the El Nido averaged at PhP1,263,383 per room, or PhP13,335,710 per establishment. The investment costs per room were derived by dividing total investment costs for the entire establishment by the total number of rooms. Hence, this includes the cost of restaurants, wharves/piers and other amenities offered by the tourism establishment.

Table 4. Minimum Rental Fee Estimates based on CA 141 for Lodging Establishments in El Nido Marine Reserve in PhP, 1998

Resort Type	Average Acquisition Costs	Average 1% value of improvements
PER ESTABLISHMENT		
Island Resorts	78,288,329 <i>(131,681,708)</i>	782,883 <i>(1,316,817)</i>
Cottages	345,187 <i>(288,426)</i>	3,452 <i>(2,884)</i>
All Establishments	13,335,710 <i>(54,161,601)</i>	133,357 <i>(541,616)</i>
PER ROOM		
Island Resorts	2,421,289	24,213
Cottages	55,675	557
All Establishments	1,263,383	12,634

Notes:

1. One island resort did not provide data
2. Figures in italics are standard deviations from the mean

5.1.2 Excess Profit

Table 5 shows the various computations for excess profit for each resort type, using the two sets of revenue figures. A margin for profit and risk (MPR) was used for both types of resorts, following the return on investment (ROI) required by the National Economic and Development Authority (NEDA) in its project assessment. The MPR is applied on the total annual costs incurred by the establishments.

From the survey figures, island resorts on the average registered huge negative excess profits in 1998. On the other hand, cottages enjoyed excess profits from their operations in the same year, with an average of PhP57,575 per establishment, or PhP9,286 per room. However, because the island resorts account for the bulk of tourist arrivals in El Nido, the average excess profit for all tourism establishments in the Reserve in 1998 was negative at (PhP51,513) per establishment, or (PhP4,880) per room.

The picture is even bleaker when the reported revenue figures were used to compute for excess profits of El Nido resorts in 1998. Since revenues were generally underreported, excess profits were negative on the average (PhP371,658) for all establishments on a per establishment basis, or (PhP30,506) per room. Each resort type likewise had negative excess profits: PhP1,313,528 for island resorts and PhP114,973 for cottages on a per establishment basis; or PhP40,625 and PhP19,974 on a per room basis.

It is noted that the negative excess profits of island resorts in 1998 may be attributed to the fact that the other resort operated by Ten Knots just opened and its operations are expected to intensify in succeeding years.

Table 5. Estimates of Annual Excess Profit of Lodging Establishments in El Nido Marine Reserve, in PhP, 1998

Resort Type	Average Total Revenues	Average Total Costs	Margin for Profit and Risk (15% of Total Costs)	Average Excess Profit
A. Revenues Based on Survey				
PER ESTABLISHMENT				
Island Resorts	67,214,290	58,966,897	8,845,035	(597,642)
Cottages	241,875	160,261	24,039	57,575
All Establishments	11,403,944	9,961,267	1,494,190	(51,513)
PER ROOM				
Island Resorts	2,078,792	1,823,718	273,558	(18,484)
Cottages	39,012	25,849	3,877	9,286
All Establishments	1,080,374	943,699	141,555	(4,880)
B. Revenues Based on Submissions to Municipal Treasurer's Office				
PER ESTABLISHMENT				
Island Resorts	66,498,404	58,966,897	8,845,035	(1,313,528)
Cottages	82,445	171,669	25,750	(114,973)
All Establishments	14,314,437	12,770,517	1,915,578	(371,658)
PER ROOM				
Island Resorts	2,056,652	1,823,718	273,558	(40,625)
Cottages	9,752	25,849	3,877	(19,974)
All Establishments	1,054,748	943,699	141,555	(30,506)

Note:

Four cottages that did not report revenues to municipal treasurer's office are not included in B

5.2 Projected Performance in 1999

Estimates of excess profits are sensitive to tourist arrivals in the Reserve. Because of the regional currency crisis that started in 1997, the number of foreign tourists, the primary market of the reserve, declined considerably in 1998 (*Table 6*). The year 1998 was not a representative year with respect to tourist arrivals. The previous years showed an increasing trend, particularly from 1992 to 1997 and then declined in 1998.

Projections were made to compute for the excess profit in 1999 to assess the potential performance of the resorts. First, the number of foreign tourist arrivals in 1999 was estimated using a three-year moving average. The number is expected to increase by 9.3 percent over the 1998 figure (*Table 7*). On the average, tourists will number 2,879 per island resort, as compared to 2,634 in 1998. For cottages, tourists will increase to 397 in 1999 per cottage, from 363 in 1998. On the average, foreign tourist arrivals in El Nido will increase from 1295 in 1998 to 1341 in 1999 per establishment. On a per room basis, visitors at island resorts will increase from 81 to 89 per room. For cottages, the average number of visitors will be 64 per room. For all establishments, visitors will increase from 123 to 134 per room.

From these projections, simulations of average revenues and costs for 1999 were performed. *Table 8* contains the average revenues and costs that result therefrom. Island resorts will enjoy average revenues of PhP73,465,219, while their costs will increase to PhP63,725,712

per establishment. Using the same 15 percent MPR, excess profit is now positive at PhP180,650 per resort. For cottages, excess profits even go higher at PhP66,418 per cottage, relative to their average 1998 excess profit of PhP57,575. Hence, an average increase in tourist arrivals by 9.3 percent translates into an average 15 percent increase in excess profit for cottages. On the whole, each establishment will enjoy an average of PhP84,456 in excess profits.

On a per room basis, island resorts will now enjoy excess profits of PhP5,587 per room, while cottages will increase their excess profits to almost twice that for island resorts, at PhP10,713 per room. It follows from the projected performance in 1999 that in years when the number of foreign visitors exceeded those in 1998, the resorts would have captured considerable excess profits.

Table 6. Tourist Arrivals in the Province of Palawan, 1992 to 1998

YEAR	ARRIVALS	FIRST FIVE RANKING OF NATIONALITIES VISITING PALAWAN	% Increase (Decrease)	Inclusive Date	Source
1998	83,464	American German Japanese French British	(15%)	Jan to Dec	Puerto Princesa City (PPC) El Nido, Quezon & Calauit Wildlife and Game Preserve
1997	98,612	Japanese American Korean German British	8%	Jan to Dec	PPC, Aborlan, Quezon, Brooke's Point, Bataraza, Roxas, Taytay, El Nido, Busuanga, Cuyo
1996	91,603	Japanese German American Korean French	48%	Jan to Dec	PPC, Roxas, San Vicente, Taytay, El Nido, Busuanga, Quezon, Cagayancillo, Agutaya, Aborlan, Brooke's Point
1995	61,896	Taiwanese French German American British	81%	Jan to Dec	PPC, El Nido, Taytay, Cuyo
1994	34,187	Hongkong American Japanese German British	34%	Jan to Dec	PPC, Quezon, Coron, El Nido, Cuyo
1993	25,514	German American French British Japanese	75%	Jan to Dec	PPC
1992	14,624	German French British Japanese American		Jan to Dec	PPC

Source: PGO-Tourism Division

Capitol Building Complex, Rizal Avenue, Puerto Princesa City, Palawan

Table 7. Simulated Average No. of Visitors for 1999 In Lodging Establishments at El Nido Marine Reserve

Resort Type	Average No. of Visitors in 1998	Percent Increase in 1999 ^{1/}	Simulated No. of Visitors in 1999
PER ESTABLISHMENT			
Island Resorts	2634 <i>(4149)</i>	9.3	2879 <i>(4534)</i>
Cottages	363 <i>(494)</i>	9.3	397 <i>(540)</i>
All Establishments	1295 <i>(2042)</i>	9.3	1341 <i>(2194)</i>
PER ROOM			
Island Resorts	81	9.3	89
Cottages	59	9.3	64
All Establishments	123	9.3	134

Notes:

- 1/ Percent increase based on 3-year moving average of number of visitors in Palawan, from 1996 to 1998
2. Figures in italics are standard deviations from the mean.

Table 8. Simulated Excess Profit from Lodging Establishments in El Nido Marine Reserve Using 1999 Simulated Revenues, in PhP

Type	Average Total Revenues ^{1/}	Average Total Costs ^{2/}	Average 15% MPR	Average Excess Profit
PER ESTABLISHMENT				
Island Resorts	73,465,219	63,725,712	9,558,857	180,650
Cottages	264,369	172,132	25,820	66,418
All Establishments	12,464,511	10,764,395	1,614,659	85,456
PER ROOM				
Island Resorts	2,272,120	1,970,898	295,635	5,587
Cottages	42,640	27,763	4,164	10,713
All Establishments	39,242	33,311	4,997	934

1/ Computed by adding 9.3% on base figure

2/ Computed by adding 9.3% on variable costs only

5.3 Break-even Analysis

In order to determine the number of tourists that would allow the resorts and cottages to break even, simulations were done with revenues and costs that would result in a zero excess profit. Revenues and variable costs were computed for each visitor, using the 1998 survey data. The results are presented in *Table 9*. For island resorts, a total of 2822 visitors, or 8466 visitor nights per resort are required for each resort to break even, translating to a required occupancy rate of 36 percent. There was only an average of 7901 visitor nights per resort in 1998, with an average occupancy rate of 33 percent. Hence, excess profit was negative. For cottages, only 124 visitors or 372 visitor nights on the average are required for the establishments to break even, translating to an occupancy rate of only 8 percent. In 1998, there were already 1027 visitor nights per cottage on the average, with an occupancy rate of 23 percent. Hence, the cottages were

already enjoying excess profits then. Overall, approximately 10,400 visitors are required to visit El Nido, staying an average of 3 nights per visitor, with each establishment enjoying an average of 22 percent occupancy rate, for all establishments to break even.

Table 9. Break-even (Long-Run) Analysis of No. of Visitor Nights/ Visitors For Lodging Establishments at El Nido Marine Reserve

Resort Type	No. of Visitor Nights/ Visitors	Occupancy Rate	Total Costs (PhP)	Total Revenues (PhP)	Excess Profit (PhP)
A. Island Resorts					
Existing Average	7901	33%	67,811,932	67,214,290	(597,642)
<i>Per Visitor Night</i>			7,804,444	8,507	
No. of visitor nights per resort to break even	8466	36%	72,019,974	72,020,779	~0
No. of visitors per resort to break even	2822				
<i>Total No. of Visitors for all Island Resorts to break even</i>	8466				
B. Cottages					
Existing Average	1027	23%	184,300	241,875	57,575
<i>Per Visitor Night</i>			32,766	236	
No. of visitor nights per cottage to break even	372	8%	87,569	87,626	~0
No. of visitors per cottage to break even	124				
<i>Total No. of Visitors for all Cottages to break even</i>	1860				
<i>Total No. of Visitors at El Nido to break even</i>	10326	22%			

Note: Occupancy rate = visitor nights to break even divided by maximum occupancy
 Maximum occupancy = total no. of rooms * 365 days * 2 beds per room

5.4 CA 141 as Basis for Rental Fees

Another basis for estimating the development fees in El Nido is Commonwealth Act 141 or the Land Code of 1936. It contains specific provisions in determining rentals of government land leased to private entities. Chapter IX, Section 64 states that:

"The leases executed under this chapter by the Secretary of Agriculture and Natural Resources shall, among other conditions, contain the following:

- a) The rental shall not be less than three per centum of the appraised or reappraised value of the lands plus one per centum of the appraised or reappraised value of improvements.
- b) The land rented and the improvements thereon shall be reappraised every ten (10) years of the term if the lease is in excess of that period."

Lack of data had prevented the team from including the reappraised value of the land in the computations. Instead, rent was computed using only the value of land improvements which is assumed to be equivalent to the acquisition costs of facilities. As discussed in Section 5.1, the average value of land improvements for island resorts is PhP78,288,329. Hence, rent for this resort type is equal to PhP782,883 on the average. For cottages, the average acquisition cost is PhP345,187, and rent is computed at PhP3,452 per cottage.

On a per room basis, acquisition costs for island resorts reached an average of PhP2,421,289, translating to an average rental fee of PhP24,213 per room. For cottages, acquisition costs averaged at PhP55,675. Hence, rental fees would be equivalent to PhP557 per room for this type of lodging establishment.

Table 10 shows the different values of rent in using either excess profit or CA 141 as basis. Given that the resorts did not enjoy positive excess profit in general, such could not be used as basis initially for computing rent to be charged against the resorts in the Park.

Table 10. Comparison of Rental Fee Estimates based on Excess Profit and CA 141 for Lodging Establishments in El Nido Marine Reserve, in PhP, 1998

Resort Type	Excess Profit From Survey	1% Value of Improvements (Minimum Rent based on CA 141)	Difference
PER ESTABLISHMENT			
Island Resorts	(597,642)	782,883	(1,380,525)
Cottages	57,575	3,452	54,123
All Establishments	(51,513)	133,357	(184,870)
PER ROOM			
Island Resorts	(18,484)	24,213	(42,697)
Cottages	9,286	557	8,729
All Establishments	(4,880)	12,634	(17,514)

6. Other Issues Raised by Resort/Cottage Owners

During the course of the survey, the team gathered other relevant information that affected the operations of El Nido resorts. One of the issues most commonly raised was the monopoly that Soriano Air has over air transportation services between Manila and El Nido. Although guests were willing to pay the relatively high airfare, there was no booking assurance. Soriano reserves the right to cancel bookings of passengers not staying in Ten Knots, even three days before the flight. Because of the preferential treatment, some visitors are either "forced" to stay in Ten Knots resorts or cancel their visit to El Nido altogether. Alternate routes to the Park are either too time-consuming or too circuitous for tourists. Thus, there is a big pay-off for encouraging other players in the aviation industry to service the Manila - El Nido route. With lower air fares and better flight schedules, the reserve could be more competitive with similar tourist spots in the country and the rest of Asia.

There were also numerous complaints raised against the National Integrated Protected Areas Programme (NIPAP), particularly on the logging prohibition being implemented in the resort. Although this imposition is valid, additional IEC efforts might be warranted in order to get the voluntary support of their stakeholders. Admittedly though, the survey was conducted

prior to the establishment of the Protected Area Management Board (PAMB) in the area. The Board could serve as the venue for which issues may be cleared between management and the stakeholders and where NIPAP's IEC efforts can be maximized.

Finally, Ten Knots raised a very valid issue concerning government fees being collected from the resorts. The company signed a MOA with the DENR and the PCSD in jointly protecting and managing the three islands where their lodging facilities are located. In particular, the company established an Endowment Fund worth PhP300,000 for the three islands, held in trust, for purposes of "environmental management, protection, rehabilitation and enhancement of the subject area" (*Appendix E*). It further established the Ecotourism Maintenance Fund by allocating PhP25 for every paying guest at Ten Knots resorts. A Committee composed of DENR, DOT, PCSD, PAMB, LGU and Ten Knots representatives manages both Funds. Admittedly, though, the Committee has met only once and the implementing guidelines of the MOA have not been finalized. However, as of this writing, the company is willing to reactivate the Committee to discuss the details of implementation, including the establishment and disbursement of the Fund for the Park. In this connection, they have requested that the MOA be taken into consideration when development fees are indeed imposed on all tourism establishments within the Reserve.

7. Recommendations

Table 11 presents the summary of recommendations of the study. The alternative maximum development fees are presented for both types of resorts. Using CA 141, management can impose an average of PhP24,213 per room in an island resort, and PhP557 per room in a cottage. On a per establishment basis, fees can reach as high as PhP783,000 per island resort, and PhP3,500 per cottage. Doing so would raise PAMB's annual revenues from this site to approximately PhP2,400,000 annually. If excess profit is used as the basis for development fees, the study recommends that management collects a maximum of 25 percent of the potential excess profit from simulated revenues for 1999, to leave a substantial amount as their incentive to innovate and improve their operations. This can be of benefit to the PAMB as the incentive would increase excess profits, which could be captured partially in future revisions of the fees. As mentioned earlier, this exercise is valid, given that 1998 was not a representative year for El Nido, in particular, and Palawan, in general, in terms of tourist arrivals. This would translate into a fee of PhP1,397 per room in an island resort, and PhP2,678 per room in a cottage. Per establishment, fees would reach PhP45,000 per island resort and PhP16,600 per cottage on the average, or a total of approximately PhP385,000 in annual revenues for the PAMB.

Table 11. Potential Rental Income in El Nido Marine Reserve Using CA 141 and Excess Profit Estimates Based on Simulated 1999 Revenues

Resort Type	Rental Based on CA 141	Rental Based on 25% of Simulated Excess Profit for 1999
A. Island Resorts		
Per Room	24,213	1,397
Per Resort	782,883	45,163
All Island Resorts (3)	2,348,650	135,488
B. Cottages		
Per Room	557	2,678
Per Cottage	3,452	16,604
All Cottages (15)	51,778	249,066
Total	2,400,428	384,554

Endnotes

- ¹ Most information for this section was lifted from the Draft General Management Plan for El Nido Marine Reserve, October 1998 to December 2003, drafted by the National Integrated Protected Areas Programme (NIPAP)-DENR.
- ² Mostly taken from the Second Draft of the Manual for the Implementation of the Fee System Guidelines in Protected Areas, by Padilla, J., Ulep, C., Rosales, R.M. et. al.

References

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- PGO-Tourism Division, DOT-Palawan. 1999.** Tourist Arrivals, Province of Palawan, 1992-1998. Department of Tourism, Puerto Princesa, Palawan.
- Republic Act No. 7586, "National Integrated Protected Areas System Act of 1992",** Section 10 (f).
- Republic Act No. 7611, 1992,** "An Act Adopting the Strategic Environmental Plan for Palawan, Creating the Administrative Machinery for its Implementation, Converting the Palawan Integrated Area Development Project Office to its Support Staff, Providing Funds Therefor, and for other Purposes".

APPENDIX A

Alternatives Routes to Get to El Nido Marine Reserve

Route/Model of Transportation	Price
1. a. Direct flight to El Nido c/o Soriano Air b. Tricycle ride to town proper	PhP 7,400 <i>Round-trip</i> PhP 100 <i>One-way</i>
2. a. Flight to Puerto Princesa c/o PAL b. Jeep from Puerto Princesa to El Nido	PhP 3,881 <i>Round-trip</i> PhP 250 <i>One-way</i>
3. a. Flight to Puerto Princesa c/o PAL b. Jeep from Puerto Princesa to Taytay c. Pumpboat from Taytay to El Nido	PhP 3,881 <i>Round-trip</i> PhP 150 <i>One-way</i> PhP 300 <i>One-way</i>
4. a. Superferry to Puerto Princesa b. Jeep from Puerto Princesa to Taytay c. Pumpboat from Taytay to El Nido	PhP 970 <i>One-way</i> PhP 150 <i>One-way</i> PhP 300 <i>One-way</i>

Source: National Integrated Protected Areas Programme (NIPAP)-DENR, NAPWNC, Quezon Avenue, Diliman, Quezon City

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DENR ADMINISTRATIVE ORDER

No. 99 - _____

SUBJECT : Guidelines and Principles in Determining Fees for Access to and Sustainable Use of Resources in Protected Areas.

Pursuant to the provisions of Republic Act 7586 otherwise known as the National Integrated Protected Areas System (NIPAS) Act of 1992 and its Implementing Rules and Regulations, and in order to provide guidelines and principles in accessing and sustainably using resources in protected areas, this Order is hereby issued for the guidance of all concerned.

SECTION 1
TITLE

This Order shall be known as "*Guidelines and Principles in Determining Fees for Access to and Sustainable Use of Resources in Protected Areas*".

SECTION 2
OVERRIDING PRINCIPLES IN THE UTILIZATION
OF RESOURCES IN PROTECTED AREAS

2.1 Sustainability is the overriding consideration in determining all types and rates of use of all resources in protected areas. Sustainable use shall be operationalized as follows:

2.1.1 For the extraction of renewable resources such as forest flora and fauna and other forest products, surface and ground water, fisheries, geothermal energy and similar resources, sustainable use shall be the rate of extraction that is lower than either the rate of regeneration or the rate that shall endanger life forms inside the protected area. The rate of use shall be within the carrying capacity of the protected area and its immediate surroundings when taken individually or collectively or in relation to other uses of the area and that any form of use shall maintain the socio-economic and cultural aspect of the area.

- 2.1.2 Any development of land and other resources in a protected area shall not alter the landscape and shall not significantly disrupt normal ecological functions and processes.
- 2.1.3 The recreational use of resources for tourism, for filming or photography, shall preserve the natural landscape and not put significant stress on living resources by considering the carrying capacity of the area.
- 2.1.4 In the process of resource utilization, the introduction of substances or chemicals harmful to the environment shall not be allowed.
- 2.2 Subsistence use of resources by IPs and tenured migrants shall be exempt from the payment of user fees.
- 2.3 Pending the issuance of certification by the National Commission on Indigenous People (NCIP) in accordance with the Indigenous Peoples Rights Act (IPRA), IPs in protected areas shall be given preferential access to and be levied lower fees for the commercial extraction of allowable resources in protected areas.
- 2.4 Prior to the full implementation/operation of the IPRA Law, free and informed prior consent from indigenous people shall be sought in the gathering of biological and other resources within protected areas.
- 2.5 The collection and research of biological and genetic resources in protected areas for scientific and/or related purposes shall be governed by the provisions of Executive Order No. 247 (Prescribing Guidelines and Establishing a Regulatory Framework of Biological and Genetic Resources, their By-Products and Derivatives) and its implementing rules and regulations, if applicable.

SECTION 3 OBJECTIVES

It shall be the objective of this Order to set forth the procedure which DENR through the Protected Areas and Wildlife Bureau (PAWB) and the Protected Area Management Boards (PAMBs) shall follow in determining fees for access to and sustainable use of resources located in protected areas for subsistence, recreational, extractive, commercial, and all other purposes.

SECTION 4 SCOPE

This Order shall cover identified major uses of all resources and facilities in areas comprising the National Integrated Protected Areas system (NIPAS).

SECTION 5 DEFINITION OF TERMS

- 5.1 *Carrying capacity* - refers to the ability of the natural or environmental resource to absorb stress without experiencing unacceptable instability and degradation.
- 5.2 *Commercial Use* - is the use of resources in excess of subsistence use.
- 5.3 *Cottage-Scale Development* - any development that requires an investment of PhP 150,000 to 1.5 million.
- 5.4 *Development of Land and Other Resources* - involves all forms of improvement or enhancement of land and other resources within a protected area for any purpose.
- 5.5 *Extractive Use* - is the use of resources involving gathering, tapping, diverting, or any form of removal of resources within the designated multiple use zone, sustainable use zone and buffer zone.
- 5.6 *Final Consumption* - refers to use of resources where the resource is no longer used as input to production of other goods or services.
- 5.7 *Fishing* - is the taking of fishery species from their wild state or habitat, with or without the use of fishing vessels.
- 5.8 *Indigenous Cultural Communities/Indigenous People (ICCs/IPs)* - refer to a group of people or homogenous societies identified by self-ascription and ascription by others, who have continuously lived as organized community on communally bounded and defined territory, and who have, under claims of ownership since time immemorial, occupied, possessed and utilized such territories, sharing common bonds of language, customs, traditions and other distinctive cultural traits, or who have, through resistance to political, social and cultural inroads of colonization, non-indigenous religions and cultures, become historically differentiated from the majority of Filipinos. ICCs/IPs shall likewise include peoples who are regarded as indigenous on account of their descent from the populations which inhabited the country, at the time of conquest or colonization, or at the time of inroads of non-indigenous religions and cultures, or the establishment of present state boundaries, who retain some or all of their own social, economic, cultural and political institutions, but who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains (Section 3(h), RA 8371).

- 5.9 *Medium-Scale Development* - any development that requires an investment of above PhP 1.5 million to 60 million.
- 5.10 *Marketed Resources* - are resources which use entails voluntary exchange involving monetary transaction or non-monetary transaction as in the case of barter.
- 5.11 *Micro-Scale Development* - any development that requires an investment of PhP 150,000 and below.
- 5.12 *Non-marketed Resources* - are resources which use does not entail market transaction.
- 5.13 *Recreational Use* - is the use of resources for the primary purpose of personal enjoyment but which does not entail any form of extraction, except, for example, in recreational or sports fishing where a regulated number of fish may be taken.
- 5.14 *Resources* - refer to all living and non-living, renewable or non-renewable, including but not limited to terrestrial, aquatic or both, surface or subsoil resources found within protected areas.
- 5.15 *Small-Scale Development* - any development that requires an investment of above PhP 1.5 million to 15 million.
- 5.16 *Subsistence Use* - is the use of resources to satisfy the minimum basic requirements of households of indigenous cultural communities and tenured migrants including but not limited to food, dwelling, clothing, medical assistance and recreation.
- 5.17 *Sustainable Use* - is the use of components of biological diversity in a way and at a rate that does not lead to the decline in the species used, thus, maintaining its potential to meet the needs and aspirations of the present and future Filipino generations.
- 5.18 *Tenured Migrant* - or communities within protected areas are those who have actually and continuously occupied area five (5) years before the designation of such as protected area in accordance with the NIPAS Act and are solely dependent on the resource for subsistence (Sec. 4(1), RA 7586).

SECTION 6 TYPES OF USES

The following are the types of uses of resources in protected areas on which fees shall be assessed or may be applied.

- 6.1 Subsistence use shall include but not limited to hunting of wildlife for household consumption, gathering of forest products for house construction, agriculture or fish culture to raise crops or fish for household consumption. Subsistence use shall be for the benefit of indigenous cultural communities and tenured migrants only.

- 6.2 Recreational use shall include but not limited to land, water-based activities such as snorkeling, SCUBA diving, swimming, boating, mountain climbing, trekking, picnicking, and bird watching, filming and photography; and all other similar activities as may be determined and allowed by the Protected Area Management Board (PAMB).
- 6.3 Extractive use shall include but not limited to: a) extraction or diversion of water for irrigation or domestic uses; b) collection or gathering of forest products such as vines, rattan, bamboo, resin, ornamental plants, bird's nest, guano, honey; c) collection of wildlife such as monkeys, wild pigs, butterfly.; d) extraction of flora and fauna and its by-products, parts and derivatives, including, but not limited to leaves, blood and samples; e) fishing either in small or commercial scale.
- 6.4 Commercial use shall refer to the development of land and other resources such as construction of kiosks for vending food and souvenir items; construction of tourist and lodging facilities; shops for rental of recreational equipment such as boats, and such other activities as may be allowed by the Management Plan and in accordance with Department of Trade and Industry (DTI) guidelines.

Further, it shall also include existing activities relating to the use of geothermal energy, water resources for electric power generation, use of fishpens and fishcages, use of highways, relay stations and similar communication or transportation structure.

SECTION 7 TYPES OF FEES

- 7.1 *Protected Area Entrance Fee* - is a fee paid to enter a protected area.
- 7.2 *Facilities User Fee* - is a fee paid for the privilege of using man-made facilities inside a protected area.
- 7.3 *Resource User Fee* - is a fee paid for the sustainable commercial use of a specified quantity of resources within protected area over a specified period of time.
- 7.4 *Concession Fee* - is a fee paid for the use of land or other resources for the privilege of undertaking micro and cottage-scale development for a specified period of time and for a specified nature of development.
- 7.5 *Development Fee* - is a fee paid for the use of land or other resources for the privilege of undertaking small, medium and other bigger scale development in protected areas to the extent as may be allowed by PAMB and in accordance with the Management Plan for a specified period of time and for a specific nature of development.
- 7.6 *Royalty* may be defined as a fee paid based on the gross output value or gross sales from products out of resources derived from a protected area.

SECTION 8 SPECIFIC GUIDELINES AND PRINCIPLES IN DETERMINING FEES

One or more guidelines and/or principles may be employed in determining fees based on the following: a) capability to approximate closely the correct fee; b) availability of data as basis for computations; and c) costs to be incurred in estimating the fee.

8.1 Protected Area Entrance Fees and User Fees

Specific Principles

- 8.1.1 Cost-recovery principle - For Protected Area Entrance Fees, collected revenues shall cover, as much as possible, a reasonable proportion of all costs incurred in protecting, maintaining and enhancing the natural attractions of the protected area. For Facilities User Fees, collected revenues shall cover, as much as possible, a reasonable proportion of all costs incurred in providing and maintaining the man-made facilities in the protected area.
- 8.1.2 Willingness-to-pay principle - For Protected Area Entrance Fees, these shall be based on the willingness-to-pay estimates of the visitors based on appropriate surveys.

Guidelines

- 8.1.3 Protected Area Entrance Fees shall cover access to the protected area. If applicable, an additional Facilities User Fee shall cover access to and the use of man-made facilities in the protected area.
- 8.1.4 For Protected Area Entrance Fees, the willingness-to-pay principle shall be the primary basis for computing fees. However, if information is not available, the cost-recovery principle shall be the basis of computation.
- 8.1.5 For Facilities User Fees on man-made facilities managed by private entities, rates shall be determined by the private entity but shall be comparable to fees charged for the use of similar facilities in a comparable location. All Facilities User Fees shall be determined in consultation with the PAMB.
- 8.1.6 For Facilities User Fees on man-made facilities managed by the government, these shall be determined using the cost-recovery principle and shall be comparable to the fees for the use of privately-managed facilities with similar characteristics.
- 8.1.7 A three-tiered system of Protected Area Entrance Fees shall be developed: lower rates for Filipino students and senior citizens; normal rates for other Filipino visitors; lower rates for minors; higher rates for all foreign visitors.

8.2 Resource User Fees, Development Fees and Concession Charges

Guidelines and Principles

- 8.2.1 The PAMB shall, to the extent feasible, enter into co-production, joint venture or production-sharing agreements with interested parties in the commercial extraction and/or development of resources in protected areas.
- 8.2.2 The government share of the protected area through the Integrated Protected Areas Fund (IPAF) in these agreements shall be a reasonable proportion of the excess profits derived from the commercial extraction of resources.
- 8.2.3 All types of development are required to undergo EIA System as prescribed under PD 1586 and other pertinent laws and regulations.

8.3 Royalty

Guideline and Principle

For any use of resources that result in the sale of goods or services where the value of total sales can be easily monitored, the resource fee may be based on royalty.

**SECTION 9
OTHER PROVISIONS**

- 9.1 The computation of the excess profits shall be guided by the formula specified in *Annex A*. The corresponding government share from the excess profit shall be determined consistent with the appropriate instrument agreed upon by the contracting parties.
- 9.2 The rate of subsistence use shall be specified for each resource and where possible, for each household of indigenous people and tenured migrants. Such rate shall not exceed the rural annual capita threshold income by region as may be determined by the National Economic and Development Authority (NEDA).
- 9.3 The classification of development projects in protected areas in terms of investments shall be regularly updated in accordance with DTI guidelines.
- 9.4 The guidelines and principles enumerated herein shall be elaborated and operationalized in a handbook that shall be developed after pilot-testing in a sufficient number of protected areas.

**SECTION 10
RESPONSIBILITIES OF PAWB AND PAMB**

- 10.1 PAWB shall:
 - 10.1.1 Take the lead in pilot-testing these guidelines and principles in key resources and uses in collaboration with the PAMBs and DENR Field Offices;
 - 10.1.2 Develop a manual to be used by PAMBs in the implementation of the guidelines and principles after pilot testing in a sufficient number of areas;
 - 10.1.3 Assist the PAMBs to operationalize the manual; and
 - 10.1.4 Assist in providing experts required by the PAMBs in the implementation of the guidelines and principles.
- 10.2 PAMB shall:
 - 10.2.1 Collaborate with PAWB in the pilot testing of the guidelines and principles;
 - 10.2.2 Be guided by the manual developed by PAWB in implementing the guidelines and principles;
 - 10.2.3 Approve all types of uses of resources in a protected area through a Memorandum of Agreement with the concerned entity;

- 10.2.4 Conduct public consultations/dialogues with interested parties on proposed fees;
- 10.2.5 Formulate and pass all resolutions required to enable and facilitate the collection of fees; and
- 10.2.6 Determine through consultations with indigenous people the traditional uses of resources within protected areas.

This Order shall take effect fifteen (15) days after publication and revokes, supersedes, and amends any order and/or instructions inconsistent herewith.

ANTONIO H. CERILLES
Secretary

version as of February 2, 1999

A. COMPUTATION OF EXCESS PROFIT

The excess profit per year that arises from a natural resource-based activity shall be computed using the following formula.

Excess Profit = gross sales (GS) of natural resource-based product or service
 Less cost of production
 Less margin for profit
 Less margin for risk

where:

GS = (quantity of product or service) x (farm-gate price)

Cost of Production includes:

 payment for wages;
 material cost, e.g., gasoline;
 rentals for equipment, buildings, etc.;
 depreciation; and
 payments for taxes normally paid by any business enterprise (e.g., income taxes,
 permit fees, etc.)

Margin for Profit = normal return to entrepreneurial capita, usually determined through prevailing conditions in the financial market

Margin for Risk = a premium to cover losses from natural calamities and other causes

The margin for profit and risk shall be set at a maximum of 30% of the total cost of production.

Information to be used in computing for excess profits shall be based on a hypothetical company operating at an efficient level. Such information may be supplemented with data on the cost of the next-best-alternative. The cost of the next-best-alternative is the cost of providing equivalent goods and/ or services for the same market without using the resources of or derived from the protected area.

B. COMPUTATION OF WILLINGNESS-TO-PAY

The willingness-to-pay for a natural resource good or service shall be computed from appropriate surveys employing accepted economic tools such as travel cost method or the contingent valuation method. These surveys shall arrive at an estimate of the willingness-to-pay for a natural resource good or service taking into account factors such as income, occupation, and nationality, among others.

APPENDIX C

Members of the ENRAP-PAWB-PPSO Team

- | | |
|---------------------------|------------------------------|
| 1. Jose E. Padilla, Ph D. | Deputy Project Leader, ENRAP |
| 2. Rina Maria P. Rosales | Research Associate, ENRAP |
| 3. Teresita Blastique | Sr. EMS, PAWB |
| 4. Sarah Jane Cabrera | CP II, PAWB |
| 5. Engeline Corquera | Statistician I, PAWB |
| 6. Ruby Buen | DMO III, PPSO-DENR |
| 7. Imelda Matubis | DMO II, PPSO-DENR |

APPENDIX D

Survey form for Tourism Establishments in
El Nido Marine Reserve

APPENDIX E

Memorandum of Agreement

By and Among

Department of Environment and Natural Resources (DENR)
Department of Tourism (DOT)
Palawan Council for Sustainable Development (PCSD)
Ten Knots Philippines, Inc. and Ten Knots Development Corporation (Ten Knots)

MEMORANDUM OF AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

This Agreement made as of this ____ day of _____

1995 by and among:

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, a government entity duly organized and existing under the laws of the Republic of the Philippines, with office address at Visayas Ave., Quezon City, represented herein by its Secretary, Angel Alcalá (hereinafter called the "DENR");

- and -

DEPARTMENT OF TOURISM, a government entity duly organized and existing under the laws of the Republic of the Philippines, with office address at DOT Bldg., T.M. Kalaw St., Agrifina Circle, Rizal Park, Manila, represented herein by its Secretary, Vicente Carlos (hereinafter called the "DOT");

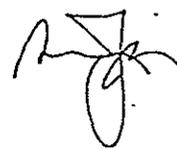
- and -

PALAWAN COUNCIL FOR SUSTAINABLE DEVELOPMENT, a government entity duly organized and existing under the laws of the Republic of the Philippines, with office address at 3rd Floor, Gazini Plaza Bldg., 60 Timog Ave., Quezon City, represented herein by its Chairman, Salvador P. Socrates (hereinafter called the "PCSD");

- and -

TEN KNOTS PHILIPPINES, INC. and TEN KNOTS DEVELOPMENT CORPORATION, corporations duly organized and existing under the laws of the Republic of the Philippines, with office addresses at A. Soriano Hangar, Andrews Ave., Domestic Airport, Pasay City and El Nido, Palawan, respectively, represented herein by its Director and Chief Operating Officer, Alberto A. Lim (hereinafter referred "Ten Knots").

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WITNESSETH: That

WHEREAS, the DENR is mandated, under E.O. 192 dated 10 June 1987, to be the primary government agency responsible for the conservation, management, development and proper use of the country's environment and natural resources;

WHEREAS, the DOT is the primary government agency charged with the responsibility of encouraging, promoting and developing tourism as a major socio-economic activity to generate foreign currency and employment and to spread the benefits of tourism to a wider segment of the population;

WHEREAS, the PCSO is mandated, under R.A. 7611 dated 19 June 1992, to govern, implement and give policy direction to the Strategic Environmental Plan for Palawan which has as its philosophy the sustainable development of Palawan by improving the quality of life of its people in the present and future generations through the use of complementary activities of development and conservation;

WHEREAS, Ten Knots is the owner, developer and manager of world class tourist resorts within the El Nido Marine Reserve area and has as its philosophy the promotion of responsible and sustainable tourism development and management/ecotourism;

WHEREAS, the DENR has issued an Environmental Compliance Certificate ("ECC") to Ten Knots on 9 August 1990 for the proposed Lagen Island Resort and Condition No. 22

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thereof requires Ten Knots to set up an Environmental Guarantee Fund ("EGF") for the purpose of environmental protection/ rehabilitation;

WHEREAS, the DENR has likewise issued an ECC to Ten Knots on 27 July 1994 for the Pangulasian Island Resort and Condition No. 15 thereof requires Ten Knots to set up a similar EGF;

WHEREAS, Ten Knots has another resort, Miniloc Island Resort, which is not covered by the EGF requirements since said resort project was commenced prior to the declaration of the El Nido area as a marine reserve but in spite of which Ten Knots, consistent with its philosophy of responsible and sustainable tourism development and management/ecotourism, would like to set up a similar fund for the protection/ rehabilitation of the environment in Miniloc Island and the surrounding areas;

WHEREAS, all the parties to this Agreement realize that there is an urgent need to operationalize the concept of sustainable development in the El Nido Marine Reserve area with the end view of properly managing the environmental circumstances of the area as well as improving the socio-economic well-being of the local community;

WHEREAS, all the parties to this Agreement agree that responsible and sustainable tourism development and management/ecotourism is a desirable means of achieving sustainable development in El Nido;

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NOW, THEREFORE, for and in consideration of the foregoing and of the terms and conditions hereinafter set forth, it is hereby agreed and declared as follows:

1. Policy of Partnership

The parties hereby agree to be partners for the environmental protection and management of the natural resources in, as well as the promotion of the tourism potentials of, El Nido in order to achieve the sustainable development of the area and thereby assist in the promotion of the socio-economic upliftment of the local community.

2. Area of Concern/Responsibility

The areas of concern/responsibility ("Subject Area") include the following:

2.1 Lagen Island and the surrounding area extending up to 200 meters from the MLLW level, a description of which is hereto attached as Annex "A" and made integral part hereof;

2.2 Pangulasian Island and the surrounding area extending up to 200 meters from the MLLW level, a description of which is hereto attached as Annex "B" and made integral part hereof; and

2.3 Miniloc Island and the surrounding area extending up to 200 meters from the MLLW level, excluding the Big Lagoon and the Small Lagoon, a description of which is hereto attached as Annex "C" and made integral part hereof.

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3. Duties and Responsibilities and Undertakings

3.1 Ten Knots - The following shall be the duties and responsibilities of Ten Knots:

a. Environment - For environmental protection, Ten Knots shall:

i. undertake resource inventory and assessment and establish an ecological data base of the Subject Area;

ii. protect the terrestrial and marine environment of the Subject Area;

iii. implement programs and projects that will enhance the environmental conditions of the Subject Area;

iv. patrol the Subject Area in order to preclude any individual or entity from engaging in any illegal and/or environmentally destructive activities (e.g. illegal logging, cyanide fishing, blast fishing, illegal fishing, coral and shell

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collection, hunting, wildlife trade, illegal quarrying or mining, etc.);

v. provide proper anchorage system to prevent wanton destruction of coral reefs (e.g. installation of mooring buoys, boat tying system, etc.);

vi. devise and implement tourist traffic regulation system and an entrance fee system in areas frequented by tourists and other persons or groups as the parties in this Agreement may deem fit;

vii. apprehend violators, when deputized, and turn over said violators to the appropriate authorities;

viii. gather data for scientific analysis;

ix. provide regular environmental seminars to raise the environmental consciousness of its staff;

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x. regularly clean-up the beach area of marine debris; and

xi. perform such other functions as may be required in the performance of its duties and responsibilities as an environmentally responsible corporate citizen engaged in the promotion of responsible and sustainable tourism/ecotourism.

b. Tourism - In the aspect of tourism, Ten Knots hereby agrees to do the following:

i. promote responsible and sustainable tourism/ecotourism;

ii. provide adequate guest briefings and briefing materials to raise the environmental consciousness of its guests;

iii. ensure that all guest activities are in consonance with sound environmental practices;

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iv. encourage guests to be involved in the environmental programs and projects of the Subject Area as well as the other surrounding areas;

v. install interpretative signs in the Subject Area for the proper identification of the unique flora and fauna; and

vi. acquire and provide environmental instructional reading and video materials for guests.

c. Finance - Ten Knots hereby agrees to provide the seed fund for environmental protection through the EGF, the mechanism of which are stipulated in Section 4 hereunder.

3.2 DENR - The following shall be the duties and responsibilities of the DENR:

a. provide Ten Knots with scientific and technical support to carry out its duties and responsibilities;

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b. deputize some of the officers and personnel of Ten Knots to implement environmental laws, rules and regulations; and

c. provide legal, logistical and manpower support to Ten Knots for the enforcement of environmental laws, rules and regulations.

3.3 DOT - The following shall be the duties and responsibilities of the DOT:

a. actively market/promote El Nido locally and internationally as a tourism destination;

b. provide logistical and resource support for the development of tourism related infrastructures in El Nido (e.g. pier development, visitors' center);

c. promulgate rules and regulations governing the operations and activities of all persons or entities that cater to tourists to ensure that they practice environmentally responsible tourism activities.

3.4 PCSD - The PCSD shall have the following duties and responsibilities:

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a. provide technical support to enable Ten Knots to effectively perform its duties and obligations;

b. authorize/deputize Ten Knots to perform specific functions of PCSD in the Subject Area; and

c. provide legal, logistical and manpower support to Ten Knots.

d. promulgate rules and regulations governing the operations and activities of all persons or entities to ensure that they practice environmentally responsible activities.

4. Environmental Guarantee Fund ("Fund")

4.1 Establishment of the Fund

Ten Knots hereby undertakes to establish the Fund for purposes of environmental management, protection, rehabilitation and enhancement of the Subject Area. Said Fund shall have two (2) components, namely:

a. Ten Knots Environmental Endowment Fund ("Endowment Fund") which shall have a seed fund of PESOS: ONE HUNDRED THOUSAND (P100,000.00) for each island in the Subject Area or an aggregate amount of PESOS: THREE HUNDRED THOUSAND (P300,000.00) held in trust in a bank or financial institution.

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The Endowment Fund shall have four (4) separate accounts for each of the following:

- a. Lagen Island;
- b. Pangulasian Island;
- c. Miniloc Island; and
- d. Entrance fees to the other tourist sites in the Subject Area.

b. Ecotourism Maintenance Fund ("Maintenance Fund") which shall be set up by Ten Knots through the allocation of P25.00 for every paying tourist visiting the resorts of Ten Knots in the Subject Area. The Maintenance Fund shall be kept in trust in one (1) account in a bank or financial institution.

4.2 Environmental Fund Management Committee

The Fund shall be managed by the Environmental Fund Management Committee ("EFMC") to be composed of one (1) representative from each of the following:

- a. DENR - Regional Executive Director of of Region 4B;
- b. DOT - Regional Director of Region 4;
- c. PCSD - Executive Director;
- d. Ten Knots - Director of Corporate and Legal Affairs/Planning;
- e. PAMB/PAMC - designated representative; and

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- f. Municipal Government - designated representative.

The EFMC shall have the following functions:

- a. Manage, control and operate the Fund in accordance with internal procedure which shall be established by the EFMC;

- b. Approve the annual environmental protection and assistance programs and projects;

- c. Resolve issues involving the environmental management, protection, rehabilitation and enhancement of the Subject Area;

- d. Issue guidelines on questions involving the implementation of environmental programs and projects in the Subject Area;

- e. Designate independent individuals/entities to resolve issues which cannot be resolved by the EFMC; and

- f. Invite resource persons to assist in the environmental programs/projects of the Subject Area.

4.3 Fund Usage

The Fund shall be used only for the actual implementation of environmental programs and projects in the Subject Area. Subject, however, to the discretion of the

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EFMC, a portion of said Fund may be utilized for the environmental programs and projects in the areas outside the Subject Area but within the Bacuit Bay Area. The manner of fund disbursement as well as the mechanism/procedures for auditing and accounting shall be specified in the internal guidelines to be established by the parties to this Agreement.

5. Stewardship and Trust Agreement

This Agreement hereby constitutes a Stewardship and Trust Agreement between DENR and Ten Knots over the Subject Area whereby Ten Knots is obliged to protect the environment of the Subject Area and it is given the authority and responsibility to control and manage said Subject Area in accordance with the guidelines prescribed by EFMC.

6. Effectivity/Amendment of the Agreement

6.1 Effectivity - This Agreement shall become effective, operative and binding among the parties hereto on and as of the date hereinabove mentioned.

6.2 Amendment - This Agreement shall constitute the entire agreement among the parties hereto and shall not be amended or supplemented except by an instrument in writing executed by the parties.

REPRODUCIBLE COPY

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<u>Name</u>	<u>Community Tax Certificate No.</u>	<u>Date/Place Issued</u>
Department of Environment and Natural Resources		
Angel Alcalá	3720-C	1-17-95; Quezon City
Department of Tourism		
Vicente Carlos	5613856	2-10-95; Makati, M.M.
Ten Knots Development Corporation		
Alberto A. Lim	7421136 A	6-24-94; Pasay City

known to me to be the same persons who executed the foregoing instrument and acknowledged to me that the same is their own free act and deed as well as those of the entities they respectively represent.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal on the date first above written.



REGISTRAR GENERAL
 OFFICE OF THE REGISTRAR
 1001 S. E. 17th St. 3rd Fl.
 MIAMI, FL 33132
 TELEPHONE: 305-375-2265
 ISSUED AT MAKATI, M.M.
 ON JANUARY 17/1995

Doc. No. 144;
 Page No. 30;
 Book No. 11;
 Series of 1995.

pcsd.MOA

ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES)
PUERTO PRINCESA, PALAWAN)S.S.

Before me, a Notary Public, for and in Puerto Princesa City,
this 7th day of June, 1995, personally appeared
Salvador P. Socrates, representing Palawan Council for
Sustainable Development with Community Tax Certificate No.
19369740 issued on January 17, 1995 at Puerto Princesa City,
known to me and to me known to be the same person who
executed the foregoing instrument and acknowledged to me
that the same is his own free act and deed as well as that
of the corporation he represent.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my notarial seal on the date first above-written.

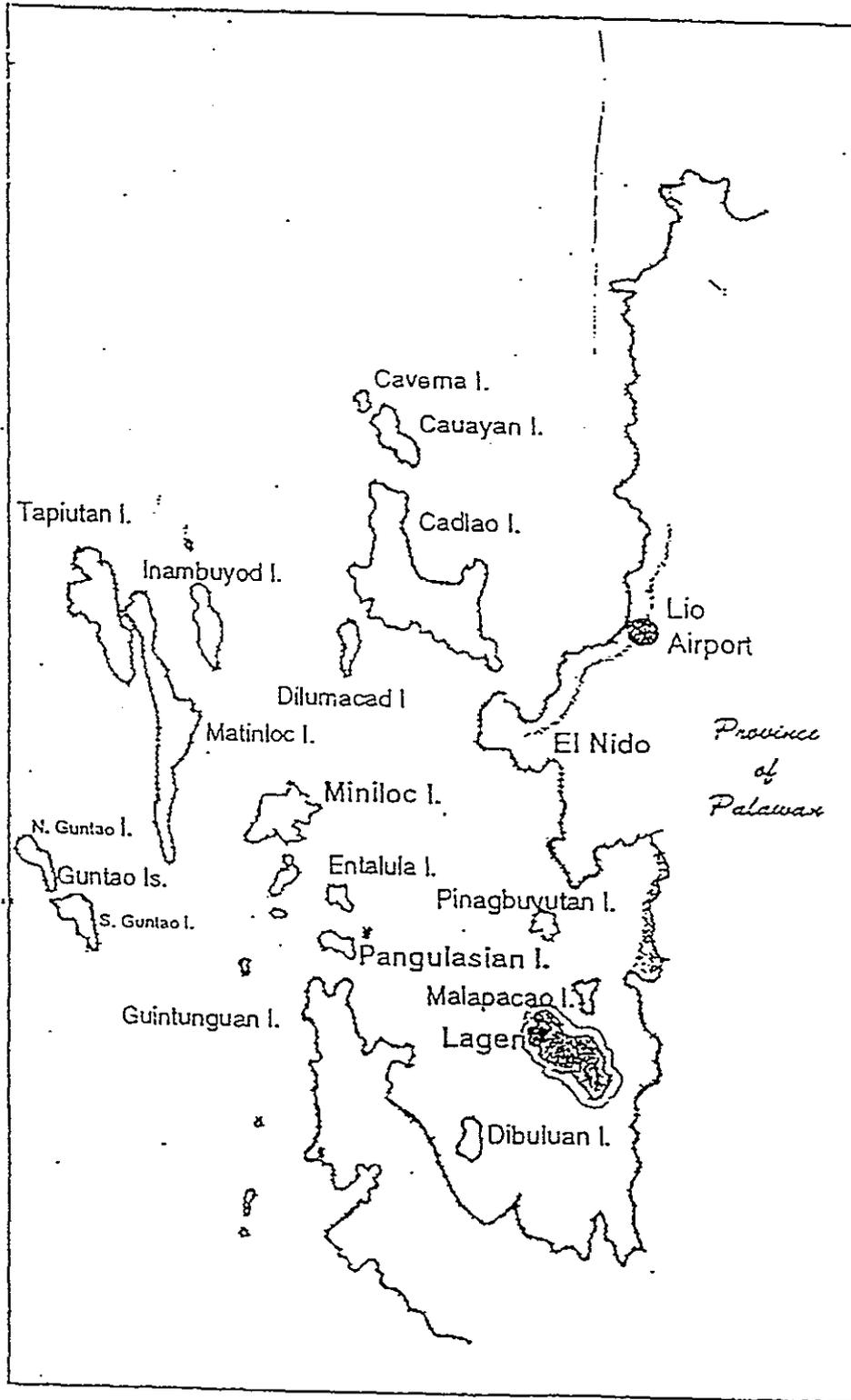
Doc. No. 465 ;
Page No. 93 ;
Book No. IV ;
Series of 1995.



MARTIN E. EUFILIO
NOTARY PUBLIC
UNTIL DEC. 31, 1995
PTR # 0160004
JAN. 5, 1995 PTG. PRIN. CITY

BACUIT BAY
EL NIDO, PALAWAN

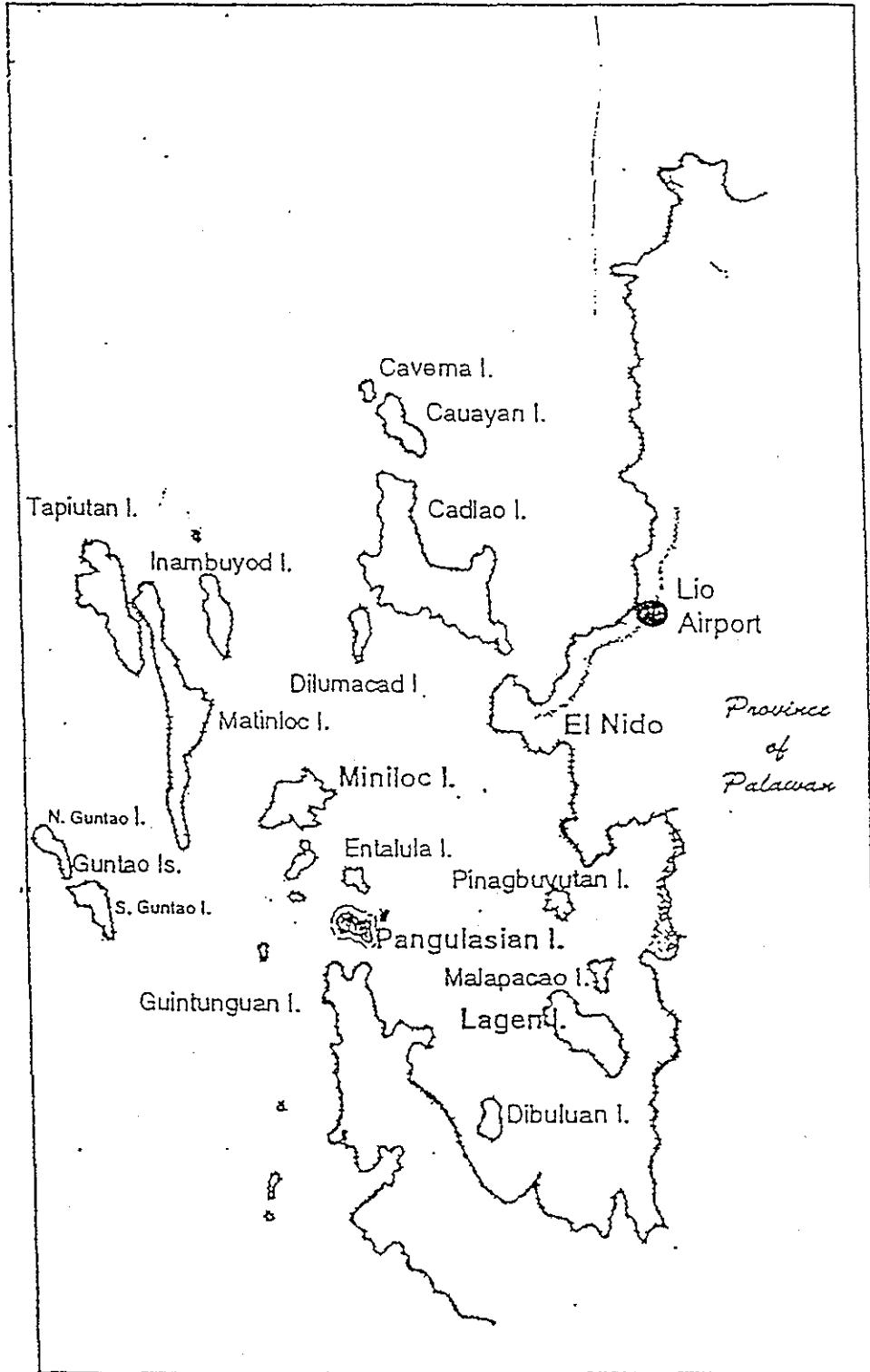
Annex "A"



200m from MLLW Level

BACUIT BAY EL NIDO, PALAWAN

Annex "B"

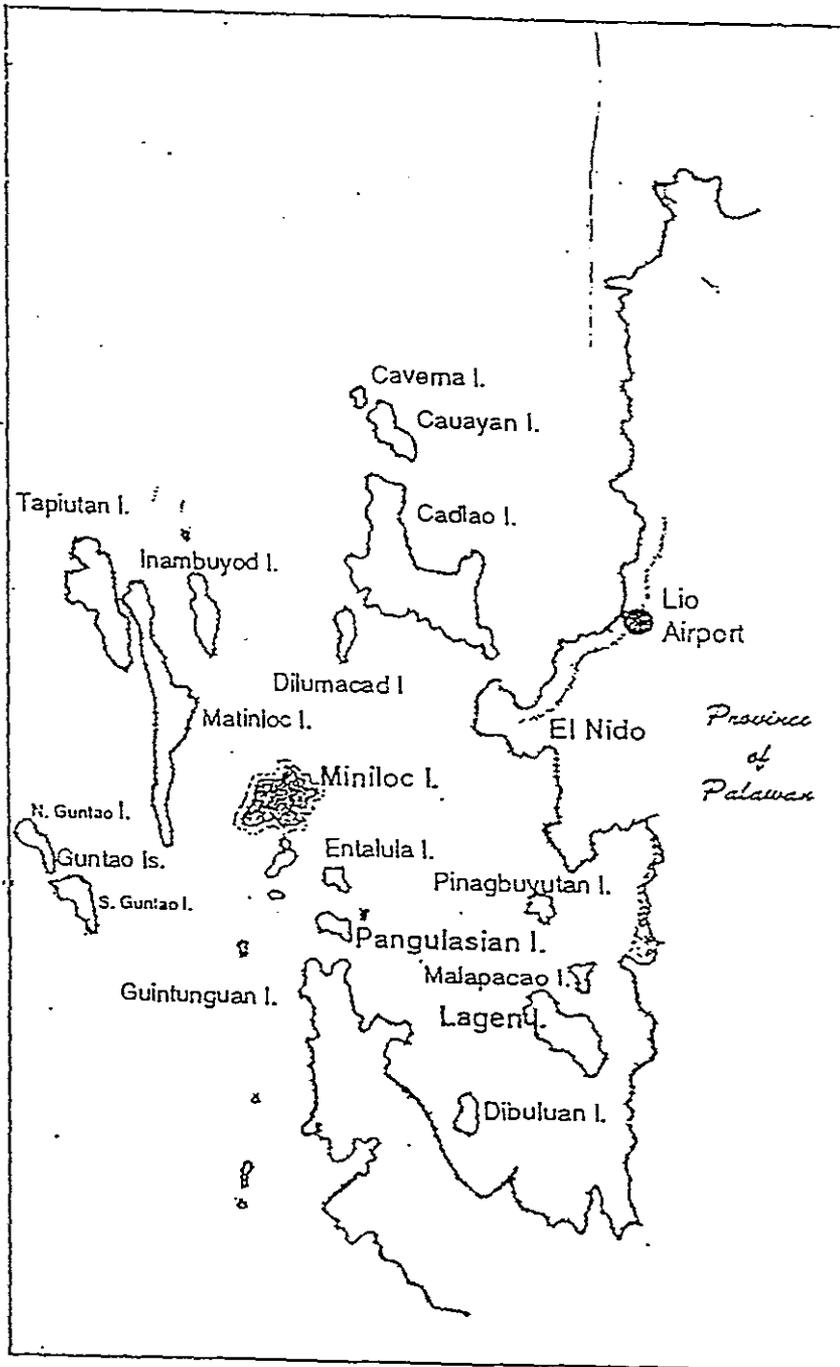


200m from MLLW Level

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BACUIT BAY
EL NIDO, PALAWAN

Annex "C"



200m from MLLW Level

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