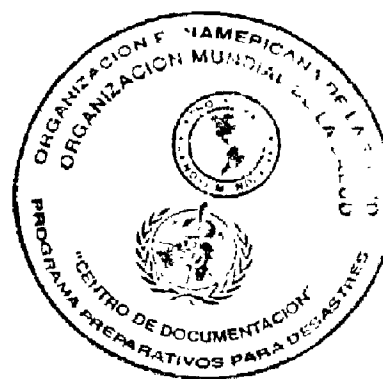


PROJECT DOCUMENT

INS/82/020/C/01/31

**STRENGTHENING DISASTER PREPAREDNESS AND
DISASTER MANAGEMENT IN INDONESIA**



S E C R E T A R I A T E

JL. MERDEKA BARAT 3 JAKARTA PUSAT

TELEX. 46027 BKN PBA IA, PHONE. 376215, 376368, 353283, RS.66

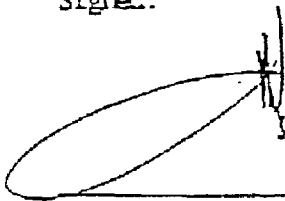
JL. DEWI SARTIKA 101 CANGKAR JAKARTA TIMUR PHONE. 803218

P R O T O C O L

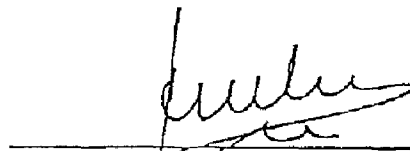
This Protocol formally confirms the exchange of letters* between Representatives of the Government of the Republic of Indonesia and of the Government of the United States of America, by which agreement was expressed on the Third party participation of the United States in the Project, "Strengthening Preparedness and Disaster Management," as described in the covering Project Document.** The United States plans to contribute \$350,000 to the Project through an AID/OFDA-funded grant to UNDP and funds have already been reserved for this purpose.

The Undersigned further confirm that the provisions set out in the Project Document on the Third Party participation of the United States are mutually acceptable.

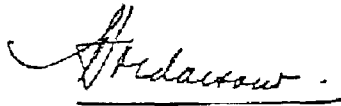
Signed:



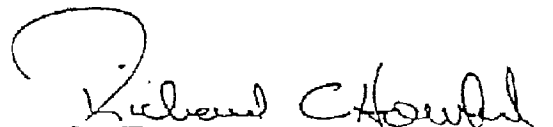
On behalf of the Government
Co-ordinating Agency
Co-ordinating Minister for People's
Welfare
H.E. Mr. Alamsyah Ratuperwiranegara



On behalf of the United Nations
Development Programme
Galal M. Magdi, Resident Representative



On behalf of the Government
Implementing Agency
Minister of Social Affairs
H.E. Madame Nani Soedarsono



On behalf of the Government of
the United States of America
Richard C. Howland, Chargé-d'Affaires,
Embassy of The United States of America

Letter No. 3669 D.I./12/1985 from Drs. Muchtarudin Siregar, Deputy Chairman, BAPPENAS to Mr. William Fuller, Director, USAID; Letter No. II/3146 dated Dec. 18, 1985 from Mr. Robert Clark, Acting Director, USAID to Mr. Siregar, BAPPENAS

** UNDP Project Document INS/82/020/C/01/31

UNITED NATIONS DEVELOPMENT PROGRAMME

Project of the Government of
INDONESIA

PROJECT DOCUMENT

Project Title : Strengthening Disaster Preparedness
and Disaster Management in Indonesia

Project Number : INS/82/020/C/01/31 Duration: Three years

Primary Function : Institution Building

Secondary Function : Direct Support

Sector : Humanitarian Aid and Relief (13)

Sub-sector : Disaster Relief, Preparedness and Prevention (1320)

Government Co-ordinating Agency : Minister Co-ordinator for People's
Welfare (General Chairman BAKORNAS PBA)

Government Implementing Agency : Department of Social Affairs

Executing Agency : UNDP/Office for Projects Execution (UNDP/OPE)
in association with the Office of the United
Nations Disaster Relief Co-ordinator (UNDRO)

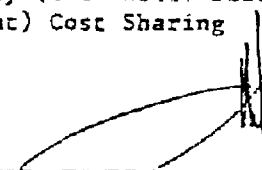
Estimated Starting Date : First half 1986

Government Input: Rp.1,798,599,100 (in kind) UNDP Input: US\$ 384,684


Third Party (the United States
Government) Cost Sharing : US\$350,000

Signed:

Date: 4 MAR 1986


On behalf of the Government, Co-ordinating
Agency: Co-ordinating Minister for People's
Welfare, General Chairman (BAKORNAS PBA)
H.E. Mr. Alamsyah Ratuperwiranegara

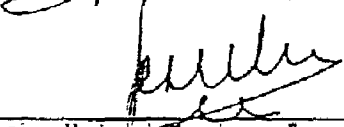
Date: 4 MAR 1986


On behalf of the Government, Implementing
Agency: Minister of Social Affairs, First
Chairman (BAKORNAS PBA)
H.E. Madame Nani Soedarsono

Date: 4 MAR 1986


On behalf of the Executing Agency
Galal M. Magdi, UNDP Resident Representative

Date: 4 MAR 1986


On behalf of the United Nations Development
Programme
Galal M. Magdi, Resident Representative

PART I.

LEGAL CONTEXT

1. This Project Document shall be the instrument (therein referred to as a Plan of Operation) envisaged in Article I, paragraph 2 of the Agreement between the Government of Indonesia and the United Nations Development Programme concerning assistance under the Special Fund sector of the United Nations Development Programme, signed by the Parties on 7 October 1960, and endorsed in a letter from the Minister of Foreign Affairs dated 25 January 1967.

PART II.

A. DEVELOPMENT OBJECTIVE

2. To strengthen the national capability to respond effectively to natural disasters - which in Indonesia annually claim an average of 1,000 lives, cause 5,000 injured, create 1,000,000 homeless, and damage or destroy property valued at Rp 125,000,000,000 - thereby mitigating their negative impact on economic and social development.

B. IMMEDIATE OBJECTIVES

3. The purpose of the Project is to strengthen key aspects of national cross-sectoral disaster management in the next decade by profiting from the experience and expertise which exists in Indonesia, and from new effective methods and technology emerging in disaster management in Indonesia, and other countries worldwide. The first four Immediate Objectives which follow have been defined to do this in the short term; meeting these Objectives will, in turn, during the project's second and third years, help meet the fifth Objective which addresses disaster management in the immediate future:
 - 3.1 OBJECTIVE ONE - To improve the disaster management capabilities of key inter-departmental staff in Indonesia's natural disaster emergency organization (BAKORNAS PBA/SATKORLAK PBA) at the national, provincial and regency levels by means of an Integrated Disaster Management Training Programme within the Directorate General for Social Assistance Development of the Department of Social Affairs, with emphasis on the social aspects of pre-disaster planning, disaster preparedness, relief and rehabilitation, and conducted in co-operation with such interested Departments as Public Works, Home Affairs, Health, Post and Telecommunication, Education and Culture.
 - 3.2 OBJECTIVE TWO - To develop optimum use and co-ordination of disaster-related resources and activities at national, provincial and regency levels by making readily available to all interested entities, a cross-sectoral BAKORNAS

PBA/SATKORLAK PBA Organization and Procedures Handbook, identifying Indonesia's disaster related resources, sector by sector, for disaster prevention, preparedness, relief and rehabilitation respective organizational capabilities, responsibilities and operational procedures, and in summary form, guidance on actions to be taken in case of disasters.

- 3.3 OBJECTIVE THREE - To identify, and to a limited extent implement, resources and procedures that will make it possible to communicate to all interested parties in BAKORNAS/SATKORLAK PBA, according to respective needs, all necessary disaster-related operational information as rapidly, accurately and completely as possible. This can be achieved by defining inter-Departmental Measures to Strengthen Disaster Communications and Information Management that will meet the requirements of decision-makers at all levels for operational information, inventory existing resources and procedures, review their adequacy in meeting these requirements, and, as appropriate, formulate recommendations on further developing resources and procedures, or within the limits of the Project institute the measures.
- 3.4 OBJECTIVE FOUR - To foster integrated cross-sectoral risk-specific, pre-disaster planning for populations, property, and development programmes at risk. This can be achieved by conducting an inter-Departmental Resource and Procedures Study on a Central Risk Monitoring Mechanism that can make it possible to efficiently: identify and classify all areas subject to hazards, determine where gaps exist in defining the risk, define priorities according to risk, determine where there is no, or insufficient pre-disaster planning and training according to the defined priorities, and ensure that the necessary pre-disaster planning and training is done.
- 3.5 OBJECTIVE FIVE - To provide the basis for further developing national disaster management capability over the medium-term. This can be done by means of an inter-Departmental Resource and Procedures Study on Future Options for Disaster Management in Indonesia that can review existing disaster management in light of national policies and of current concepts and techniques of disaster management, and formulate recommendations in such areas as organization, methodology, training and equipment, appropriate for national disaster related policy and planning in the immediate future - notably during REPELITA V.

C. SPECIAL CONSIDERATION

4. Indonesia is signatory to the ASEAN Declaration of Mutual Assistance in Case of Natural Disaster (1976), and has participated regularly in bi-annual meetings of Natural Disaster Experts from ASEAN member countries. The Declaration and recommendations of the Asian Natural Disaster Experts have called for strengthening of respective national capabilities to cope with natural disasters on the basis that expertise developed in one country can benefit other countries in the region through technical cooperation. It is expected that the improved disaster management resulting from this project will add significantly to Indonesia's capability to contribute to regional efforts towards mitigating the effects of commonly shared types of disasters.

D. BACKGROUND AND JUSTIFICATION

5. Indonesia is subject to potentially destructive natural phenomena that are more frequent and varied than in most countries. The principal hazards are earthquakes (three distinct belts), volcanoes (128 active, of which 70 classified as dangerous), landslides, floods, droughts, storms, tsunamis, fires, and agricultural pests and disease. It can be estimated that in the five-year period (1978/79 - 83/84), there was an annual average of 2,814 significantly destructive events, with an annual average of 1,000 deaths, 5,000 injured, 100,000 homeless, 1,000,000 hectares of agricultural land destroyed, with total direct costs at approximately Rp 125,000,000,000 (approx. US\$ 125,000,000).
6. Disaster management in Indonesia is complicated not only by the frequency and variety of the natural phenomena, but by the country's large physical expanse and varied geographical character (13,677 islands), by the diversity of local socio-cultural traditions and dialects and by a dense and unequally distributed population (approx. 157 million persons of which more than 96 million live in Java - 1/20th the size of the archipelago).
7. Many of the problems related to disasters are addressed sectorally (especially in their scientific and technological dimensions) - the appropriate governmental ministries or departments being responsible for prevention, preparedness, or relief measures within their own areas of competence (see Annex A). For example, the Department of Social Affairs covers the social sector (as specifically assigned in Presidential Decree No. 49 - 1983), the Department of Public Works has disaster-related programmes to control floods, volcanic lava and debris flows; the Meteorological and Geophysical Centre (Department of Communications) addresses meteorological aspects, and is also responsible for geophysical monitoring; the Directorate General of Mines (Department of Mines and Energy) has three interested Directorates: Directorate of Environmental Geology for

landslides and soil movement; Directorate of Volcanology for volcanic eruptions and the Geologic Research and Development Centre for earthquakes; the Department of Agriculture, Health, Defence and Security, of Population and Environment, of Forestry, of Tourism, Post and Telecommunications (which oversees the National Search and Rescue Organization - BASARNAS), Manpower and Transmigration, have responsibilities in their respective sectors. The Department of Home Affairs, responsible for the governmental administrative apparatus down to the sub-regency level has an evident critical role in the conduct of all disaster-related activities, and also administers the 3,000 member strong Civil Defence apparatus. Furthermore, there are several technical departments with activities bearing on disaster management, for example the Palapa Domestic Satellite programme, and the LANDSAT imagery collection station (LAPAN) which processes data from the Japanese geostationary satellite GMS and the US NOAA satellites, and the research facility PUSPITEK of the Department of Research and Technology. Certain other technical institutions, such as the Bandung Institute of Technology, play an important, if indirect, role in disaster affairs. National non-governmental organizations such as The Indonesia Red Cross also undertake significant disaster-related work.

8. Disaster management is not, however, mono-sectoral whether in the phases of disaster prevention, of preparedness or of relief. The socio-economic and spiritual welfare of people, and the protection of personal and public property, and of development programs require cross-sectoral efforts and resources at all administrative levels responsible for planning or response. Furthermore, the character of disasters - especially after their occurrence - places a high premium on co-ordination and rapid exchange of information horizontally between departments, and vertically within each department.
9. The importance of cross-sectoral co-ordination has been recognized by the Government, and an important step in strengthening this aspect from the national to the local level was taken with the publication of Presidential Decision 028/1979 of 18 June 1979 (Annex A). The Presidential Decision established non-structural Co-ordination Boards at the three chief administrative levels: the National, Provincial and Regency levels. (There are 27 Provinces and 295 Regencies.)
10. At the National level, the organizational elements are:
 - 10.1 A National Co-ordination Board for Natural Disaster Relief (BAKORNAS PBA) under the General Chairmanship of the Minister Co-ordinator for People's Welfare, assisted by three Chairmen: the Minister of Social Affairs (1st Chairman), the Minister of Home Affairs (2nd Chairman), and the Minister of Public Works (3rd Chairman). The Board is composed of senior representatives of Departments from interested governmental and non-governmental agencies. The Director General for Social Assistance Development (Department of Social Affairs) serves as Secretary to BAKORNAS PBA, and a member of the Expert Staff to the Co-ordinating Minister for People's Welfare as Vice-Secretary.

- 10.2 A Technical Working Team brings together as needed a pre-designated group of middle management officials under the chairmanship of the Secretary of BAKORNAS PBA. The team can call on other Government officials or non-governmental officials, as necessary for their expertise. A Secretariat, supervised by the Secretary of BAKORNAS PBA, serves the Board and the Technical Working Team and is now the main structural support element to BAKORNAS PBA.
11. At the Provincial level, Provincial Co-ordination Boards for Natural Disaster Relief (SATKORLAK I PBA) bring together representatives of governmental organizations concerned reflecting the membership of BAKORNAS PBA. Provincial Governors, Provincial Armed Forces and Social Affairs representatives are respectively Chairman, Vice-Chairman and Secretaries of these Boards. Emergency Task Forces (SATGAS) are formed as needed from units of the Provincial Civil Defence Force, the Armed Forces, SAR, Social Affairs Teams, Local Red Cross, Youth Organizations and voluntary agencies.
12. At the Regency levels there are corresponding Co-ordination Boards (SATKORLAK II PBA) similarly under the Chairmanship of the Regency Head, and Vice-Chairmanship of the Military Representatives, and with the Regency Social Affairs Representative as Secretary. A standing Social Affairs Task Force (SATGASOS) is attached to the Board. Emergency Task Forces (SATGAS) are also formed as needed.
13. Since the Presidential Decision was issued, Indonesia's frequent and varied natural disasters have given ample opportunity to assess the strengths and weaknesses of the structure - the floods/landslides and tsunamis on Flores Islands in 1979, the earthquake of 1981 in Irian Jaya, the landslide and heavy rains in West Java in 1980, the serious droughts in many parts of Indonesia in 1982 and 1983, the volcanic eruptions of Mount Galunggung (West Java) in 1982, and of Mount Colo (Central Sulawesi) and Mount Gamalama (North Maluku) in 1983, all of which engaged the emergency apparatus from local to national level, and provided especially useful evidence of areas which need strengthening.
14. Collective, intra-institutional reviews of national disaster management experience were made during two significant gatherings of officials with disaster-related responsibilities at the three administrative levels: (1) the "National Training Session for the Provincial Management of the National Co-ordinative Units for Emergency Relief of Natural Disasters" held in March 1981 (Co-sponsored by the Government of Indonesia, UNICEF and AID/OFDA), and (2) the "National Workshop on Mount Galunggung Volcanic Risk Management" held in September 1982 (Co-sponsored by the Government of Indonesia, UNDP, UNDRO, UNICEF and AID/OFDA). Similar reviews are being conducted regularly in annual provincial level disaster management field training.

15. The 7-day National Training Session in 1981 was attended by three participants from different ministerial departments in each SATKORLAK I PBA, some from the central offices of BAKORNAS PBA and some observers - a total of 150 persons. The purpose of this session was to train provincial officials in their disaster-related responsibilities, to strengthen the work of the Provincial and Regency Co-ordination Boards, and to obtain feedback from these officials on ways to improve the general programme of BAKORNAS PBA. Participants were divided into three Working Groups, each studying a specific aspect.
16. Two conclusions of the Session are particularly relevant to strengthening disaster management and preparedness, which is the purpose of this Project:
 - 16.1 "Co-ordination of member offices of BAKORNAS PBA and SATKORLAK PBA should be improved—by integrated, co-ordinated, guided, effective planning and programmes so that they become strong organizations."
 - 16.2 "The system of planning, operations and reporting of natural disaster relief should be improved in the sense that there should be a co-ordinated, integrated, standardized, easy and simple system, thus supporting effective and efficient implementation of the programme."
17. The National Workshop on Mount Galunggung Volcanic Risk Management was held in connection with the emergency which gave BAKORNAS/SATKORLAK PBA its chief test since its creation in 1979. Mount Galunggung, at which no violently destructive eruption had occurred since 1822, had 36 major and 300 minor eruptions between 5 April and 20 September 1982. A large, heavily populated and generally prosperous area had been severely affected; because of the great accumulation of ash on the volcano's slopes, "lahar floods" (rainwater mixed with large amounts of volcanic material) could be expected in forthcoming rainy seasons - notably the season then about to start.
18. The Workshop was held at the request of the President of Indonesia so as to bring scientists and technicians together with officials directly responsible for disaster prevention, preparedness and relief, to review measures taken and planned. The problem of "lahar flooding" involved several distinct disciplines - volcanology, meteorology, hydrology, engineering, communications, agriculture, economy, ecology, and several activities directly related to protecting and caring for affected populations (warning, evacuation, search and rescue, shelter, feeding, health and sanitation). The Workshop was a symbol of, and a practical exercise in comprehensive, co-ordinated planning and execution of disaster counter-measures - and its conclusions substantiated the recommendations made at the National Training Session the previous year.
19. The salient points of the Workshop's proceedings and recommendations relevant to this Project are:

- 19.1 In particular: "volcanological, meteorological and hydrological phenomena should be more continuously and completely monitored, the means to do this provided, and the resulting data processed and more effectively shared with the interested governmental agencies. The warning systems seemed to need strengthening, and the affected people to be more clearly informed of the dangers they faced and the precautions they should take The administrative mechanisms set up in 1979 to meet natural disasters were reviewed; implementation to address the current disaster was collectively judged insufficiently comprehensive and incompletely integrated in the co-ordinative structure prescribed (BAKORNAS/SATKORLAK PBA). Furthermore, the financial and material resources available to this structure in the affected areas were found inadequate to the tasks."
20. The Mount Galunggung volcanic emergency was a protracted and severe test of the relatively young National and Provincial Co-ordination Boards. And while this emergency confirmed the validity of the increased effort given to disaster management in Indonesia since 1979, it also offered a good opportunity to review what had been accomplished, and what might yet be done. A UNDP/ILO Project (INS/82/019/A/13/31) helped make this possible, as one aspect specifically addressed disaster management. UNDRO was given responsibility to cover this aspect with the Indonesian authorities.
21. Accordingly, for three months an UNDRO Consultant on loan from the Swedish Stand-by Force for Disaster Relief worked closely with Indonesian officials responsible for pre-disaster planning and emergency response at national, provincial and regency levels, with respect to the effects of Mount Galunggung's eruptions. His mission was to advise on the mechanism of BAKORNAS PBA in the management of disaster relief and rehabilitation activities; to evaluate past disaster relief activities; to identify existing technical and administrative problems, and to recommend improvements to disaster relief and rehabilitation programmes.
22. Of the Consultant's findings, the most relevant to the objectives of this Project are:
- 22.1 "The need for Operation Rooms at the National and Provincial levels where information can be kept up to date and members of BAKORNAS PBA and SATKORLAK I PBA can respectively get an overall picture of a disaster situation."
- 22.2 "The need for different Departments to co-ordinate disaster-related projects through BAKORNAS PBA so that priorities can be assigned to projects before going to the President for funding."
- 22.3 "The need for improved manuals and guidelines to inform on standard procedures, for assessment and reporting on the respective authority of Organizations in disaster, on the availability and appropriateness of assistance."

- 22.4 "The need to train teams in multi-disciplinary surveys" (of disaster damage and needs).
- 22.5 "The need for funds and trained staff, clearly committed to disaster management who can ensure continuity of preparedness and relief efforts at National and Provincial levels."
23. In connection with the foregoing reference to training requirements, and with the consideration given by the Indonesian Government to establishing a National Disaster Management Institute to serve as a national focal point for applied research, training and operational support to BAKORNAS/ SATKORLAK PBA, a Feasibility Study funded by AID/OFDA was conducted in 1984-85 on such an Institute and three inter-Departmental study groups visited disaster management facilities in Australia, the Philippines and the United States. In light of national considerations establishing the NDMI was not now considered timely. The Feasibility Study will, however, benefit the Activities for Output Five (Resource and Policy Study on Future Options for Disaster Management in Indonesia); similarly the programme of instruction and the training syllabus developed with the Department of Social Affairs is to be adapted for use in Activities relating to Project Output One (Integrated Disaster Management Training Programme).
23. Indonesia's fourth five-year development plan (REPELITA IV) 1984-88 refers to disaster-related activities within sectoral components. In the social sector, the need is identified to inform populations at risk of the hazards they face and to train them in the action which they might have to take. Specialized training is called for of co-ordinative teams at SATKORLAK PBA I and II and of special units which might be set up in stricken areas. The need for emergency operation centres is identified and prescribed. Other sectorial programmes in REPELITA IV set forth disaster-related activities emphasizing administrative and technological development to mitigate the effects of natural disasters.
24. Experience and ability in, and resources for disaster management are clearly available in Indonesia. Since 1979 the framework has existed. The measures proposed by the Project are designed to strengthen the framework where it can be strengthened, and where those closest to it have felt it should be strengthened during the current REPELITA on the basis of the experience of the past six years.
25. It is, however, also the intent of this Project to look to the future - and, in particular to REPELITA V. For this reason the three Resource and Procedures Studies (Outputs Three, Four and Five), while expected to have some immediate benefits, are chiefly designed to bring national expertise together around specific aspects of disaster management for the purpose of

defining ways to take best advantage of existing cross-sectoral resources and procedures and, if necessary, especially in light of recent developments in disaster-related technology and methodology of suggesting future options in disaster management to those responsible for formulating REPELITA V.

26. In particular, the Activities for Output Five, in the Project's second and third years, will capitalize on the experience, conclusions, and recommendations of Activities for the other four Outputs, in order to define these future options, from an organizational and policy perspective. From this final synthesis, the Project as a whole will derive its chief benefit: inter-departmental assessment of current national cross-sectoral disaster management and prospects for the future.

E. OUTPUTS

27. OUTPUT ONE: INTEGRATED DISASTER MANAGEMENT TRAINING PROGRAMME (REF. OBJECTIVE ONE)

- 27.1 A programme and syllabus of instruction on cross-sectoral disaster management, with emphasis on social aspects, with appropriate training materials and reference works, for Master Trainers in Disaster Management and for inter-departmental officials with disaster-related responsibilities at the national, regional and regency levels.
- 27.2 An inter-departmental team of up to forty Master Trainers benefitting from sixteen weeks of basic and refresher training in disaster management.
- 27.3 Up to forty inter-departmental Core Staff benefitting from a total of six weeks of basic and refresher training in disaster management.
- 27.4 Up to ninety key provincial level inter-departmental staff benefitting from six weeks of basic and refresher disaster management training.
- 27.5 Key inter-departmental staff at the Regency and sub-Regency level, in disaster prone areas benefitting from two weeks of training from Mobile Training Teams.
- 27.6 A body of experience and "lessons learned" which will contribute to Output Five (Resource and Procedures Study on Future Options for Disaster Management in Disaster Management in Indonesia)

28. OUTPUT TWO: BAKORNAS PBA DISASTER MANAGEMENT ORGANIZATION AND PROCEDURES HANDBOOK (REF. OBJECTIVE TWO)

- * Core staff are defined as middle level officials, from different Departments with disaster-related responsibilities within BAKORNAS PBA.

- 28.1 A BAKORNAS PBA Disaster Management Organization and Procedures Handbook, (hereafter referred to as the O&P Handbook) which will bring together in simple, summary and easy to use form, information on the resources available in Indonesia for disaster prevention, preparedness, relief and rehabilitation, the respective responsibilities of each office or organization and the procedures by which to engage them. (The purpose of the O & P Handbook will not be to set out new organization and procedures). An important section of the Handbook will be a Directory of organizations concerned, names, addresses, telephone/ telex numbers etc. An Annex will provide summary guidance on measures to be taken in case of disasters.
- 28.2 The O&P Handbook will be made available in a sufficient number of copies to allow for a minimum of one to each member of BAKORNAS PBA and one to each Provincial and Regency SATKORLAK PBA. The copies will be "controlled", that is, each copy will be numbered and the name and address of each recipient centrally recorded. The Handbook will be in loose-leaf form to facilitate entering changes. The changes will be made at least once a year on word processing equipment, for general distribution.
- 28.3 Documentary material which will directly contribute to Output Five (Resource and Procedure study on Future Disaster Management in Indonesia).
29. OUTPUT THREE: MEASURES TO STRENGTHEN DISASTER COMMUNICATIONS AND INFORMATION MANAGEMENT (REF. OBJECTIVE THREE).
- 29.1 An inter-Departmental assessment written in Bahasa Indonesia with a set of specific recommendations on measures to upgrade significantly the readiness and responsiveness of the BAKORNAS/SATKORLAK PBA system by improving the ability to acquire, evaluate, collate, analyze and disseminate disaster-related operational information, largely by ensuring that the necessary linkages are established between existing national sources and with international (especially regional) sources of disaster-related information.
- 29.2 The assessment will describe the existing system, (including traditional early warning) to obtain and communicate disaster-related information, both within Indonesia, and between sources of information inside and outside Indonesia. The assessment will categorize the sources of information, the type of information communicated, the means of communications, the recipients and users of the information. In particular, the assessment will review the needs of decision makers at all administrative levels, and the adequacy of the information at their disposal in terms of timeliness, comprehensiveness and accuracy. Possible improvements in procedures, staffing and equipment will be defined and specific recommendations formulated on measures to make inter-department disaster communications and information management more effective.

- 29.3 The assessment will be conducted and the identified will be defined for the particular benefit of national level policy makers, and planners, especially with respect to disaster-related inputs to REPELITA V.
 - 29.4 The assessment will contribute to Project Output 5 (Resource and Procedures Study on Future Options for Disaster Management in Indonesia).
 - 29.5 It is expected that the Activities related to this Output would, before their conclusion, identify certain measures which could result in improvements in procedures and equipment and which could be put into effect with a minimum of procedural change and expense. Should this be the case, ways would be sought to effect these measures and acquire the equipment before the end of the project period.
30. OUTPUT FOUR: RESOURCE AND PROCEDURES STUDY ON CROSS SECTORAL RISK MONITORING AND CONTROL.* (REF. OBJECTIVE FOUR)
- 30.1 An Inter-Departmental Study written in Bahasa Indonesia will be prepared, with a set of specific recommendations, on monitoring at provincial and national levels, natural hazards to populations, property and development projects, and the related counter-disaster measures taken or planned.
 - 30.2 The Study will review significant hazards in Indonesia by type, geographical area, degree and character of risk, and the inter-departmental methods and procedures to take these risks into account and develop counter-measures. The Study will identify any existing insufficiencies and make specific recommendations to correct them.
 - 30.3 It is intended that the Study would benefit national policy makers and planners, especially with respect to disaster-related inputs for REPELITA V.
 - 30.4 The Study will contribute to Project Output 5 (Resource and Procedures Study on Future Options for Disaster Management in Indonesia).
31. OUTPUT FIVE - RESOURCE AND PROCEDURES STUDY ON FUTURE OPTIONS FOR DISASTER MANAGEMENT IN INDONESIA (REF. OBJECTIVE FIVE)
- 31.1 In the Project second and third years, a Study will be conducted on future options for disaster management in Indonesia. The Study will review existing organizational responsibilities, resources, procedures, training, and related equipment, with respect to meeting national policy requirements. Ways to further national disaster management over the medium term in light of recently developed disaster management technology and methodology will be defined and a set of specific recommendations made for the benefit of policy-makers and planners - notably with respect to their needs for REPELITA V.

F. ACTIVITIES

32. REF ALL OUTPUTS

32.1 A three-day project planning and review meeting will be held at least twice annually between Activity Leaders * responsible for the five Outputs, so as to formally insure a maximum of intra-project co-ordination exchange and support.

33. ACTIVITIES FOR OUTPUT ONE: INTEGRATED DISASTER MANAGEMENT TRAINING PROGRAMME.

ACTIVITY ASSIGNED TO: DEPARTMENT OF SOCIAL AFFAIRS.

33.1 The schedule and location of activities is given in Annex B. The first-four months of this Activity (in Jakarta) will consist of: establishment of an Inter-departmental Consultative Committee * under the Activity leader; review and confirmation of complete training programme (schedule, syllabus curriculum, training staff and trainers, orientation of core training staff, and preparation of Master Trainers course).

34. ACTIVITIES FOR OUTPUT TWO: BAKORNAS PBA/SATKORLAK PBA ORGANIZATION AND PROCEDURES HANDBOOK.

ACTIVITY ASSIGNED TO: DEPARTMENT OF HOME AFFAIRS

34.1 First year - Jakarta and Provinces as necessary

34.1.1 Four months. Form Inter-departmental Consultative Committee under Activity Leader. Review objectives, methodology and described schedule of activities. Determine organization, design, content, distribution of Handbook.

34.1.2 Four months. Inventory of present cross-sectoral disaster-related Organizations and Procedures.

34.1.3 Four months. Prepare first draft in Bahasa Indonesia with translation into English.

34.2 Second Year - Jakarta and Provinces as necessary

34.2.1 Four months. Prepare first issue in Bahasa Indonesia, with translation into English.

34.2.2 Four months. Disseminate to identified cross-sectoral recipients for field test, solicit response.

* See Annex D for description of functions of Activity Leaders and Inter-departmental Consultative Committees

34.2.3 Four months. Revise in view of response.

34.3 Third Year - Jakarta and Provinces as necessary

34.3.1 Four months. Issue final version to all recipients.

34.3.2 Four to eight months. Review and issue first changes.

34.4 In second and third years contribute to activities of Output 5.

35. ACTIVITIES FOR OUTPUT THREE: MEASURES TO STRENGTHEN DISASTER COMMUNICATIONS AND DISASTER MANAGEMENT.

ACTIVITY ASSIGNED TO: DEPARTMENT OF PUBLIC WORKS

35.1 First Year - Jakarta.

35.1.1 First four months: Form Inter-Departmental Consultative Committee under Activity Leader. Review objectives, methodology and detailed schedule of activities.

35.1.2 Fifth to twelfth months: Inventory of all internal and external sources and recipients of information relating to disasters in Indonesia. Inventory of inter-departmental procedures and technical means by which this information is collected and disseminated - and of regulations and formal and informal understandings by which information is communicated and used.

35.2 Second year - Jakarta and Provinces as necessary.

35.2.1 First nine months: Review national policy objectives and operational information needs of different entities at all levels - especially needs of decision making bodies. Assess adequacy of findings in the first year with respect to meeting these needs.

35.2.2 Last three months: Draft conclusions and recommendations on measures to strengthen.

35.2.3 Through the year identify measures which can be effected in the context of the Project and take steps to implement them.

35.3 Third year - Jakarta and Provinces as necessary

35.3.1 First six months: Finalize conclusions and recommendations.

35.3.2 Second six months: Contribute to Activities of Output 5.

35.3.3 Through the year identify measures which can be effected in the context of the Project and take steps to implement them.

36. ACTIVITIES FOR OUTPUT FOUR: RESOURCE AND PROCEDURES STUDY ON AN INTEGRATED RISK MONITORING SYSTEM.

ACTIVITY ASSIGNED TO : MINISTRY FOR POPULATION AND ENVIRONMENT

36.1 First year - Jakarta and Provinces as necessary.

- 36.1.1 First four months - form Inter-Departmental Consultative Committee under Activity Leader; review objectives, methodology and detailed schedule of activities.
- 36.1.2 Fifth to twelfth months - Inventory all internal and external sources and recipients of information relating to natural hazards and persons, property and development programmes at risk. Inventory procedures by which this information is collected and disseminated and the uses made of it - and of the regulations and formal and informal understandings by which the information is communicated and used.

36.2 Second year - Jakarta and Provinces as necessary.

- 36.2.1 First nine months: Review national policy objectives and pre-disaster planning and needs of different entities at all levels - especially the needs of medium and long term planners and of decision-making bodies. Assess the adequacy of first year findings with respect to meeting these needs.
- 36.2.2 Last three months: Draft conclusions on resource development and procedures and related recommendations.

36.3 Third year - Jakarta.

- 36.3.1 First six months: Finalize conclusions and recommendations.
- 36.3.2 Second six months: Contribute to Activities of Output Five.

37. ACTIVITIES FOR OUTPUT FIVE : RESOURCE AND PROCEDURES STUDY ON FUTURE OPTIONS FOR DISASTER MANAGEMENT IN INDONESIA.

ACTIVITY ASSIGNED TO: (A GOVERNMENT ENTITY CONCERNED WITH NATIONAL ORGANIZATION AND ADMINISTRATION TO BE DETERMINED BY BAKORNAS PBA IN CONSULTATION WITH BAPPENAS).

37.1 First year - no activity

37.2 Second year - Jakarta and provinces as necessary

- 37.2.1 Three months: Form Inter-departmental Consultative Committee under Activity Leader. Review objectives, methodology and detailed schedule of activities, inventory official documentation.
- 37.3 Third year - Jakarta and provinces as necessary.
- 37.3.2 First two months: General review of national policy and requirements with respect to pre-disaster planning, preparedness, relief and rehabilitation.
- 37.3.3 Third and fourteenth months: Establish contacts with Activity Leaders for other four project Activities.
- 37.3.4 Fifth and sixth months: Review experience, Outputs, conclusions and recommendations of four other Activities.
- 37.3.5 Seventh and eight months: Project national disaster management requirements, and capabilities in the medium term.
- 37.3.6 Last four months: Formulate conclusions and recommendations on options for Indonesian disaster management in the medium term especially with respect to requirements.

G. INPUTS

38. Government

38.1 National Project Director

The Project will be implemented under the supervision of a National Project Director who will be appointed by the Government of Indonesia. This person should be experienced in cross-sectoral planning and familiar with problems and issues relating to disaster management both in their human and technical dimensions. The National Project Director will be responsible for basic planning decisions, budget approval and the overall progress of Project implementation. On these matters he will be responsible to the Minister for Social Affairs, as First Chairman of BAKORNAS PBA, who in turn will answer to the Minister Co-ordinator for People's Welfare as General Chairman of BAKORNAS PBA. He will oversee the National Project Co-ordinator who will be directly responsible for the implementation of the Project as a whole.

38.2 Activity Leaders

The Government will assign two staff (including an Activity Leader), with supervision by the National Project Co-ordinator for each of the five Project Activities.

38.3 Administrative Support Staff

The Government will provide all necessary administrative support staff to the Project Director, National Project Co-ordinator and to the Activity Leaders. A driver will be provided to the Chief Technical Advisor, and be available to other international consultants.

38.4 Training

Costs related to training, other than those identified under UNDP inputs will be borne by the Government. These include the salaries and travel costs of national trainers and trainees alike.

38.5 Equipment, Premises and Supplies

The Government will provide: office facilities for international and national staff; office supplies and equipment (other than identified under UNDP and Third Party Inputs below) to carry out Project activities; furniture and fittings for the offices of international and national staff; internal transport costs for national and international consultants; operation and maintenance of project equipment.

38.6 Miscellaneous

The Government will provide in its Project Budget, covering Budget Contributions in kind, the amount of Rupiah for the miscellaneous expenses which it will incur during the implementation of this Project.

39. UNDP

39.1 Assignment of International Staff

39.1.1	<u>One Chief Technical Advisor</u>	18 man-months over 3 years
39.1.2	<u>International Consultants</u>	30 man-months over 3 years

39.2 Assignment of Local Staff

39.2.1	<u>National Project Co-ordinator</u>	Full time (36 man-months)
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A National Project Co-ordinator nominated by the Government Co-ordinating Agency for this project in consultation with the Departments having direct "Activity" responsibilities in the Project, and appointed according to established U.N.D.P. procedures (Employment of Nationally Recruited Project Professional Personnel), will be assigned to work full-time for the Project.

Under the authority of the National Project Director, he will provide technical guidance and co-ordination of all Inputs and Activities and Outputs and be the link between the implementing agency, the governmental organizations concerned, especially those represented within BAKORNAS PBA, the Offices of the UNDP Resident Representative and of AID in Jakarta, and UNDP/OPE. (A summary job description is given in Annex C). The National Project Co-ordinator recruited under this condition will be paid in Indonesian Rupiah at the best prevailing conditions in Indonesia as determined by the UNDP.

39.2.2 National Consultants - 84 man-month

National consultants will be recruited from outside the Government Implementing Agency to undertake specific tasks which could not otherwise be carried out by the Implementing Agency or Departments directly associated with the Project. They will be remunerated in Indonesian Rupiah at appropriate rates.

39.2.3 Project Administrative Officer - 36 man-months.

A national officer will be recruited to provide administrative support to the National Project Co-ordinator and to the Chief Technical Advisor. This function will be necessary in view of the complex inter-departmental nature of the Project and of the intermittent presence of the CTA in Indonesia; the Project Administrative Officer will thus be expected to ensure the continuity of essential but routine tasks (operating accounts, reports, administrative responsibilities) which would normally be handled by the CTA. The officer will be remunerated in Indonesian Rupiah at an appropriate rate.

39.2.4 One bi-lingual Secretary 36 man-months

For the duration of the Project implementation, one bi-lingual secretary who is proficient in both Bahasa Indonesia and English will be recruited and paid in Indonesian Rupiah at an appropriate rate.

39.3 General Conditions on Employment of Project Personnel

39.3.1 The Government agrees to the recruitment of National Project Professional Personnel (NPPP) required for the implementation of this project, in accordance with UNDP policies and procedures established within the United Nations system, for this purpose. These services constitute an addition to the regular