

PN-ABX-405

1991 97382

CONSERVATION EXCHANGE PROGRAM SURVEY

**Indonesia, Malaysia, Philippines, Singapore, and Thailand
January 29 - March 15, 1995**

Prepared for:

US - ASIA ENVIRONMENTAL PARTNERSHIP



WORLD ENVIRONMENT CENTER

**NEEDS ASSESSMENT FOR PROPOSED US-AEP CONSERVATION
EXCHANGE PROGRAM (CEP)**

submitted to

United States - Asia Environmental Partnership
U.S. Agency for International Development
Room 3208 NS
Washington, DC 20523-0018

March 31, 1995

by

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I. SUMMARY

The US-Asia Environmental Partnership (US-AEP) requested the Smithsonian Institution (SI) to conduct a needs assessment for a potential new program entitled the "Conservation Exchange Program" (CEP). Target institutions for this program would be protected areas, zoological parks, aquariums, botanical gardens, natural history museums, and other appropriate areas. CEP funds would be limited and only used to finance travel and per diem of participants in this two-way exchange program (US to Asia; Asia to US).

US-AEP and SI selected five Southeast Asian countries to conduct an on-site needs assessment of target institutions (Thailand, Malaysia, Singapore, Indonesia, Philippines). Before and during the mission, we contacted the USAID missions, the US-AEP Technical Representative offices, and as many potential target institutions as possible to arrange meetings. The 46 on-site surveys were conducted by Michael Stüwe.

Three major areas emerged during the meetings in Asia in which CEP exchanges could benefit partner institutions: (1) environmental education, (2) mid-level staff training, and (3) database management. Additionally, other specific areas were discussed in institution design and policy and technical workshops.

It was made clear to Asian institutions that CEP funds were limited to exchanges only, not the financing of programs or specific projects. Several of the Asian partner institutions have agreed to contribute the funds necessary for program implementation either from their core funds or through special fund raising efforts.

We also simultaneously contacted by mail, fax, electronic mail, and telephone many target institutions in other US-AEP represented countries (e.g., Taiwan, Hong Kong, India). The replies received all state that they would like to be involved in CEP. We also contacted the umbrella organizations for the target institutions in the United States. All have replied very positively to the general concept of CEP and are willing to collaborate.

US-AEP provided financial support to conduct the needs assessment in Southeast Asia. The World Environment Center administered and provided logistical support for the survey under contract # 4836.

II. INTRODUCTION

A. OBJECTIVES

US-AEP is considering the establishment of a Conservation Exchange Program. Target institutions include protected areas, national parks, botanical gardens, aquariums, natural history museums, and other appropriate areas. US-AEP requested the Smithsonian Institution to conduct a needs assessment and survey potential partner institutions in the United States and Southeast Asia.

B. SCOPE OF WORK

- TASK A: Identify target institutions in Southeast Asia and the United States (name of contact, address, phone, and fax).
- TASK B: Briefly assess the demand/need (e.g. fellowships, exchanges, short term technical assistance) of these institutions.
- TASK C: Obtain their expressions of interest to participate in the CEP.
- TASK D: Package this list in a final report by April 1, 1995, and summarize the demand/need conclusions by sector, country and institutions.

C. SCHEDULE

Due to the short time available, we selected five Southeast Asian countries for an on-site survey: Thailand, Malaysia, Singapore, Indonesia, and the Philippines. In addition, we surveyed institutions in other eligible US-AEP countries by mail and fax. Due to the vast number of individual target institutions in the United States, we limited our US survey to umbrella organizations of the four main institutional categories: zoos, museums, botanical gardens, and protected area agencies. In the direct survey countries in Asia, we limited our survey to protected area agencies instead of individual protected areas and national parks.

- Jan 23 - Mar 18, 1995: Mail and fax survey of Asian and US institutions (Appendices 1 and 3).
- Jan 23 - 27, 1995: Preparation for direct survey in Asia.
- Jan 29 - Mar 15, 1995: Direct survey of selected countries in Southeast Asia (Appendix 2).
- Mar 16 - 31, 1995: Preparation of survey report.
- Apr 1, 1995: Submission of survey report.

III. RESULTS AND CONCLUSIONS

A. TASK A:

Dozens of Asian target institutions were identified. Copies of business cards are attached in Appendix 4.

B. TASK B:

Summaries of the exchanges with potential CEP partners are attached as Appendices 1-3.

C. TASK C:

Statements of interest by potential partner institutions are included in the summaries of Appendices 1-3. Written statements from institutions that responded by fax or mail have been turned over to the US-AEP Secretariat.

D. TASK D:

During the survey, three general areas were frequently mentioned in which CEP exchanges could help potential Asian partner institutions: (1) environmental education, (2) mid-level staff training, and (3) database management. We have listed a few examples to show where the CEP exchanges could contribute to these larger efforts.

It was made clear to Asian institutions that CEP funds were limited to sponsoring the travel and per diem of exchanges only, not the financing of programs or specific projects. Several of the partner institutions have agreed to contribute the funds necessary for program implementation either from their core funds or through special fund raising efforts.

1. Environmental education

Throughout the survey in Southeast Asia it was evident that, while having great potential, CEP target institutions had few if any established programs in environmental education. CEP target institutions are mostly located in or near fast growing metropolitan cities and attract millions of visitors annually. The number of visitors to botanical gardens and zoos in Indonesia may reach 7-8 million per year. The Singapore Zoo attracts 2.9 million visitors per year. A large number of these visitors are school children.

The Singapore Zoological Garden submitted a proposal to CEP for technical assistance to develop an environmental education show to be performed live on stage. Such shows had great success in Latin America, as they provided live entertainment rather than still exhibits. They were even picked up by radio and TV stations. The development of the script for such a show will require considerable capital investment in which the Singapore Zoo is prepared to fund raise. While we did not survey the Northeast Asian zoos, we assume a show designed for a Singapore audience might also be applicable for a Taiwanese, Hong Kong, and possible Korean audience. With relatively little additional financial investment, such a show might easily be adapted to other Southeast Asian zoos, possibly through facilitation by the Southeast Asian Zoo Association. A CEP exchange to such an initiative could achieve a multiplier effect throughout the region.

The zoos and botanical gardens of Indonesia and Malaysia have only the very first beginnings of environmental education programs. Still, millions of school children visit them each year. Both countries speak a version of Bahasa. Several institutions suggested that school teachers need to be provided with a curriculum outlining how they can utilize the existing zoos and botanical gardens as open classrooms to teach biodiversity conservation.

CEP could possibly provide an American exchange to Asia to conduct a workshop for zoo, botanical gardens, aquariums, and teacher training to college educators on how to develop/incorporate environment into curriculums. One of the institutions or one of Indonesia's NGOs in interaction with the target institutions could then implement the curriculum. Local support for curriculum development could possibly be provided by grants from foundations operating in either or both of the target countries. Once a principal curriculum is developed, translation and adaptation to local problems, could easily make it applicable for other countries. Distribution could be encouraged by the Southeast Asian Zoo Association, and again, CEP could achieve a multiplier effect.

Both the Malaysian Department of Fisheries and USAID/Philippines are currently developing natural history museums and interpretive centers focusing on marine and coastal conservation. The centers are located on opposite sides of the South China Sea. Both countries are currently creating a trans-frontier national park also located in the South China Sea. Trans-frontier parks are one of the topics currently debated among ASEAN countries who recently held an international workshop on the topic. The Assistant Director General of the Malaysian Department of Fisheries is currently chairman of the ASEAN Working Group on Marine Science. Trans-frontier parks and their significance for a regional approach to marine conservation could be made a lead topic of the interpretive centers. Both contacts have asked whether CEP could possibly provide technical assistance by a US museum exhibit/interpretative specialist to help in the design of the centers.

2. Regional mid-level staff training

Mid-level staff training has been the most frequently voiced need during the survey of CEP target institutions. General workshops on protected area management and biodiversity inventory surveys, as well zoo management and husbandry and breeding of endangered species, organized in sub-regions speaking the same language were often requested.

Besides these requests, we received several specific proposals. They include proposals by the ASEAN Working Group on Nature Conservation to host a series of training courses in conservation biology, environmental education, inventory of biodiversity, and protected area management. The leading role would be taken by the Malaysian Department of Wildlife and National Parks and the Thai Forest Department. These departments would provide facilities, logistical support, and staff but inquired whether CEP could help provide US instructor(s) to teach conservation management principles.

In addition, they suggested that CEP may consider financing managers from other ASEAN countries to join the workshops as that would greatly improve future working relationships between ASEAN countries.

The Research Division of the Thai Forest Department requested to organize a series of regional workshops on biodiversity inventory surveys, mapping of animal distribution, management of regional biodiversity databases.

The Thai Zoological Park Organization requested to organize a zoo management and conservation assistance training program for regional zoo managers.

In general, regional training activities, if considered eligible CEP activities, have to be prepared carefully to be efficient and effective. They should be based at regional training centers of institutions who have shown their ability to logistically support preparation and operation of training exercises. Activities should train trainers to achieve a multiplier effect and should address regional issues and a regional target audience to generate a network of regional trainers. One measure for success of the CEP program would be, if at its completion, CEP could provide the relevant ASEAN working groups and individual countries with a network of conservation management trainers and training curricula to use in its own training efforts in the future.

Contacts in natural history museums and collections mentioned most frequently the need to train their curators in collection maintenance, especially for collections in tropical climates. This type of training, probably more than that for any other target institution, needs to be done at a US tropical institution(s) (e.g., Hawaii, Florida). Such training should probably be in the form of 2-3 month internships.

3. Database Management

Surveyed CEP target institutions often asked whether CEP could get involved in helping them to interact with international institution-specific databases. Such databases are widely used by zoos, museums, and botanical gardens to manage their respective collections and exchange that information between institutions. The ultimate goal of these databases is to be able to treat the world's separate collections as one thus greatly increasing their value for managers and scientists world-wide.

Integration of institutions from high-priority biodiversity countries into the international networks is very desirable because their collections often are the best record of the respective country's biodiversity history. The most efficient way for CEP to address this request would be the organization of regional workshops by US experts or institutions who have developed such databases.

The following includes other institution-specific activities mentioned during the survey that illustrate the demand for the CEP.

4. Establishment of a National Museum for Natural History in Malaysia

The National Museum of Malaysia requested an American expert to design a National Museum for Natural History (see Appendix 2). The Government of Malaysia has funded the establishment of a new museum inside a new National Botanical Garden. The National Museum has put together a team to visit museums outside Malaysia and talk to specialists about the design of their new museum, especially a biodiversity conservation exhibit. Since they are interested in long-term collaboration with US museums and the Malays will presumably pay their own costs, it is conceivable that CEP could assist in facilitating the "matchmaking" of appropriate American contacts at no cost to the program.

The Malaysian state of Sarawak is planning to establish a biodiversity center, which basically would be a natural history museum. Any CEP activities involving the National Museum could be extended to cover Sarawak as well.

There is a rumor in Thailand that a new Natural History Museum is to be created. However, it was not possible to get any explicit information. If true, CEP activities in Malaysia could be duplicated in Thailand.

Taiwan has just build a new natural history museum. The Taiwanese architects might be willing to discuss their ideas with their Malaysian colleagues. CEP could facilitate such communication and thus become a catalyst of exchanges between US-AEP institutions.

5. Regional Ethno-Botany Workshop in Thailand

The Queen Sirikit Botanical Garden in Thailand is currently being constructed with major Government funding. This garden is being designed as a regional center for ethno-botany and as a germ plasm storage facility for regional endemic plants. CEP was asked whether it could provide an expert to help train ethno-botanists from the region to enable them to evaluate the pharmaceutical potential of the regional flora.

6. Workshop on ASEAN Bio-Prospecting Policies

Many tropical countries are currently writing strict legislation regarding bio-prospecting. This was prompted by the Rio Biodiversity Conference and the US's reluctance to sign resolutions dealing with patent issues for endemic plants with potentially high pharmaceutical value. Contacts in Malaysia and in the Philippines asked whether CEP could provide an expert on current US and world policies and guidelines on bio-prospecting. More than any other CEP topic discussed so far, bio-prospecting touches on the target institutions' dealings with commerce.

7. Establishment of a CITES Forensic Lab in Thailand

The CITES unit at the Thai Forestry Department asked whether CEP could possibly help set up a forensic lab designed after the US Fish and Wildlife Service's lab in Oregon. CEP or the USAEP/USFWS's CITES project may be able to help the Thai Forest Department clarify the issue and perhaps write a proposal for submission elsewhere.

8. Development of a Green Education and Nature Tourism Program at Khao Yai National Park in Thailand

USAID assistance to the Royal Thai government helped in the eco-restoration of Khao Yai National Park. The park is considered a priority site for plant conservation. Visitors use the park mostly for recreational purposes. There are no educational programs, even though it would be an ideal site.

The Thailand Development Research Institute Foundation, encouraged by USAID/Thailand, forwarded a proposal to create an environmental education program. Should CEP consider contributing an exchange to this program, it could be designed as an in-situ/ex-situ link. Environmental education programs could be set up at Thai zoos which would point to and interact with similar programs inside protected areas. Visitors would thus be exposed to biodiversity conservation first "ex-situ" in the metropolitan zoo setting and then "in-situ" inside the national park.

E. REGIONAL CONFERENCES

During the coming months, a number of international conferences will be held which will specifically deal with CEP target institutions. Such conferences could possibly be used to further assess needs, advertise CEP, discuss the program, or even conduct CEP activities. One major advantage of attending such conferences would be that many CEP target institutions will attend using their own funds. Thus professionals whom CEP wants to target would be assembled and CEP activities could be conducted at low cost to the program. Possible conferences include:

- May 1995: Bandar Seri Begawan, Brunei. **5th Meeting of ASEAN Working Group on Environmental Information, Public Awareness and Education.**
- Oct 16-20, 1995: Taipei, Taiwan. **Southeast Asian Zoo Association Annual Conference.** c/o See-Wu Chu, Taipei Zoo, 30 Hsin-Kuang Road Sec. 2. Taipei, Taiwan 11628. Fax: +886-2-938-2316.
- Sep 1995: Perth, Australia. **5th International Congress on Botanical Gardens and Arboretums.**
- Jul 10-14, 1995: Richmond, UK. **Flora Malesiana Symposium 95.** c/o R.J. Johns, The Herbarium, The Royal Botanical Gardens, Kew, Richmond Surrey TW9 3AE, UK. Fax: +44-81-332-5287.
- Nov 1995: Indonesia. **Biodiversity Forum.**

APPENDIX 1

RESPONSES OF POTENTIAL CEP PARTNER INSTITUTIONS IN THE UNITED STATES

The number of potential CEP target institutions in the US is so large that we did not survey them individually but rather approached umbrella organizations representing zoos, museum, botanical gardens, and protected area agencies.

Mr. Paul Meyer, American Association of Botanical Gardens and Arboreta (AABGA)

- They are very interested in CEP.
- They presently conduct a similar exchange program exclusively with China (NAPEC). Dr. Ned Garvey of the US National Arboretum is chair of NAPEC.
- They would like to learn more about CEP.

Dr. Elaine Hoagland, Association of Systematics Collections (ASC)

- They are interested to participate in CEP.
- They have no direct contacts but through their members have contacts with several countries at the national museum and individual scientist levels, e.g. Korea, Taiwan, China, Japan, Indonesia. Harvard has close ties with Indonesia and the Bishop Museum in Hawaii with the Pacific Island countries.

Dr. Michael Hutchins, American Zoo and Aquarium Association (AZA)

- They have been involved in the preliminary planning stages of CEP.
- They are very interested in participating in CEP and facilitating the participation of its extensive conservation network.
- Most activities are ongoing with China, though they realize China is not an eligible US-AEP country.
- CEP could help AZA reach its goal of increasing the role of SSP and TAG to field conservation efforts through training and technology transfer.
- They believe the best method of transferring biodiversity conservation know-how to be training workshops held in the range countries.
- They would like to schedule a meeting to discuss cooperation.

Mr. David Ferguson, International Office, US Fish and Wildlife Service (USFWS)

- o They are interested in collaborating with CEP.
- o Their office would help identify partner individuals and organizations both in Asia and the US.
- o They would like to meet to discuss such collaboration once the CEP mode of operation has been defined.

Individual institutions

We have not generally surveyed the large number of individual institutions in the United States about potential involvement in CEP. Before getting out the word, we rather wanted operational procedures to be established. However, several individual institutions who have come to know about CEP some way or another have expressed interest in collaborating. Besides various Smithsonian bureaus, they include among others: Bishop Museum in Hawaii; Center for Plant Conservation; Field Museum in Chicago, IL; Hobart and William Smith Colleges in Geneva, NY; Society for Conservation Biology; University of Georgia in Athens, GA; California State University in Fullerton, CA; University of Minnesota in St. Paul, MN; University of the Pacific in Stockton, CA; University of Vermont in Burlington, VT; University of Wisconsin in Madison, WI.

APPENDIX 2

RESPONSES OF ON-SITE SURVEYED POTENTIAL CEP PARTNER INSTITUTIONS IN ASIA

INDONESIA

Dr. Ir. Suhirman, Director Bogor Botanical Garden (BGG)

- He welcomes a program like CEP as institutions like his have largely been left out of the recent wave of biodiversity funding.
- He sees the network of Indonesian Botanical Gardens as an essential link in the conservation of Indonesia's flora. Whenever financially possible, they organize or accompany expeditions into all parts of Indonesia to, among others, collect selected plant species to be grown as small viable populations in the gardens of the network.
- His most important objective at this time is to improve the quality of his staff by providing them with opportunities to earn graduate degrees from foreign universities. One such program was set up with the University of Edinburgh, however, funding has been difficult to obtain. He may be able to pay for flights, but not for living and tuition expenses.
- his next challenge is the establishment of an environmental education program to show the importance of plants for the survival and welfare of man. They are in the process to establish interpretive signs which are currently completely missing. The Friends of the Botanical Garden have done the fund raising for this and pursue this operation.
- Besides Edinburgh, most of his international connections are with Harvard and with colleagues in Australia and Singapore. He has very few links with colleagues in neighboring countries.
- CEP could possibly help in the education of his staff, in collaborative research programs, and in the design of educational programs.

Dra. Siti Roosita Ariati, Indonesian Network for Plant Conservation (INetPC)

- They have just been established. At this early stage, they see their role in the dissemination of conservation information, and in providing a forum for the Indonesian conservation community through seminar series and newsletters.

- They are presently developing a plant database but do not have any expertise in this matter. A dBaseIII database was custom written for the BBG by a member of latter's staff. However, this database is not compatible with international databases, INetPC does not plan to make r heir database compatible with it, and it is no longer under development.
- CEP could possibly provide help in database design.

Ms. Jeanine Pfeiffer, Director INetPC

- She basically volunteers her time to run INetPC. She has very limited staff and only one computer.
- She sees INetPC's major role as a communication forum for the Indonesian conservation community. BBG is ideally located for that, as much of the Indonesian conservation community is within walking distance.
- The BBG is suffering financially because the municipal authorities have always seen it as a pleasure garden for Bogor's population and not as a scientific conservation institution.
- BBG may receive a grant for database management with an international software package from Botanic Garden Conservation International, based in Kew, London.
- There is practically no environmental education going on in Indonesian botanical gardens but it would be an extremely important activity (annual visitors of BGG: 1.5 million).
- CEP could possibly help develop a communications network, training staff, establish database management capabilities, and develop an environmental education program.
- She provided me with an extensive document of INetPC's mission and possible CEP involvement.
- Upcoming Botanical Garden and Arboretum Congress in Perth, Australia in September might be an ideal site to discuss and possibly conduct CEP activities.

Mr. Supena, Ass. Dir. Cibodes Botanical Garden

- All data management is done at BGG.
- All staff is trained in administration and exploration at BGG.
- There are no on-going environmental education programs, though many school children visit the garden (annual visitors: 400,000).
- CEP could help develop a 2-3 day environmental education course for which teachers and children would be invited.

Mr. Asep Sugih Suntana, Chairman of the Board RMI-DIFERS, et al.

- RMI mainly is involved in eco-labeling of products.

- In 1994, they developed an environmental education program for schools based at BGG. There was basic support by the garden, but no personnel got involved and the program is still fully carried by RMI. RMI sees their role in conservation activities as initiating them at institutions to have the institutions take them over. This so far did not happen at BGG. (However, see remarks by Dr. Suhirman)
- RMI is now planning the second phase of the environment education program in which together with the teacher college they will develop a conservation education curriculum and materials to be taught at BGG.

Drs. Mohammad Amir, Head Bogor Zoological Museum

- The museum conducts mostly taxonomic work, sometimes in collaboration with colleagues from Australia, UK, and the US. They do not have direct links with other countries in the region.
- They are the scientific authority for CITES and validate specimen and products. Museum scientists train customs officers and rangers. They conduct about one CITES course per year.
- The museum, through the Biological Center, has received GEF funding for collection management, study tours, graduate education, and museum construction. It has also received JICA funding to build a completely new collection building and laboratories.
- Most important activities, with which CEP could possibly help, include computer databases and collection management, especially targeted towards problems of tropical climates. In addition, CEP could support collaborative research with international institutions and special training in herpetology, ichthyology, taxonomy, and DNA mapping.
- There are no environmental education activities occurring. Many school children visit the museum on a regular basis (it was packed when I visited).
- No funds have been allocated for renovation of the actual public exhibits in the present old building. All funding will go into museum research activities.

Drs. Effendi A. Sumardja, Director Conservation Program, Forest Department

- Mid-level training is the single most important activity for all staff at the Forest Department.
- Ex-situ conservation plays a major role in the country's conservation and is manifested in the rhino and tiger plans.
- A course in zoo management would be important to allow institution of professional captive breeding programs for endangered species.
- The biodiversity action plan outlines the training needs and should be consulted as a guideline.

**Ir. Wandojo Siswanto, Environmental Conservation & Planning
Officer Gede Pangrango N.P.**

- Ranger-level staff training is most important. Present donor programs only provide for graduate education of high-level officials but little, if any, on-site training of rangers in, for example, inventory and monitoring techniques. Topics could include conservation biology, inventory and surveys, people relations, interpretation.
- US educated staff, like himself, usually goes into administrative positions and has no time to conduct intensive training courses for mid-level staff.
- A Forest Department training center exists in Bogor, additional ones are planned for Bali and this park in the very near future.

General D. Ashari, President Indonesian as well as South East Asian Zoo Association (SEAZA)

- He is very excited about a program like CEP. SEAZA would very much like CEP to help train staff. The best site for such training would be the Singapore Zoo.
- He has very good contacts throughout the country, several ministers are on his association's board, he was ambassador to the US.
- Would appreciate if CEP activities in Southeast Asia would be coordinated with his office.
- Upcoming SEAZA congress in Taiwan in September could be used to discuss and implement first CEP activities.

Drs. Jansen Manansang, Director Taman Safari Indonesia

- Safari park hosts almost all meetings and courses regarding zoos in Indonesia, including CBSG activities, veterinary courses and biodiversity meetings.
- Best connections with Minnesota and Bronx Zoos.
- Would be very interested in hosting and logistically supporting CEP activities.
- Has no environmental education programs ongoing and has no interpretative program. Minnesota Zoo will help design interpretive boards this year.
- CEP should deal directly with individual organizations rather than go through SEAZA.

Ir. Atje D. Salfifi, Director Jakarta Zoo, et al.

- Zoo is site for veterinary training exercises by local universities.
- Zoo organizes one 2-week keeper training course per year.
- Has a cooperative sister zoo agreement with Sydney Zoo.

- CEP could help in sending staff to training in zoo management, animal handling, computer databases, veterinary care, nutrition, exhibit design, education and landscaping. Training should be at the senior keeper and curator level.
- Tries to develop zoo as an integrated botanical and zoological park, has 135 hectares of which only 65% are developed.
- Has a staff of 12 education people who produce leaflets and "touch and feel" objects for children. Rely mostly on hand-me-down videos and materials from western zoos.
- Has 2.5 million visitors per year.

Ms. Mary S. Boomgaard and Ir. Rudy Yuwono, AEP

- She likes the idea of CEP.
- Her office will provide full support for all CEP activities, including office space, bookings.

Mr. Alfred Nakatsuma, USAID/Indonesia

- Was not aware of potentially broad scope of CEP, e.g. that it would include protected area agencies in its program to provide the in-situ/ex-situ link. He liked that more integrated approach.
- Ex-situ ranked at the very bottom of the recently conducted priorities in biodiversity conservation survey. environmental education ranked near the top.
- I explained that one possible CEP activity could be the development of an environmental education curriculum for Indonesian schools, designed so that all the CEP target institutions in Indonesia (zoos, botanical gardens, museums, aquariums) would be an open classroom. The easy-to-visit institutions would then provide a "window to conservation in the forests" for city students. He was fully supportive of that idea as it would fit the mission's priorities.

MALAYSIA

Mr. Musa bin Nordin, Director-General, Department of Wildlife and National Parks (DWNP), et al.

- ASEAN countries meet annually. They have produced a list of proposals but have not found funds to implement them. Possible CEP exchanges could help contribute to some of these activities.
- DWNP is organizing several training activities for participants from throughout the region.
- He is on the commission deciding on the creation of a National Botanical Garden and Natural History Museum in KL.
- The KL Zoo is currently being relocated and to be converted (?) into a safari park.

- DWNP would be willing to host and help coordinate any CEP activities in the country.

Mr. Zaaba Zainol Abidin and Mr. Burhanuddin Hj. Mohd. Nor, DWNP

- DWNP would be able to fully organize and support (with facilities and transportation, etc.) CEP activities that involve training programs in all aspects of protected area management. In collaboration with the Fisheries Department the marine protected areas could be included.
- It would be great if CEP could organize regional training activities in GIS, park and recreation, park planning, interpretation, education, trans-frontier park problems, database management.
- Trans-frontier problems are a recent interesting issue as Malaysia is involved in several projects including Thailand, Indonesia, and Philippines.
- DWNP would be able to suggest regional institutions and US partner institutions to be involved in the training.
- We calculated the average cost of a 15 day training activity involving 1 US professional and 10 participants from the region to be between \$11,000 and \$16,000.

Ms. Mislihah Mohd. Basir, Head Penang Wildlife Dept.

- Would appreciate any help CEP could provide to the Penang Botanical Garden.
- Her department would very much appreciate any technical assistance to help deal with nuisance animal problems.

Mr. Mazlan Jusoh, Dpt. Dir. Fisheries and Mr. Kevin Hiew Wai Phang, Chief Marine Park Branch

- CEP would be a very welcome program for their protected area managers who very much need training in reef ecology, marine park management, policy issues. Training could be done through staff exchanges with US or at facilities in Malaysian parks which they would provide with all coordination activities. Target audience would be rangers and trainers. Best scheme would be two instructors, 15 Malaysian, 5 regional participants for a 2 week course.
- They are not in touch with US institutions but mainly Australian.
- Mazlan is chairman of ASEAN Marine Sub-Committee and would very much like to organize such a course under ASEAN auspices.
- SI has developed micro-cosmos system for aquariums. They would like technical assistance to establish that principle in their new aquarium.
- All their marine parks have visitor centers which are in desperate need of upgrading. Any CEP exchange assistance in that respect would be appreciated.

Mr. Paul Hamid, Agricultural Ass. Penang Botanical Garden

- Oldest and only major botanical garden in Malaysia, established in 1884.
- Operates seed exchange program with botanical gardens around the world.
- Concentrate on propagation of selected families.
- Do not receive collections of expeditions throughout the country but try to accompany them whenever possible.
- Have no staff trained in botanical garden management.
- CEP training activities need to include collection and database management and internships in US botanical gardens.

Dr. Yap Son Kheong, Senior Research Officer Malaysian Forest Research Institute

- They are in charge of developing new National Botanical Garden.
- The botanical garden will have public education as well as pure scientific objectives. Its main objective is conservation. Taking endangered endemic plants out of the wild and propagate them in small populations provides a special challenge much as the zoo community is facing with breeding of endangered species.
- They will try to establish a very strong environmental education program.
- CEP could help a lot with both objectives by providing technical assistance exchanges.
- In addition, they would greatly appreciate any help in solving the bio-prospecting issue. What is the current policy of the United States, United Nations, and what do countries do about it? What policies are being developed? It would be great if CEP could organize a workshop on bio-prospecting.

Mr. Kevin Lazarus, Director Taiping Zoo

- No immediate ideas how CEP could help.
- Completion of Malaysia's N-S Highway has brought Taiping within easy reach of major cities like Ipoh and Penang. In the last year the number of visitors has doubled to 460,000.
- DWNP has funded Taiping's infrastructure development. They have a master plan and work at completing it.
- Besides municipal funding they generate income from concession stands and entrance fees.

Mr. Mohd. Nawayai B. Yasak, Director Zoo Melaka, et al.

- Most important topic where CEP could help is husbandry and breeding of endangered species and general zoo management. Targeting mid-level managers, administrators, curators, senior keepers would be the most important target audience.
- Singapore would be the best site to host such meetings. There regional training activities could be held in Bahasa and English for participants from Brunei, Malaysia, Indonesia, and Singapore.
- Training might best be held before this year's SEAZA meeting to show members that activities are actually happening. SEAZA has been all talk and no action.
- We discussed zoos as vehicles for environmental education and a master plan to be developed and transported to SEAZA member zoos. While they said it was worthwhile doing, I had the feeling environmental education does not seem to be important to them at this time. However, practical zoo management is.

Mr. Mohd. Shariff bin Daim, Curator Zoo Melaka

- One main role of zoos has to be to educate people about conservation in the wild. Target those who won't go out into the wild, those who go but don't see anything, and those who go but don't understand what they see.
- Melaka Zoo went to teacher training college to promote the zoo as a center for teaching nature conservation. After three years the program has become so successful that they don't know how they can possibly handle all the requests by all the schools.
- DWNP works with central and KL teacher training college to develop curricula and instruct students in the wild.
- At Melaka all schools who visit the zoo during the year are now in a competition. The best two receive a free trip by DWNP into the national park, where uniformed (the uniform is important!) rangers give lectures on various topics.
- Another main role which requires expert knowledge is captive breeding of endangered species.

Dr. Mohd. Redzuan bin Tumin, Director Research National Museum and Mr. Zainal Abidin bin Jamaludin, Curator

- Government is funding a new National Museum of Natural History to be completed in the year 2000. It will be inside a new National Botanical Garden. Construction will start in early 1996.
- They have put together a team to visit the US, Canada, and Japan to talk to specialists in architecture, exhibit design, collection management, engineering. They requested help in meeting the right people. Could CEP help there?

- They wonder if a MOU between SI and the Malaysian National Museum could be set up to outline long-term collaboration. That would be much like the MOU between SI and DWNP.
- The basic concept is an environmentally friendly design that shows man's proximity to nature with the visitors entering at sea level, climbing on land, through the canopy until they reach the skies.
- They project a staff of 200.
- They intend to extend their staff beyond the Peninsula Malaysia only.
- They want to design biodiversity exhibits to show man's need of conserving his habitat. Maybe CEP could help there.

Mr. Raleigh Blouch, ITTO Sarawak

- Sarawak Forest Department has acquired land and has budgeted the construction of a Biodiversity Center which would practically be a museum featuring Sarawak's natural history.
- While the Sarawak Forest Department has received lots of rightful criticism about their timber harvesting, there are many excellent and totally dedicated people working there who could be ideal counterparts.

Mr. Saharudin Anan, Head DWNP Natural History collection

- DWNP has almost finished construction of a new building for their natural history collection including storage, lab and holding, and display facilities.
- DWNP will actively pursue collections throughout the country. In addition, they will try to join expeditions by other institutions.
- CEP could help in training principles of collection management, especially in tropical climates.

Ms. Cathy Fuselier, US-AEP/Indonesia and Mr. Stan Harsha, USIS/Indonesia

- Feels CEP is a very welcome program as it will bring some green environmental activities to Malaysia.
- Her office would be able to help with any organizational tasks.

PHILIPPINES

Mr. Ramon Luna, President Zoological and Botanical Society of the Philippines (ZBSP)

- He and several board members are members of the Manila Jaycees (Lion Club equivalent).

- ZBSP on letterhead of the Philippines biggest developer, Ayala Land, Inc., part of the Philippines biggest conglomerate, Ayala, Inc., has submitted a proposal to develop the New Manila Zoo and Botanical Garden.
- Board members include businessmen, lawyers, and one Australian safari park developer.
- ZBSP wrote proposal, he did not name a specific technical person when asked.
- He was chairman when ZBSP decided to develop park in 1990(?). He was asked to develop a park. He was a school mate of the then Information Minister. In the last weeks of then president Aquino she signed an agreement with them for a 25 year lease of 541 ha inside a national park. The agreement can be extended for an additional 25 years.
- Due to governmental changes nothing happened until a few weeks ago when they hosted a very high-profile meeting at the Manila Hotel with the First Lady as keynote speaker to announce ZBSP and their plans.
- He only has 2 million pesos now to run the society. He wants to approach the country's 50 largest companies to donate 1 million each for a society fund.
- He wants to approach donor agencies, UN agencies, NGOs, look into debt for nature swaps, etc. to fund development.
- He contacted the Singapore Zoo 4 months ago for technical help but did not follow up as he did not have any funds.
- He was very impressed by developments like Santoso Island in Singapore or San Diego Wild Animal Park.
- He felt uncomfortable when we asked him to join us at the meeting with the Manila Zoo. (It later turned out that the Manila Zoo had not known about BZSP's intentions until they received an invitation for the meeting at the Manila Hotel).
- Analysis: BZSP is not the society one would usually associate with such a name, only two parties (!) in my subsequent meetings had ever heard of it, they had received invitations to the meeting. The approach to the development of the park appears to be (1) nurturing of all political connections, (2) securing of all permits, (3) securing of all necessary funds, (4) hiring of technical personnel, and (5) construction. BZSP currently seems to be in phase 3. So far the planning has not involved the Philippines' conservation community. The ulterior motive remains unknown and probably lies between two extremes: giving land developers access to a national park and prime tourism site or genuine desire to provide the nation with a first national botanical garden and national zoo. As long as the latter is approached professionally and the former does not infringe on protected lands, there may be no need to determine the ulterior motive. The project is not a re-location of the Manila Zoo but rather the construction of a new one.

Mr. Andrew Buencamino, Director Manila Zoo, et al.

- An information dissemination activity is left out of the present zoo program. That has to change as 70% of the 1.8 million annual visitors are children.
- They have MOU with the Department of Education to make the zoo as part of the school curriculum.
- Visitors see the zoo as a recreational park area only. He wants to change that.
- Infrastructure will be drastically improved under new plan with funds from city and funds from new foundation "Friends of the Zoo." (I was told later that the city sold current zoo playground to developer who will build a mall. All funds went directly to "Friends of the Zoo" which now have plenty of funds to completely redesign the zoo.
- Dutch Embassy is providing technical assistance. He and Ass. Dir. are leaving for Holland, Belgium and Germany tomorrow for study tour of zoos. Dutch consultant is presently drawing up a plan for horticulture landscaping in the redesigned zoo.
- They were very upset when they heard the name New Manila Zoo during BZSP's conference. They had not previously been informed. They say the Manila Zoo will not move. It is too important to have the site downtown.
- The present zoo team is in office for less than 1 year to completely redesign the zoo. (They don't seem to have zoo experience though).
- CEP would be very much appreciated as it could help train their personnel in all aspects of zoo management.
- They just met with director of KL zoo who apparently wants to set up a safari park in the Philippines and possibly wants to buy exotic animals held on an island of the Philippines for it.
- The Dutch consultant, Colin Ridsdale of the Leiden Rijksherbarium, is recommending environmental education programs to be based at the Manila Zoo above all other activities.

Ms. Maria Viveca S. May, Grants Administrator BCN

- She as well as Frank Hicks were excited about CEP as it would open opportunities that otherwise would not exist.
- She does not know about CEP target institutions in the Pacific countries.
- She provided me with an extensive list of NGOs we could contact regarding CEP.

Dr. Celso Roque, Head Southeast Asia Program, World Wildlife Fund-US

- They are involved in creating trans-frontier park with Malaysia.
- CEP may be able to help WWF develop Subic Bay Center as a training center for PA management and GIS of the country and region.
- Had never heard of BZSP but with one phone call received full information confirming my information. The head of Ayala, Inc. is on the board of WWF-US.

Ms. Mary Jean Caleda and Ms. Marlynn Mendoza, Ecosystems Management Specialists Protected Areas and Wildlife Bureau (PAWB)

- GEF funds 10 protected areas through NIPA, covering inventory surveys, zoning, management, community development. NIPA apparently took inventory surveys out to concentrate on community development.
- EU will fund 7 protected areas directly through PAWB.
- CEP could possibly help training staff of regional PAWB offices and NGOs in buffer zone management, protected area planning, wetland assessment, education, conservation policies development, eco-tourism, resource assessment, natural resources accounting, cave management, surveys and inventories, sustainable use of wildlife resources, CITES.
- PAWB is involved in setting up a trans-frontier park with Malaysia. A seminar on specific trans-frontier park problems would be very helpful.
- Do not know BZSP and have never heard of zoo relocation project before recent press reports of Manila Hotel conference. After phone call, they told me that the original MOU was apparently handled at the ministry level only.
- Upcoming Biodiversity Convention in Bali, Indonesia in November could provide a forum to discuss CEP activities.

Prof. Gilda Rivero and Prof. Prescillano Zamora, University of the Philippines at Diliman (UPD), et al.

- NIPAS took out all survey and inventory components of GEF project, so we no longer are able to find out what we are actually protecting.
- Universities have the ability to conduct inventory surveys. UPD has tried to establish Biodiversity Center, but indecision in the government on the most appropriate site have prevented its establishment so far.
- UPD runs herbarium and natural history museum. They receive collections of UP staff expeditions but there is not central site for all collections of the country. However, National Museum runs Flora of the Philippines study. UPD herbarium is funded in part by NSF and National Herbarium (?).

- CEP could help train park directors on-site in protected areas management, training museum curators in research, extension, and instruction, provide linkages between herbaria and museums, GIS, postgraduate training of wildlife specialists to allow replacement of the Philippines' "old guard."
- Have never heard of BZSP. The old BSP died years ago.
- Manila Zoo is inhumane and in horrible condition and not an appropriate site to teach conservation.
- Manila Zoo was to be relocated to UP Los Banos (UPLB) but the scheme never materialized.

Prof. Andres L. Dans, Natural History Museum UPLB

- The Institute for Biological Sciences runs the Natural History Museum and are presently designing new exhibits and storage facilities.
- CEP is a very welcome program as training is one of the most important activities needed to help Philippine institutions get qualified staff.
- Curatorial training in collection and database management at institutions in the US would be best.
- Scholarships for graduate studies are also needed.
- He attended course at Chicago Field Museum which was very good.
- Many staff and students are members of the newly founded Philippine Wildlife Society, which cuts across institutions and agencies throughout the Philippines. It may therefore be a good coordinating body for CEP activities.

Dr. Domingo A. Madulid, Curator Botany, National Museum

- National Museum is one of the active biodiversity centers in the country. MacArthur Foundation finances its activities which mainly provides biodiversity information to individuals and agencies throughout the country.
- Ongoing Flora of the Philippines project will write a series of books, and is establishing a reference collection at the museum. They use Missouri Botanical Garden's software package.
- A good site to discuss and establish CEP activities would be the "Flora Malesiana Symposium 95" to be held July 10-14, 1995 at Kew.
- He spearheaded efforts to establish National Botanical Garden for the last five years. Despite endless meetings the government could not decide on an appropriate site. The most likely site until now was next to the American Cemetery until it was recently sold to a developer. Real Estate is too expensive in Manila. A strategic plan has been drawn up. Makiling is a university garden with a very special objective and can, therefore, not be representative for the country.

- CEP could help in designing exhibits for conservation education, develop a concept for a national botanical garden, and provide training in exhibit design.

Mr. Dennis Zvinakis and Ms. Bei S. Zonaga, USAEP/Philippines

- Greatly supported all my activities in Philippines.
- Feels a little uneasy about Manila Zoo project.
- Thinks bio-prospecting is a hot topic. The position of the US government has to be determined before any activities are planned.
- Thinks that upcoming meeting of ASEAN's Working Group on Environmental Information, Public Awareness and Education in Brunei in May might be a place to discuss CEP program.

Mr. Ronald S. Senykoff, Mr. Delbert N. McCluskey, Mr. Jose Marcial K. Ochoa, USAID/Philippines

- USAID/Philippines has set priorities for country.
- It would be ideal if CEP activities would fall within priority activities in the country, not take a shotgun approach, but rather focus on some general themes.
- USAID/Philippines is not inclined to get involved with the Manila Zoo project.
- It would be great if CEP could get involved with the education component of USAID's project at Sulliman University where they are developing an Education and Interpretation Center covering natural and cultural history of the region and targeting coastal and wetland themes.

Dr. Edwino S. Fernando, Superintendent Makiling Botanical Garden (MBG)

- Has never heard of BZSP and their intentions.
- MBG is only botanical garden in the Philippines. There was a national botanical garden which now has completely decayed. MBG is financed by UPLB (staff) and entrance fees (few programs).
- Would like to become part of international databases but lacks computer with hard disk. They have BGCI software but no knowledge on how to operate it.
- CEP could help in training propagation techniques, seed storage, documentation, interpretation. Training should be targeted towards tropical climates (e.g. Hawaii) and be regional in nature by covering Thailand, Malaysia, Singapore, Indonesia, PNG, and the Philippines who all have similar problems.

- o An important activity under CEP could be a workshop to clarify bio-prospecting (see FRIM, Malaysia). He has recently been on a commission which drew up the draft of a new law preventing all export of plant material. This would greatly effect present seed exchange practices of botanical gardens world-wide who establish and maintain their collections through seed exchanges.

SINGAPORE

Mr. Bernhard Harrison, Director Singapore Zoological Gardens, et al.

- o Singapore has been interested in developing a major environmental education project. The zoo has 2.9 million visitors annually.
- o Possibly CEP could help initiate it by providing an American expert from a major US institution. Singapore as a major metropolitan zoo could develop a master program, fund raise, and train other zoos in adapting it to their very special concerns.
- o Management-wise it would be most important to run a zoo management course with husbandry and breeding of endangered species as the main topic. The single most important thing at this time is to give curators and senior keepers practical experience.
- o Could CEP fund an administrator for SEAZA? SEAZA is rather immobile, maybe activities should be administrated separately by individual zoos.
- o Singapore Zoo would be willing to coordinate and host CEP activities.

THAILAND

Mr. Robert Mather, Coordinator WWF Thailand Project

- o Does not know of any natural history museums in Thailand despite living here for 15 years.
- o Assisted Forest Department's CITES unit in writing successful proposal to DANSED.
- o Thinks collaboration with CITES unit through technical assistance would be a very good idea, especially now that they can function better because of the DANSED grant.
- o CEP could possibly help with their environmental education programs which among others include major TV series.
- o His office would help coordinate activities.

Dr. M. Zakir Hussain, Regional IUCN Coordinator

- Forwarded CEP survey to target institutions in Bangladesh via courier and to other IUCN offices in the region.
- Training activities should be conducted by US professionals within the region as the problems are more similar and to further links between regional agencies and institutions.
- Has not heard of natural history museum in Thailand.
- His and other IUCN offices in the region would help any coordination of CEP activities.

Mr. Usum Nimmanheminda, Director Bangkok Zoo

- He is Director of the Thai Zoo Association which has three open zoos and two zoos under construction.
- They would very much appreciate any CEP activities which could improve Thai zoos. Training topics could include basic animal and plant knowledge, habitat requirements, exhibit design, re-introduction techniques, and environmental education.
- The Khao Kheow Open Zoo is currently building a training center which will open in September 1996. Potential CEP activities could be hosted there.
- Laotian Government has approached Thai Zoo Association to help develop their expertise in zoo management.
- SEAZA could coordinate CEP activities, board members should possibly meet before annual meeting to discuss activities. SEAZA has not provided any hands-on help so far.

Mr. Sophon Dumnui, Director Khao Kheow Open Zoo

- Received request by Laotian Government to help development of zoo and train personnel. Five Laotians will come in 1995. Would CEP be able to provide an American expert to design such training programs and a master plan for the new zoo. WE received detailed document on this activity.
- Would CEP be able to organize study tour for Laotians and other regional zoo administrators to Thailand and the US? He has organized very successful study tours for mid-level zoo personnel through Thailand, Malaysia, and Singapore.
- CEP could possibly help organize training exercises in fund raising, exhibit design, landscaping, veterinary training, education, captive-breeding. A first course could possibly be attached to the Taiwan SEAZA meeting in September.
- He is submitting proposal to DANSET for assistance in developing training center at Open Zoo.
- We have since received a detailed document on their proposed training activities.

Mr. Manop Lauprasert, Head CITES Unit Forest Dept., et al.

- o There are no natural history museums in Thailand. He was unable to name a contact. Collections are distributed throughout universities and agencies around the country. He suggested Jarujin of the Thai Institute of Scientific Research as contact (who later said he had no time and was involved in enough projects). Jarujin is the person most often contacted for identification of the CITES unit.
- o Wondered if CEP could help establish a forensic lab fashioned after US Fish and Wildlife's lab in Oregon.
- o They are currently finishing a CITES manual to be distributed to their border offices. Possibly the manual could be put on-line on the new DANSED funded computer network (to be installed by late 1995). Maybe SI scientists could help produce it similarly to the CD ROM versions of some SI collections.
- o Would like to send officers for conservation training courses.
- o Wonders if CEP could help assist his department in organizing biodiversity inventory survey workshops. We received a detailed document on such workshops.

Dr. Schwann Tunhikorn, Head Research Unit Forest Dept., Dr. David Smith, University of Minnesota

- o Schwann wonders if CEP could help develop some new animal guides to Thailand using Audubon (?) guides as example.
- o They are running a major mammal survey throughout the country.
- o They are preparing a set of meetings in the region (Nepal, Myanmar, Thailand, Laos, Cambodia, Viet Nam, Malaysia) to train protected area managers in large mammal surveys and distribution mapping. Meetings would be organized in those countries that excel in that particular topic. Wonder if CEP could get involved in these training activities. Will prepare a document outlining the activities.
- o Wonder if CEP could organize GIS training, attendance of ESRI courses, etc. We received a detailed document on this topic.
- o Think that zoos are not the appropriate institution to teach environmental education. That should rather be done, and in Thailand is being done, during field trips.
- o Have heard rumors that a new natural history museum is being planned.

Dr. Veerachai Nanakorn, Director Queen Sirikit Botanical Garden

- o He is establishing a regional botanical garden center with major grant from Thai government. Construction has begun with center completed by 1996.

- o Center will concentrate on a regional approach to ethno-botany and to collecting germ plasm of a target of 4000 Thai species. Has very good contacts to China, Laos, and developing contacts to Myanmar.
- o Graduated from botanical garden in New York and was intern at SI Natural History Museum. Otherwise has few international contacts.
- o Wondered if CEP could help train regional botanists in ethno-botany and in the integration of regional botanical gardens into international databases.

Ms. Julie Otterbein and Mr. Kenneth A. Caplan, USAID/Thailand

- o She is the Director of Environment Team in charge of USAID/Thailand's East Asia mission which will concentrate on Indo-China.
- o She ran a city exchange program which required major administrative work of which CEP should be aware.
- o CEP is very welcome as it could be a very useful program.
- o They would like to work together closely with CEP.
- o At present their activities are restricted to Cambodia, Mongolia, and Thailand but they may expand when additional countries get cleared.
- o CEP may want to concentrate on identified high priority areas and not dot the landscape with individual activities. CEP should rather concentrate on a few main themes.
- o It would be ideal if CEP activities could be conducted after a competitive process.
- o Potential collaborating institutions should continue to be informed about the existence of CEP. Their office would help as much as possible.

APPENDIX 3

RESPONSES OF ASIAN INSTITUTIONS POLLED BY MAIL, FAX, E-MAIL, AND "RUMORS"

The following responses were tabulated up to April 20, 1995.

**Dr. Mingsarn Kaosa-ard, Director Natural Resources and
Environment Program, Thailand Development Research Institute
Foundation**

- o They are policy research institution.
- o They very recently organized a conference on Biodiversity and Natural Resources Management in Mainland Southeast Asian Economies. They wonder if CEP could support a follow-up workshop on significance of biodiversity to industry and the role of the general public in biodiversity conservation, to be held either in Thailand or in China in 1996.
- o They are seeking funding for a proposed study to upgrade Thailand's most visited national park for green education and nature tourism.

**Drs. Corlett, Dudgeon, and Weatherhead, Dept. Ecology and
Biodiversity, University of Hongkong**

- o They were set up to target local and regional issues in biodiversity conservation.
- o They are involved in a biodiversity survey of Hongkong, and in in-situ and ex-situ conservation of a variety of plant and animal species, including breeding and re-introduction of several species.
- o They would like to participate in conservation exchanges through CEP.
- o They would facilitate CEP activities to be held at the university.
- o They have forwarded our inquiry to other relevant institutions in Hongkong.

Dr. Alfred, Add. Dir. Zoological Survey of India, Calcutta

- o Their main objective is to survey, identify and inventory species from throughout the country.
- o They would very much like to participate in CEP, however, participation would need clearance from their ministry.
- o They suggest to also contact WWF-India, BNHS, SACON, and the Botanical Survey of India.

Mr. Ashiq Ahamd, WWF-Pakistan, Peshawar, Pakistan

- o He was formerly with the Pakistan Forest Institute.
- o They would be interested in participating.
- o He provided very detailed answers to the questionnaire.

Mr. John McEachern, IUCN rep, Kathmandu, Nepal

- Questionnaire was forwarded by IUCN SE Asia Regional Office.
- They would be interested to participate.
- He provided very detailed answers to the questionnaire.

Dr. John McKinnon, Asian Bureau for Conservation, Hongkong

- Would be interested in programs dealing with data exchange.

Dr. Sun Hang, Kunming Institute of Botany, Academy of Sciences, China

- They are conducting biodiversity surveys. They will host an international symposium on floristic diversity in 1996.
- They would be interested to participate in CEP.

Mr. Dylan Fuller, South Pacific Regional Herbarium, Fiji

- Would be very interested to participate.

Dr. Ely L. Alcala, Center for Tropical Conservation Studies, Silliman University, Philippines

- Would be interested to participate in CEP, especially as they are recipient of major USAID/Philippines grant.

Mr. Laurentius N. Ambu, Sabah Wildlife Dept., Kota Kinabalu, Malaysia

- Are currently developing new zoo and botanical garden.
- Would be very interested to participate.
- Training programs and exchange of officers between institutions would be best activities.

Mr. Avanthi Jayatilake, USAID/Sri Lanka

- Would be interested to participate in CEP.
- Suggested many potential participating institutions and activities for Sri Lanka.

Mr. Ching Nan Liu, Superintendent, Taroko National Park Headquarters, Fushu, Taiwan

- Thinks CEP is a very good idea.
- Suggested several other Taiwan institutions to participate.

SEAsia TEP-CEP Survey
Contacts "with" business cards

App. 4.

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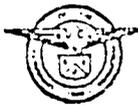


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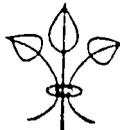
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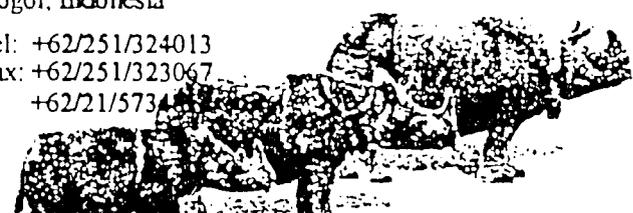
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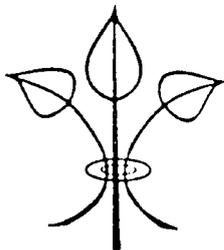
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