

FIRST TECHNICAL REPORT
FOR
PROJECT INS/82/020
GOVERNMENT OF INDONESIA
UNDP/UNDRO – USAID PROJECT

**STRENGTHENING DISASTER PREPAREDNESS
&
DISASTER MANAGEMENT
IN INDONESIA**

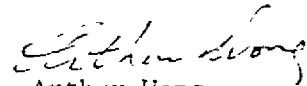
MARCH 04 – NOVEMBER 30, 1986
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F O R E W A R D

This report is made possible as a result of close coordination and cooperation of project personnel from the strong and aggressive National Project Director Mr. Jusuf Talib SH responsible for welding personnel links into a single activity with a common purpose; The National Project Coordinator Drs. Aspan S. Danuatmodjo who has contributed his ideas and years of knowledge of disaster management to guide the assigned personnel towards the common goal; Project Administrative Officers past and present Mr. Dede Maedi and Mrs. Sulianti SH who have provided the administrative expertise and support to ensure a smooth operating organization; bi-lingual secretary Mrs. Miarka Rubianty Sudarsono who has worked long and tedious hours to pull this report together; and Mr. Ade Parera who provided transport services 12 hours per day and other administrative services to the project.

Thanks are due to the four (4) Activity Leaders and their Support Staffs (Annex B) who have contributed and provided clear perceptions, understandings and actual experiences to the project. And finally, many thanks to the Project's UNDP Backstop Officer Ms. Amelia Yani who has so ably provided advice, assistance and backstop support.



Arthur Wong
Chief Technical Advisor
INS/82/020.

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SUMMARY

This first report for Project INS/82/020/C/01/31 "Strengthening Disaster Preparedness and Disaster Management in Indonesia" covers the period from April 15 through November 30, 1986. The Project is jointly funded by United Nations Development Program (UNDP) and the U.S. Agency for International Development/Office of Foreign Disaster Assistance, Washington DC, (USAID/OFDA). UNDP/OPE (Office for Project Execution) has sub-contracted execution of the project to the office of the United Nations Disaster Relief Coordinator (UNDRO). The Department of Social Affairs is the GOI Implementing Agency, and the Office of the Coordinating Minister for Peoples' Welfare is the Coordinating Agency. The Project Document and Protocol was signed March 04, 1986 and project staff personnel were appointed April 15, 1986. The Chief Technical Advisor arrived in Indonesia June 29, 1986 on initial consultancy of six months.

Initial progress was slow due in part to inadequate working facilities and limited funding availability from the GOI sector. Although the GOI project budget was planned months prior to its signing on March 4, 1986, it was expected that the GOI budget resources reflected in the Project Document would apply. However, this is not the case.

Approximately sixty percent of Indonesia's foreign exchange is from the sales of oil and gas. With the decline of oil prices in 1985, the 1986-87 fiscal year budget that began April 1986 was reduced by an overall 7 percent and Project Aid Budgets were reduced by 18 percent. The State Minister for Development Planning declared that the austerity measure would be strongly enforced, and this has resulted in budget constraints to the project. At this level we are not sure of the extent of the austerity measures applied to INS/82/020, but we do recognize that funding is not easily obtainable. For example, funding for a vehicle operator (established at 2.4-million rupiahs for 1986) is not available to pay overtime, and travel required for in-country travel to gather necessary information from the provinces has been limited. It is not anticipated that the present

reduction of the GOI operating budget in 1986-78 will affect the end of project status during the first year of implementation as the GOI have to date, been able to provide the necessary funding from other programs.

In other areas where the project may appear to be behind schedule, the project does expect to close the gap during 1987. For example, under the terms of the project document, the project provides for six (6) man-months of international and 28 manmonths of national consultancy assistance in 1986. Obviously this target cannot be reached.

BACKGROUND

Project INS/82/020 grew from the result of a number of studies into the management of Indonesia's disaster programs. Consisting of 13,667 islands totalling 1,104,600 square kilometers inhabited by 167 million people ^{1/}, the Indonesian Archipelago is subjected to all known destructive phenomena resulting in average of more than 560 significant destructive events each year.

- a. Located along the equator between the southeastern tip of the Asian Mainland and Australia, Indonesia astrides, three volcanic belts ^{2/} as shown in annex "A" and is considered as one of the most active volcanic regions in the world. Of its 128 volcanoes, 70 are considered very active and dangerous. Indonesia experiences at least 350 tectonic earthquakes annually with most epicentres located at sea. Ten (10) volcanoes ^{3/} were active from January to 30 November 1986, (T.J. Casadevall).

Footnotes

^{1/} GOI Bureau of Statistics

^{2/} a. The Alpidic-guilde belt reaches Indonesia at the island of Sumatera passes thru the Sunda Straits to Java, Bali, Lombok, Flores and to the small islands of the Banda Sea.

b. The East Asiatic belt is part of the Circum Pacific reaches Sulawesi then north to Sangir and Talaud Island and beyond.

c. The Circum Australia belt passes through Irian Jaya to the islands of Halmahera, Ternate, Makian and surrounding area.

^{3/} - Sorikmarapi (North-Central Sumatera) Jul 05
- Talang (Central Sumatera) May-Jun
- Tangkubanparahu (West Java) March and Sep
- Diang Volcano (Central Java) Apr 13-27
- Semeru (East Java) Jul-Sep
- Sangeang Api (Sangeang Island near Sumbawa) Jan-Sep
- Kelimutu (Central Flores) April and Jun 86
- Ili Boleng (Adonara Island, East of Flores) May 28
- Lokon (North Sulawesi) Apr - Sep 86
- Mt. Merapi, (Central Java) Oct 12 to present.

As volcanic material enhances soil fertility and improves productivity of farmlands, some 151 million Indonesians dwell on or near the volcanic peaks. Volcanic eruptions in Indonesia have been among the most destructive in history ^{1/}.

- b. Poisonous gas emissions related to possible interaction of ground water with magma or degassing of a magma body, have periodically caused evacuations of surrounding villages in volcanic regions.
- c. Seismic seawaves or tsunamis are also threats to life and property particularly in coastal areas. Produced by sudden movement of the ocean floor, tsunami waves reaching heights of 26 or more feet are capable of heavy destruction.
- d. Topographic conditions, particularly on the heavily populated islands of Java and Sumatera have resulted in serious floods and landslides each year. Thousands of hectares of rice fields are annually at risk.
- e. Prolonged drought which results in crop failures occurs periodically in central and eastern areas of Indonesia. Short rainy seasons, infertile soils and insect pests have caused food shortages in the areas of South Sulawesi, Maluku, West Nusa Tenggara, and Irian Jaya.
- f. Forest fires devastate thousands of hectares of forest lands annually. A total of 26,442 hectares of forest lands have been reportedly destroyed this year from January to August. In 1985 3.6 million hectares were destroyed. Fires in cities, towns and villages results in tremendous loss in property damage and thousands of people are made homeless each year. Between January 1st and September 30 this year, the city of Jakarta (Population : 7.8 million) experienced 535 fires ^{2/} resulting in estimated monetary loss of US\$8.74 million.

Over a five (5) year period, Indonesia has experienced over 2,800 significant destructive events annually. Such disasters have resulted in annual losses amounting to 125-million dollars in damage to property, farmlands and livestock.

Footnotes

- Tambora 1815. Killed 12,000. Another 80,000 died of starvation. Lower global temperatures
- Krakatau 1883 Drowned 36,000 est. Explosions heard 2,200 miles away.
- Kelut 1919 Killed estimated 5,100
- Agung 1963 Killed 1,143
- Jakarta Fire Department.

Human casualties average almost 1,000 people killed with an additional 5,000 injured annually. It is estimated that 100,000 are made homeless each year by disasters.

Added to human suffering and loss in lives, property, farmlands and livestock, the effects of disaster have adverse effects on the environment and people's lifestyles, resulting in disruption of the national economy and the national development efforts.

BEGINNING PROJECT STATUS

In dealing with disaster situations, each government ministry or department is responsible for disaster-related activities within its own areas of competence. Actions tend to be on a mono-sectoral basis rather than on cross-sectoral and coordinating basis. The government recognized the need for cross-sectoral coordination from the national level down to local levels and accordingly, Presidential Decision 028/1979 dated 18 June 1979 established non-structural coordination boards ^{1/} at the national, provincial and regency levels. These coordination committees were severely tested during the Mount Galunggung volcanic emergency in 1982, and confirmed the need for increased efforts in the overall management of disasters, and to forge the linkages between Indonesian government agencies. Reviews of disaster management procedures and systems in effect were scrutinized during two gatherings of disaster managers at :

- a. The National Training for Provincial Management of National Coordinative Units for Emergency Relief of Natural Disasters in March 1981, and
- b. The National Workshop on Mount Galunggung Volcanic Risk Management in September 1983.

Footnotes

1/ BAKORNAS PBA at the national level and SATKORLAK I PBA and SATKORLAK II PBA at the provincial and regency level respectively

Both training and workshop sessions were jointly sponsored by UNDP/ ILO, UNDRO, UNICEF and the U.S. Agency for International Development (USAID). Attendees at both meetings, together with UN and foreign observers, were in agreement that disaster preparedness and disaster management systems must be upgraded in order that the government and its people could better strengthen the national capability, and respond effectively to disasters to mitigate negative impacts on social and economic development. Accordingly, USAID and UNDRO combined resources to produce Project Document INS/82/020. In brief, the project with the Government of Indonesia would address the following :

- A concerted and major training program for disaster managers at all levels;
- Development of organizational and procedural handbooks for use at all levels;
- Improvement of disaster communications and information management systems;
- Review significant hazards and make recommendations for improvements;
- Develop future options for the future of disaster preparedness and management in Indonesia.

PRESENT STATUS OF THE PROJECT

a. Personnel - Project Director & Staff

- The project is being implemented under the supervision of Mr. JUSUF TALIB SH appointed by the Government of Indonesia as the National Project Director (NPD). He is responsible for basic planning decisions, budget approval and overall progress of project implementation. Mr. Talib is responsible to the Minister of Social Affairs who is also First Chairman of BAKORNAS PBA.

- Drs. ASPAN S. DANUATMODJO is the National Project Coordinator (NPC) recruited by UNDP/Jakarta on behalf of UNDR0 for full-time assignment to the project. Under the authority of NPD, Drs. Danuatmodjo provides the technical guidance and coordination of all outputs/activities. He is the link between the government agencies, UNDP Resident Representative and the USAID Mission in Jakarta. Appointed 15 April 1986.

- Mr. DEDEH MAEDI was the Project Administrative Officer (PAO) recruited by UNDP/Jakarta on behalf of UNDR0 from 15 April to provide overall administrative support to the project, the NPC and Chief Technical Advisor (CTA). On 16 September he departed Indonesia to attend a three (3) month training course at Oxford Polytechnic, United Kingdom and the NPD has determined that Mr. Maedi will be assigned as Special Assistant to the Project Director upon his return to Jakarta.

- Mrs. SULIANTI SH was appointed as the Acting Administrative Officer during Mr. Maedi's absence from post. Since Mr. Maedi will be transferred to the office of the National Project Director, Mrs. Sulianti has been appointed to fill the position vacated by Mr. Maedi. As Administrative Officer, Mrs. Sulianti is also designated as OIC Transport, Property Accountable Officer, Security Officer and Fire Warden.

- Mrs. RUBIANTY SUDARSONO is the bilingual secretary, proficient in Bahasa Indonesia and English, recruited by UNDP/Jakarta on behalf of UNDR0 to provide secretarial services. Mrs. Sudarsono is also designated Petty Cash Custodian. Appointed 15 April 1986.

- ARTHUR WONG (U.S.A.) appointed Chief Technical Advisor (CTA) 24 June, arrived in Indonesia to assume CTA duties on 29 June 1986. Although he will not work full time with the project, the CTA will retain his responsibilities and minister progress, problems and issues for the length of the project.

- Mr. ADE PARERA, is the primary vehicle Operator and Driver for the CTA, International Consultants, overseas visitors and project personal. He also assists project personnel in miscellaneous office tasks as required.
- Ms. IRIANI, trainee clerk from Ministry of Peoples' Welfare has been recommended for permanent assignment to the project.

UNDP Support

Primary Backstop Officer providing advice and assistance to the Project Staff is Ms. AMELIA YANI.

Activity Leaders and Support Staff ^{1/}

The Government of Indonesia has appointed the following personnel as Activity Leaders and Support Staffs :

| | | |
|---------------------|---|---|
| Activity/Output-I : | - Drs. SOETARSO MSW Activity Leader-I | Director of Social Workers Training, Dept of Social Affairs |
| | - Drs. SUPARMAN Support Staff | Dept of Social Affairs |
| | - TOBING D.L. SH Support Staff | Dept of Social Affairs |
| Activity/Output-II: | - Drs. H. POEDJI AM Activity Leader-II | Director of General Governmental Development Dept of Home Affairs |
| | - SIAGIAN SH Support Staff | Dept of Home Affairs |
| | - SUMIDI Support Staff | Dept of Home Affairs |

Footnotes

1/ Personnel Staffing Chart is attached as Annex "B"

- Activity/Output-III : - Ir. MARDJONO NOTODIHARDJO Head,
Activity Leader-III. Bureau of Planning,
Dept of Public Works
- Ir. ROMULUS Dept of Public Works
Support Staff
- Drs. SIAGIAN Dept of Public Works
Support Staff
- Activity/Output-VI : - DR. R.E.SOERIAATMADJA Deputy Assistant Minister
Activity Leader-IV of State for Population &
Environment
- Ir. ISA KARMISA Min for Population &
Support Staff Environment
- Activity/Output-V : - To commence in the second year and personnel
will be assigned accordingly.

b. Project Facilities

The Project's working facilities were initially located in one room approximately 15 x 20-feet located in an annex building at the Ministry for Peoples' Welfare. In addition to accommodating the PAO, secretary and CTA, this room was also used to maintain a number of file cabinets lining the entire length of one wall and the BAKORNAS PBA teletype machine occupied an adjacent corner. The NPC maintained his desk in the main building of the Ministry, but that office was shared with two (2) other occupants. Needless to say, these were considered inadequate working arrangements.

In July the PAO and CTA visited the DEPSOS training facility located at Jl. Dewi Sartika 200, Cawang, East Jakarta. This facility located on approximately one (1) hectare of land, was to undergo rehabilitation after which it would be used by Activity-I for disaster management training. The CTA selected four (4) rooms and requested the NPD for authorization to move to this facility.

The NPD agreed, and rehabilitation of the four rooms began immediately. The NPC, PAO, secretary, driver and CTA occupied the four renovated, furnished and air-conditioned offices on August 02, 1986. Through an arrangement with BAKORNAS PBA, a trainee clerk who had provided the project staff clerical and typing assistance at the Ministry was also transferred to the new facility.

Since August, the entire facility at Cawang has been undergoing rehabilitation and renovation. New roofing has been installed on the main administration building and trainee/student living quarters, work to replace rafters and roof on the auditorium has recently been completed. Interior rooms are still undergoing rehabilitation/renovation and the contractor believes that all work will be completed by December 1986. Birds which formerly occupied the administration building and auditorium during its years of vacancy, appear to be a current problem but may be solved after renovations are completed and buildings are again fully occupied. The government has allocated 280-million rupiahs (US\$248,668 equivalent) for complete rehabilitation work including costs for furniture and fittings.

The facility is officially designated as the "Indonesia Disaster Management Center" (IDMC).

c. Project Administration

To date, most of the administrative functions have been under the general direction of the Chief Technical Advisor. Office hours, personnel actions, administrative control of records and files, general office procedures, reporting procedures, requisitions and accountability for equipment and publications, equipment and vehicle control and inventory have all been established, and standard operating procedures (Annex "C") have been published as necessary. The PAO has been designated as OIC Transportation and also as the Property Accountable Officer.

The secretary has been designated Custodian of Petty Cash Funds. Until the facility has been completely renovated and fully occupied by Activity-I, the PAO also acts as Security Officer and Fire Warden.

d. Reference Library

Publications for the reference library are continually being sought and collected from both local and international sources. However, this will be a slow and continuing process.

The Disaster Research Center at the University of Delaware in Newark, Delaware has offered to provide IDMC Library with approximately 200 disaster-related publications free of charge except for \$100.00 to help defray mailing costs. IDMC has also subscribed to membership in the Research Committee on Disasters for two (2) years, during which time IDMC Library will receive periodic professional disaster journals and newsletters.

The British Council have accepted IDMC's application to participate in the British Council's book distribution program valued at approximately 1,400 pounds sterling. However, publications from the British Council cannot be requested until the U.K's new fiscal year which begins April 01, 1987.

Letters requesting bibliographies/publications have been mailed to :

- Australian Counter Disaster College, Australia
- East-West Center, Honolulu
- Emergency Planning Canada, Ontario
- Federal Emergency Management Agency, Washington
- National Emergency Training Center, Emmitsburg, MD
- UNICEF Library, Jakarta
- U.S. Geological Survey, Colorado.

Up to forty books per month are available from the Asia Foundation "Books for Asia" program since September 1986, but disaster-related publication from this source has been scarce.

The Royal Netherlands Embassy have requested that IDMC identify publications needed and they would make the purchases, but the Embassy must first obtain approval from Holland to participate in the project.

Status of publications owned by IDMC will be maintained by computer.

e. Fellowship, Training and Seminars (Overseas)

- United Kingdom

Administrative Officer Mr. Dedeh Maedi was accepted for training at a Disaster Management Workshop in the United Kingdom (U.K.) under the Colombo Plan Technical Cooperation Program from September 16 for three (3) months at Oxford Polytechnic. The award program consists of four (4) weeks of pre-course English tuition, followed by five (5) weeks at the Disaster Management Workshop and concluding with four (4) weeks of Attachment Visits. Total cost of this U.K. contribution is estimated at £4,000 ^{1/} or US\$.5,714.

The award recipient is expected to broaden his knowledge of disaster management and equip him to take up posts of senior responsibility in the various sectors of disaster management. This training program is an integral part of Project INS/82/020.

Report of the awarded program attended will be prepared upon Mr. Maedi's return to Indonesia. Copies of the report will be forwarded to the British Council and UNDRO.

Footnote

1/ Provided by The British Council/Jakarta.

- Thailand

The following personnel have each completed six (6) weeks of attendance at the Disaster Management Training Course conducted at Asian Disaster Preparedness Center, Asian Institute of Technology (ADPC/AIT) Bangkok, Thailand :

- | | |
|---------------------------------|----------------------------|
| - Drs. Soetarso ^{1/} | - 25 July - 05 September |
| - Mrs. Sulianti ^{1/} | - 25 July - 05 September |
| - Drs. Rusdibjono ^{1/} | - 25 July - 05 September |
| - Drs. R. Suhud Pribadi | - 20 October - 29 November |
| - Dr. Anne Kastanya | - 20 October - 29 November |

Cost of the training, travel and per diem for participants at ADPC/AIT totalling US\$15,575 were funded jointly by UNDP/Thailand and GPT/II funds ^{2/}. A result of the training at ADPC/AIT has been the recent introduction of disaster management into the curricula at the Institute of Government Studies which provides training to potential regency chiefs throughout Indonesia. The ADPC course has expanded the knowledge of participants concerning the various disaster aspects and its management systems; provided advance teaching techniques and methods in training; and resulted in establishment and utilization of international linkages to strengthen Project INS/82/020 activities. All course participants are to be attached to IDMC as trainers and to provide support and assistance to other activities of the project.

The report by attendees of the 20 October - 29 November course will be forwarded to ADPC/AIT upon completion.

- U.S.S.R.

National Project Coordinator Drs. Aspan S. Danuatmodjo attended the UNDR0-sponsored training seminar "Earthquake Prediction and Mitigation of the Earthquake Losses" at Dushanbe, USSR 8 - 14 October 1986. The program had been organized by UNDR0 in cooperation with the

Footnotes

1/ Drs. SOETARSO, Mrs. SULIANTI SH and Drs. RUSDIBJONO have produced the 48-page report "First Disaster Management Course 25 Jul - 05 Sep 86."

2/ General Participant Training (GPT) funds are provided by USAID/Education and administered by GOI/BAPPENAS.

Government of the USSR prior to the signing of the project document in March 1986.

Attendance at this training seminar has resulted in broadening knowledge of earthquake prediction and mitigation, and increasing knowledge on impact of earthquakes on economical and social development. The attendance has not only enhanced the professional capacity of the participant, but resulted in the knowledge (such as updated and modern methods of earthquake prediction and the development and strengthening the natural structures for the study and mitigation of earthquakes) passed to the project Activity Leaders for inclusion into respective phases of their programs as applicable.

Report on the seminar has been completed and copies forwarded to UNDRO.

f. Other Possible International Project Participants

- Australia

In exchange of letters with the Australian Counter Disaster College (ACDC) at Mt Macedon, Victoria, the possible nomination of an Indonesian trainer to spend a period of attachment to ACDC was referenced by the ACDC Director. Disaster management training for Indonesia's disaster managers at ACDC was also offered. This arrangement would be mutually beneficial to both ACDC and IDMC as it would provide for an exchange of ideas concerning teaching techniques and establish a linkage between both disaster institutions. These items will be further discussed during the consultancy visit of ACDC staff member 8 - 13 December. Meetings have been held with a staff member of the Australian Embassy/Australian Development Assistance Bureau (ADAB) concerning possible Australian participation in the project and ADAB is awaiting a reply from Canberra.

- New Zealand

The New Zealand Embassy and the New Zealand Director for Civil Defense has been contacted for possible New Zealand participation in the project and for possible training of Indonesian Civil Defense managers in New Zealand. With 3.6 million Indonesian civil defense workers in 27 provinces, training for civil defense managers is desirable.. The New Zealand Embassy still awaits reply from Wellington.

- Netherlands

The Royal Netherlands Embassy have shown interest in the project and have request a letter from IDMC outlining the extent of the Netherlands participation. Specific areas mentioned were possible workshops and seminars for disaster managers in Holland; Dutch consultants and expertise in technical fields as flood control; ecology and environment; volcanology; and continued contact with the International Institute for Aerial Survey and Earth Sciences.

- Embassies of Japan and Sweden will advise IDMC of their possible participation after they have received notification from Tokyo and Stockholm respectively.

g. Other IDMC Linkages

In addition to the contacts named in paragraphs d, e and f above, IDMC has established a firm linkage with the Asian Disaster Preparedness Center, Asian Institute of Technology (ADPC/AIT) in Bangkok Thailand. A four (4) day meeting at ADPC 12 September 1986 culminated in a Memorandum of Understanding (Annex "D") between ADPC and IDMC for collaborating in exchanges of information and cooperative assistance between both institutions. IDMC hopes to establish similar linkages with disaster-related institutions in other countries of the region.

h. Output-I

The immediate objective of Output I is to improve disaster management capabilities of key inter-departmental staff through integrated disaster management training. In accordance with work plans, Activity-I was to have completed the following during this reporting period :

- Appoint the Support Staff
- Establish an Inter-Departmental Training Program Committee
- Review and confirm a complete training staff and lecturers
- Orientation of the core training staff and preparation of the Master Trainers course

The appointed support staff and training committee continues to revise its training modules and the major contents of the curriculum. With training of 40 Master Trainers scheduled to begin 12 January 1987, the activity is in process of finalizing its budget plan and preparing to orient its training officers and administrative staff members. Arrangements have been initiated for an international consultant from the Australian Counter Disaster College, to assist and advise on the training modules and curriculum 8 - 13 December 1986.

The administration building containing the classrooms, syndicate rooms, library and auditorium are still undergoing rehabilitation/renovations and all work is expected to be completed during December 1986. Requests for training aids equipment and audio-visual equipment have been submitted with 15 December requested as the delivery date. (Annex "E").

i. Output-II

The immediate objective for this reporting period is the nomination of the Activity's Support Staff, and establishment of its Inter-component Consultative Committee to begin a review of

the objectives and determine the schedule and methodology for research and data-gathering, and determine the organization, design, content, and distribution of the handbook. The review of the objective and determination of methodology for research and data-gathering has been accomplished. The Activity continues its data gathering from available publications and literature at the national level and from SATKORLAK PBA at the provincial and regency levels. The Activity expects to complete the inventory of cross-sectoral related organizations in November 1986, and thereafter begin work on the design and content of the handbook.

The objective of Output-II is to produce a cross-sectoral BAKORNAS PBA/SATKORLAK PBA Organization and Procedures Handbook to provide guidance on actions to be taken in the event of disasters.

j. Output-III

The objective of this output is to provide measures to strengthen disaster communications and information management. This output is to provide a written assessment and specific recommendations to upgrade the readiness and responsiveness of BAKORNAS PBA by improving the ability to acquire, evaluate, analyze, collate and disseminate disaster information.

The Output's study will review the significant hazards to strengthen disaster communication and information and assist in developing counter-measures that would benefit national planners and policy makers especially with respect to disaster-related inputs to the next Five Year Development Plan (REPELITA V).

During this reporting period, the Activity Support Staff and Inter-departmental Coordinating Committee (ICC) have drafted a paper reflecting method and the analysis system to be used in determining the reporting systems to be used. The activity is

in process of devising a second questionnaire to be used in gathering an inventory of procedures presently used in the provinces for disaster reporting.

k. Output-IV

The objective of Output-IV is to provide a resource and procedures study on a cross-sectoral risk monitoring and control mechanism. The Output will provide specific recommendations on monitoring of disasters at national and provincial levels of hazards to population property and development projects and analyze and recommend improved counter-measures. The study will identify existing deficiencies and make corrective recommendations.

In this reporting period the supporting staff and Inter-Departmental Consultative Committee are fully functional and the office of the State Minister for Population and Environment have consolidated its staff and facilities to provide support for the implementation of output-IV. Inventories of data collected to date is being distributed to other Activity Leaders so that available information may be integrated into the respective programs and outputs. The ICC will be the primary mechanism to draft the vulnerability and risk analysis and to consider the suggestions and recommendations for all planners and decision makers in matters concerning risk-monitoring systems. Annex "F" reflects the monitoring capabilities for disaster mitigation.

l. Output-V

Output-V will begin in the Project's second year to conduct a resource and procedures study to determine the future options for disaster management in Indonesia. Based on its study and review of the other four activities, Output-V will formulate conclusions and make specific recommendations on options for disaster management for the benefit of policy makers over the medium term.

m. Inter-departmental Consultative Committee (ICC)

Activities I-IV have been required to establish Inter-departmental Consultative Committees (ICC) as necessary to result in cross-sectoral involvement of all GOI Departments. In addition to serving as contact person, the committee member is able to provide the Activity Leader with information concerning available expertise and resources from respective departments. Meetings are held with ICC at the discretion of Activity Leaders.

U.S. Dollar Expenditures & Disbursements

Except for salary payments, project expenditures did not begin until July. Since then, expenditures have been steady but behind schedule, caused in part by the slow start up of the project. Annex "G" provides a summary of expenditure and disbursement from April to October 31, 1986.

A revision of the annual budget figures will be necessary. Also, due to the late start of the project in 1986, the revision should also provide a budget for January through March 1989. The proposed revised budget is reflected in Annex "H".

Equipment Purchases

Equipment purchases were held in abeyance pending availability of secured facilities and after it was certain the equipment could not be made available from GOI or other third party sources. As rehabilitation and renovation of the training facility progresses, request are being submitted for procurement and installation of training aids and audio-visual equipment. Equipment purchases to date are as follows :

For use by Project Administration :

- Typewriter, electric.....US\$1,110.12(B.L.#42)
- Calculator, 12-columnUS\$ 77.71(B.L.#42)

- Vehicle, Van, Toyota, Kijang*..... US\$9,746.89...(B.L.#42)
- Photo Copier Canon* US\$5,856.13...(B.L.#42)
- Air Conditioning unit for Jeep..... US\$ 364.12...(B.L.#41)
- Computers, equipment and
software for Admin/Library
and each Activity US\$15,907.32...(B.L.#42)

* Joint usage by Project Administration and Activity-I.

Purchase of training aids equipment and audio-visual equipment for the Training Activity have been requested. A listing of the items request for 15 December delivery is reflected in Annex "E".

VISITORS FROM OVERSEAS

Overseas visitors during this reporting period were as follows :

- 16 Jun 86 Japanese delegation from Japan International
Emergency Relief System
- 20 Jun 86 Mr. Brian Ward
Director
Asian Disaster Preparedness Center (ADPC)
Asian Institute of Technology
Bangkok, Thailand
- 21 Jul 86 Mr. Moon Sup So
Regional Bureau for Asia and Pacific
UNDRO/New York
- 29 Jul 86 Dr. Arthur N.L. Chiu
Professor of Civil Engineering
University of Hawaii
- 09 Aug 86 Dr. C. Voute
Chairman
International Expert Panel (IEP)
International Institute for Aerospace & Earth Sciences
The Netherlands
- 06 Oct 86 Mr. Douglass Stafford
Deputy Asst Administrator and Director, Division of Finance
UNDP/New York
- 09-13 Nov 86 Mr. Giles M. Whitcomb
Assistant Coordinator
UNDRO/Geneva

ISSUES & RECOMMENDATIONS

- a. Although the periodic monthly meetings between Staff and Activity Leaders are useful and provides information concerning current status of progress, participants at these meetings tend to hold back on problem areas they may consider to be internal, and which could easier be worked out with Project Staff assistance. For example, after computers had been distributed and set up, it was found that all computers were not operational as qualified operators were not available to operate the equipment, and the activities were hesitant in notifying the project staff of this problem. This is in example of the need for a closer relationship between project staff and project activity. (We have since contacted all activities to determine the extent of training required for computers operators and are making arrangements to have the people sufficiently trained so that the equipment can be fully utilized).

It is the recommendation that the project staff make more frequent visits to Activity Leaders and their Support Staffs, and that Support Staff do not hesitate to call upon the project staff for assistance at any time. Contacts or informal meetings between staff and Activity Leaders and their respective support staff every two weeks should result in closer working relationship and ensure adherence to the Project Docuemnt and Work Plans.

- b. Follow-up contacts with other third party participants and disaster-related agencies in the private sector need to be maintained. Although not directly related to the project document, there is a need to maintain rapport and working relationship with private agencies now before a disaster happens, and bring the disaster-related interests of these activities closer to the IDMC, so that when a disaster does occur, the types and quantity/quality assistance is already known and established. Cooperation between the government and the private sectors to share the responsibility of disaster preparedness, response and recovery, needs to be expanded so that a disaster does not become the sole responsibility of the GOI.

The training of disaster managers should also be extended to the private sectors including industrial plants particularly those engaged in chemical manufacturing which could signify more complex hazards. Hospital personnel should also be included in both the project's training and handbook phases in the event the hospital facilities are called upon to assist during a major disaster.

Linkages need to be established between the Project and universities to encourage scientific and social research into all aspects of disaster mitigation and management.

- c. All GOI Ministries and participating departments/agencies will need to incorporate the funding requirements of the project into their respective budget submissions. Although slow in starting up during the initial phases, funding requirements for the second and third year of the project could result in serious setbacks and delays unless actions are taken immediately to resolve the issue. Inadequate funding results in reduced incentive. Funding requirements for Output-V must also be considered, and the GOI should determine and identify the responsible ministry/department so that adequate funding can be made available to the responsible department.

d. Operations and Information Center

An improvement of disaster communications systems is required at all levels. This was the common theme amongst recommendations made during the Galunggung disasters. The GOI recognizes there is an immediate need to establish a central Operations/Information Center (OIC) for the collection, dissemination and analysis of data gathered by all departments and agencies involved in disaster management of natural and technological hazards.

The following is but one example of length of time taken to obtain disaster information. In late July, it was reported that a forest fire was in progress in Sumatra that had to date, destroyed 250-hectares of forest lands. It was more than week later before

information could be verified and confirmed that indeed a forest fire had taken place but only 25-hectares had been destroyed and that heavy rains had extinguished the fire. If there had been a central operations and information center in operation, it would not have taken the length of time that it did to confirm that this particular fire had existed or happened. Though not included in the Project Document, the GOI confirms an immediate need to establish a Operations/Information Center (OIC) for the collection, dissemination and analysis of data gathered by all departments and agencies involved in disaster management of natural and technological hazards.

The operations/information center under the direction of BAKORNAS PBA would be in contact between BAKORNAS PBA and SATKORLAK PBAs throughout all 27 provinces and regions and be linked by telephone, teletype and radio. OIC would also be linked to BMG and VSI operations rooms, and be the center for analysis and dissemination of all information on a particular disaster or crisis with information available to all departments/agencies of the government and private sectors involved in disaster mitigation and management. OIC could also be the official center for dissemination of new releases.

During an emergency, the operations room would be manned by decision-making managers from all involved GOI Departments, (i.e. Social Welfare, Public Works, Public Health, Home Affairs/Civil Defense, VSI, BMG and etc). During periods of inactivity, manning of OIC would be on rotational basis from the various GOI Departments as directed by BAKORNAS PBA.

Training classes in session during an occurrence of a major disaster could be temporarily suspended, and trainees would be at the disposal of the BAKORNAS PBA managers of OIC for duty to disaster evaluation teams, other task force teams or duties as directed by OIC.

The Operations Center would establish and maintain computerized data-base that would expedite response to disasters. E.g. maintaining listings of medical supply companies that could respond immediately for needed medical supplies. It is not impossible to begin establishing an Operations and Information Center now, providing the authorities and the project is sufficiently aggressive and flexible in pursuing this matter. A small vacant lot adjacent to IDMC is also available for purchase by the GOI and the NPD suggests acquisition of this property by GOI if needed. The building north of the administration building could be used, but a second floor needs to be added to provide office and administrative space for Operations and Information Center personnel. The administrative space would be needed during a disaster occurrence.

Although this plan is not an operational activity of the project, we recommend that serious consideration be given to formally review and support GOI plans for an Operation and Information Center.

CONCLUSIONS

Disaster management must be extremely aggressive and move at a rapid pace. The project for strengthening disaster management must be sufficiently flexible to all output activities for change of direction or advance beyond the scope and targets as outlined in current project document. In Indonesia, it is never a question of whether a major disaster will occur. It is only the question when, and the government and private sectors must be prepared. Disaster management must be considered as a very important segment of the overall National Development Planning Programs in Indonesia. As of this date, famine has been reported from Jayawijaya District in Irian Jaya; Mt. Merapi in Central Java has increased its volcanic activity since mid-October; rehabilitation work has begun in South Sumatra as the result of the recent serious floods; and the Department of Agriculture is concerned of possible insect pest infestation that could possibly affect rice production in 17 provinces. Such situations affect Indonesia's national and social development programs.

Aggressiveness in pursuing all implementation phases of the project should be considered as the prime scenario for all project personnel during 1987.

***** E N D *****



*WERENG PEST - On his recent working visit of the pest stricken rice fields in Buarahatu, Bandung regency, West Java Governor Jogie SM (in white) is seen giving directives and guidance as well as asking for reports on wereng pest from the local officials. (Antara photo)**