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REPUBLIK INDONESIA

NATIONAL ACTION PLAN

FOR

DISASTER REDUCTION

2006-2009

United Nations Development Programme

REPUBLIC OF INDONESIA

NATIONAL ACTION PLAN FOR DISASTER REDUCTION 2006-2009

Cooperation between

OFFICE OF THE STATE MINISTER FOR NATIONAL DEVELOPMENT PLANNING/ NATIONAL DEVELOPMENT PLANNING AGENCY

with

NATIONAL COORDINATING AGENCY FOR DISASTER MANAGEMENT

2006

FOREWORD

The National Action Plan for Disaster Risk Reduction is formulated as a commitment of the Government of Indonesia to the UN Resolution No. 63/1999, which was followed by the Hyogo Framework for Action and the Beijing Action Plan. The document comprises a joint undertaking by the National Development Planning Agency (BAPPENAS) and the National Coordination Body for Disaster Management (BAKORNAS PB) that is supported by the United Nations Development Programme (UNDP).

The document is prepared with a purpose, among others, to change the focus in the current practices in disaster management, from a responsive approach to a more preventive one, with the hope that this can help prevent or mitigate disaster impacts and reduce or altogether eradicate disaster risks.

The consultation process to prepare the document was initiated in March 2006 and it involved many different stakeholders from the national and local levels, including government departments/agencies, institutions of higher learning, NGOs, donors and local governments. The effort consisted of the compilation of the work plans of relevant stakeholders that were related to risk reduction and the classification of these into categories prescribed by the Hyogo Framework for Action 2005-2015.

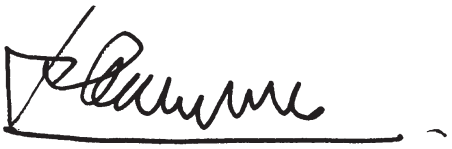
As a first attempt, the National Action Plan for Disaster Risk Reduction is not without flaws and it only maps the planned programmes of the different stakeholders to allow for easier coordination. In the immediate future BAPPENAS will continue to refine the plan and ensure that all priority actions will be put in the agenda and implemented accordingly to make an appropriate disaster risk reduction programme.

It is expected that Local Governments, as a follow-up to this national action plan, will develop their own Local Action Plans for Disaster Risk Reduction, at the provincial and district/city levels.

I would like to express my sincere gratitude to all partners who have supported the preparation of the National Action Plan for Disaster Risk Reduction. I hope this document can become a shared reference in the advancement of disaster risk reduction in the

country. To support the implementation of this Action Plan, further commitment of all the stakeholders, which so far has been evidently demonstrated, should be maintained and enhanced.

Minister's Expert Staff Member for Regional and Natural Resources Affairs/ Head of Implementing Team of the Working Group on Disaster Risk Reduction and Conflict Management



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REMARKS

The National Action Plan for Disaster Risk Reduction is formulated as a follow-up to the 1999 Resolution of the UN Economic and Social Council that calls for world governments to devise and implement a National Disaster Risk Reduction Action Plan to support and ensure the attainment of the objectives and targets of sustainable development. It is also prepared as part of the commitment to the Hyogo Framework for Action 2005-2015 that urges all countries in the world to prepare an integrated disaster risk reduction mechanism that is supported by a proper institutional basis and adequate resources for implementation.

More importantly, the Action Plan is devised in response to the increased incidences of natural disasters in the country in the last two years, such as the Nabire and Alor earthquakes, the Aceh and Nias tsunamis, the Mount Merapi eruption and the Yogyakarta and Central Java earthquake and the recent floods in Langkat, North Sumatera and Aceh Tamiang in the Province of Nanggroe Aceh Darussalam.

The preparation of this document involves many different stakeholders from the national and local levels. Multi-stakeholder consultations were performed to encourage ownership by all relevant stakeholders and to ensure that it would fulfil its purpose as an integrated reference for action that embraces social, economic and environmental aspects.

Disaster mitigation and management have become one of the nine priorities of the National Development as prescribed in the Government's Work Plan (RKP) for 2007 that is enacted through the Presidential Regulation Number 19/2006. Aside from materializing

commitment to the Hyogo Framework for Action 2005-2015 and the Beijing Action Plan for Asia, the presence of this document indicates a shift of paradigm in disaster management in the country from responsive measures through emergency response to preventive measures through mitigation and prevention.

It is expected that this document, which was prepared jointly with the National Coordination Body for Disaster Management (BAKORNAS PB), will serve as a reference for all stakeholders in executing disaster mitigation and risk reduction efforts.

Jakarta, January 2007
STATE MINISTER FOR NATIONAL DEVELOPMENT PLANNING/
HEAD OF THE NATIONAL DEVELOPMENT PLANNING AGENCY

H. Paskah Suzetta

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LIST OF ACRONYMS AND ABBREVIATIONS

- ADPC : Asian Disaster Preparedness Centre
- AIDS : Acquired Immuno-Deficiency Syndrome
- AMDAL : Environmental Impact Analysis
- APBD : Local Revenue and Expenditure Budget
- APBN : National Revenue and Expenditure Budget
- APELL : Awareness and Preparedness for Emergencies at Local Level
- ASEAN : Association of Southeast Asian Nations
- AUSAID : Australian Agency for International Development
- AWS : Automatic Weather Station
- BAKORNAS PB : National Coordination Body for Disaster Management
- BAKOSURTANAL : National Coordination Body for Survey and Mapping
- BANSOS : Social Assistance
- BAPPENAS : National Development Planning Agency
- BGR : Bundesanstalt für Geowissenschaften und Rohstoffe
- BKKBN : National Coordination Body for Family Planning
- BKRK : Hazard, Vulnerability, Risk and Capacity
- BLS : Basic Life Support
- BMG : Meteorological and Geophysical Agency
- BPPT : Agency for the Assessment and Application of Technology
- BPS : Central Statistics Agency
- BRR NAD : Agency for the Rehabilitation and Reconstruction of Nanggroe Aceh Darussalam
- BSB : Disaster Preparedness Brigade
- CBDRM : Community-Based Disaster Risk Management
- CBFA : Community-Based First Aid
- CBRR : Community-Based Risk Reduction
- CLCC : Creating Learning Communities for Children
- CWS : Church World Service
- DAS : Watershed areas

- DCSP : Decentralized Conflict-Sensitive Planning
- DESDM : Ministry of Energy and Mineral Resources
- DEPDAG : Ministry of Trade
- DEPDAGRI : Ministry of Home Affairs
- DEPDIKNAS : Ministry of National Education
- DEPHUB : Ministry of Transportation
- DEPHUT : Ministry for Forestry
- DEPKES : Ministry of Health
- DEPKOMINFO : Ministry for Communication and Information
- DEPKUMHAM : Ministry of Justice and Human Rights
- DEPPERIN : Ministry for Industry
- DEP. PU : Ministry of Public Works
- DEPSOS : Ministry of Social Affairs
- DEPTAN : Ministry of Agriculture
- DIPECHO : Disaster Preparedness European Commission Humanitarian Aid Office
- DISTAMBEN : Directorate for Mines and Energy
- DITJEN : Directorate General
- DIY : Special Region of Yogyakarta
- DKP : Ministry of Fisheries and Maritime Affairs
- DMIS : Disaster Management Information System
- DMP : Disaster Management Plan
- DPR : People's Representative Assembly
- DRM : Disaster Risk Management
- DRR : Disaster Risk Reduction
- DUMPLAP : Field Kitchen
- DVI : Disaster Victim Identification
- DVMBG : Directorate for Vulcanology and Geological Disaster Mitigation
- ERTR : Emergency Response and Transitional Recovery
- FDRS : Fire Danger Rating System
- FKM : Faculty of Public Health
- GELS : General Emergency Life Support

- GIS : Geographical Information System
- GI-TEWS : German-Indonesia Tsunami Early Warning System
- GNRHL : National Movement for Forest and Land Rehabilitation
- GPS : Global Positioning System
- GS : Grand Strategy
- GTZ : Deutche Gesselschaft fur Technische Zusammeinarbeit
- HFA : Hyogo Framework for Action
- HIV : Human Immunodeficiency Virus
- HIVOS : Humanistic Institute for Development Cooperation
- HOPE : Hospital Preparedness for Emergency and Disaster
- IDEP : Indonesian Development of Education and Permaculture
- IFRC : International Federation of Red Cross
- IFSAR : Interferometric Synthetic Aperture Radar
- IIDP : Indonesian Institute for Disaster Preparedness
- INGV : National Institute for Geophysics and Vulcanology
- IOTWS : Indian Ocean Tsunami Warning System
- IPTEK : Science and Technology
- ISDR : International Strategy for Disaster Reduction
- ITB : Bandung Institute of Technology
- ITS : 10 November Surabaya Institute of Technology
- IUDMP : Indonesia Urban Disaster Mitigation Program
- JATENG : Central Java
- JATIM : East Java
- JICA : Japan International Cooperation Agency
- KALTIM : East Kalimantan
- KBBM : Community-Based Disaster Preparedness
- KEMENEG LH : Office of the State Minister for the Environment
- KEMENEG PP : Office of the State Minister for Women's Empowerment
- KEMENKOKESRA : Office of the Coordinating Minister for People's Welfare
- KEPPRES : Presidential Decree
- KFW : German Financial Cooperation
- KKN : Students' Community Service
- KLB : Extraordinary Event

- KOMPAK : Collaboration of Disaster Mitigation Organizations in Urban Areas
- KRB : Disaster Prone Region
- KSR : Youth Volunteer Corps
- LAPAN : National Space and Aviation Institute
- LIMBAH B3 : Hazardous and toxic waste
- LIPI : National Institute of Sciences
- LPND : Non-departmental Agency
- LSM : Non-government Organization
- MDHF : Mitigation of Disaster on Health Facility
- MPBBM : Community-Based Disaster Management
- MPBI : Indonesian Society for Disaster Management
- NAD : Nanggroe Aceh Darussalam
- NGO : Non-government Organization
- NKRI : Unitary State of the Republic of Indonesia
- NTB : West Nusa Tenggara
- NTT : East Nusa Tenggara
- NU : Nahdlatul Ulama
- OXFAM : Oxford Committee for Famine Relief
- PANSUS : Special Committee
- PBB : United Nations
- PDA : Peace Trough Development Analysis
- PEMDA : Local Government
- PEMKOT : City Government
- PEMPROV : Provincial Government
- PERDA : Regional Regulation
- PERPRES : Presidential Regulation
- PERTAMA : Community-Based Integrated Risk Reduction
- PHAST : Participatory Hygiene and Sanitation Approach
- PIKUL : Institutional and Local Capacity Building
- PIRBA : Information Centre for Research on Natural Disasters
- PK-MKL : Mitigation of Crises and Other Health Issues
- PLTA : Hydroelectric Power Plant

- PMB : Disaster Mitigation Centre
- PMI : Indonesian Red Cross
- PMR : Youth Red Cross
- POLRI : Indonesian National Police
- PP : Government Regulation
- PPGD : Basic Trauma Life Support
- PPK : Crisis Management Centre
- PRAMUKA : National Scouts Movement
- PRB : Disaster Reduction
- PROTAP PB : Standard Operating Procedure on Disaster Management
- PSC : Public Safety Centre
- PTT : Non-permanent Employee
- PVMBG : Vulcanology and Geological Disaster Mitigation Centre
- RAN-PRB : National Action Plan for Disaster Risk Reduction
- RAPBD : Local Revenue and Expenditure Budget Plan
- RISTEK : Research and Technology
- RKP : Government's Work Plan
- RPJM : Medium-term Development Plan
- RPJMN : National Medium-term Development Plan
- RRA : Rapid Risk Assessment
- RS : Hospital
- RUPUSDALOPS : Operations Control Room
- RUU PB : Draft Bill on Disaster Management
- SAR : Search and Rescue
- SATGANA : Disaster Preparedness Team
- SATGAS : Task Force
- SATKORLAK : Disaster Coordination Task Force at Provincial Level
- SATLAK : Disaster Coordination Task Force at District/City Level
- SD : Elementary School
- SDA : Natural Resource
- SIBAT : Community-Based Response Team
- SIPBI : Indonesian Disaster Management Information System
- SKDPM : Early Warning Infectious Disease Surveillance

- SKPG : Food and Nutrition Surveillance
- SLTA : Senior Secondary School
- SLTP : Junior Secondary School
- SNI : Indonesian National Standards
- SOP : Standard Operating Procedure
- SUMBAR : West Sumatra
- SPGDT : Integrated Emergency Medical Service System
- TAGANA : Field Emergency Team
- TEWS : Tsunami Early Warning System
- TNI : Indonesian Armed forces
- TRC : Rapid Response Team
- TOT : Training of Trainers
- UGM : Gadjah Mada University
- UNDP : United Nations Development Programme
- UNESCO : United Nations Educational, Scientific and Cultural Organization
- UNICEF : United Nations Children's Fund
- UN ISDR : United Nations International Strategy for Disaster Reduction
- UNOCHA : United Nations Office for the Coordination of Humanitarian Affairs
- UNTWG : United Nations Technical Working Group
- UPN : University of National Development
- USA : United States of America
- USAID : United States Agency for International Development
- USGS : United States Geological Survey
- UU : Law
- VCA : Vulnerability and Capacity Assessments
- VDAP : Volcano Disaster Assistance Program
- WFP : World Food Programme
- WHO : World Health Organization

INTRODUCTION I

1.1. Background

Awareness of the importance of disaster risk reduction has become stronger since the decade of 1990-1999 that was declared as the International Decade for Disaster Reduction. The need for a concerted effort in disaster risk reduction requires a shared understanding and commitment by all relevant stakeholders particularly decision makers.

the UN Economic and Social Council's Resolution Number 63/1999 calls for world governments to formulate and implement a National Action Plan for Disaster Risk Reduction to support and ensure the attainment of the objectives and targets of sustainable development. As a country invested with disaster-prone areas, Indonesia stands to gain much from the presence of such an Action Plan.

The Hyogo Framework for Action 2005-2015 urges all countries of the world to prepare an integrated disaster risk reduction mechanism that is supported by a proper institutional basis and adequate resources. These three issues have yet to become a priority in Indonesia. Existing disaster management agencies in the country have yet to be vested with sufficient authority and mechanisms to deal with problems larger than mere emergency response.

The formulation of the National Action Plan for Disaster Risk Reduction, later on will be referred to as RAN-PRB, involves a nation-wide process that engages national and sub-national stakeholders from government, civil society and the private sector. The participatory approach was employed because RAN-PRB comprises an integrated plan that includes social, economic and environmental aspects. The Action Plan has also been adapted to fit in with regional and international disaster risk reduction plans.

The community occupies a crucial position in the Action Plan, given that it is a subject,

object and main target of disaster risk reduction efforts. The Action Plan must adopt and respect local wisdom and traditional knowledge prevailing in Indonesian communities. Both aspects are key in making disaster risk reduction a success considering the depth and variety of tradition growing in Indonesia. As subject, the community is expected to enhance access to all formal and informal information sources, hence allowing for direct involvement of the community in disaster risk reduction. The government is expected to make available accessibility facilities and infrastructure as well as adequate resources to implement the action plan.

In the context of supporting and enhancing local capacity, disaster risk reduction efforts as far as possible will use and empower local resources. This includes but not limited to financial resources, natural resources, skills and economic and social processes.

Although set out as a national framework, the implementation of the RAN-PRB involves regional as well as international actors. Good cooperation in disaster risk reduction must be sought as disasters are bound neither by administrative nor territorial boundaries. Regional and international cooperation is therefore one form of cross-jurisdictional disaster risk reduction that demonstrates mankind's solidarity and togetherness.

RAN-PRB is a component of the National Development Plan and key in ensuring that national development objectives are attained. Success in national development will be very much dependent on success in disaster risk reduction. It would only be prudent if the national short, medium and long-term development plans address and incorporate disaster risk reduction considerations.

RAN-PRB merupakan bagian dari Rencana Pembangunan Nasional dan merupakan salah satu faktor penentu tercapainya tujuan pembangunan nasional. Keberhasilan pembangunan nasional akan sangat ditentukan oleh keberhasilan upaya pengurangan risiko bencana. Dengan demikian sudah semestinya apabila rencana pembangunan nasional jangka pendek, menengah maupun jangka panjang juga memperhatikan dan memuat pertimbangan akan risiko bencana yang ada di Indonesia.

RAN-PRB also reflects a shift of paradigm in disaster management Indonesia. There are three important aspects to this paradigm shift:

1. Instead of focusing merely on emergency response, disaster management now represents all aspects of risk management
2. Protection against disaster threats must be provided for by the government not out of obligation but for the fulfilment of the basic human rights of the people

3. Responsibility for disaster management lies no longer with the government alone, but a shared responsibility of all elements of the society

Bearing in mind Indonesia's geographical context and the need to protect the people from disasters, Indonesia needs to devise RAN-PRB in a participatory manner. Hence, the formulation of the current action plan engages the government, the civil society, NGOs, the private sector, international organizations and all other stakeholder concerned with disaster management.

RAN-PRB will first of all describe disaster context in Indonesia including factors contributing to disaster; international, regional and national platforms of the action plan; and priorities, efforts and action plans for national disaster risk reduction. It will also feature a complementary section describing mechanisms and sources of funding for the implementation of the plan.

1.2. Purpose and Objective

The purpose of the action plan is to provide guidelines and information that will facilitate decision makers to pledge commitment to cross-sectoral and -jurisdictional priority programmes based on a strong and systematic foundation.

The objective is to support policymaking and monitoring of disaster risk reduction activities. It lends the document a regulatory authority in maintaining the activities within the right direction, integrated and sustainable.

1.3. Scope

RAN-PRB is a national document specifying platforms, priorities, action plans and mechanisms pertaining to the implementation and institutional basis of disaster management in Indonesia. It describes interests and responsibilities of all stakeholders which were identified through a participatory coordination process and codified in line with the Hyogo Framework for Action.

DISASTER SITUATION IN INDONESIA

II

Indonesia is prone to disasters, be they natural or man-made. Some causes of disaster are related to geography, geology, climate or other factors related to social, cultural or political diversity.

2.1. Factors Contributing to Disaster

Disasters may be caused by nature (natural disaster) or an act of man (man-made disaster). Following are factors that may interact to cause disasters:

(a) Natural and man-made hazards, which the United Nations International Strategy for Disaster Reduction (UNISDR) classify into geological hazards, hydro-meteorological hazards, biological hazards, technological hazards and environmental degradation

(b) High vulnerability of communities, infrastructure and elements in cities/areas at disaster-prone areas

(c) Low capacity of elements within the community

Geographically Indonesia is an archipelago situated at a juncture of four tectonic plates, the Asian Plate, the Australian Plate, the Indian Ocean Plate and the Pacific Ocean Plate. The southern and eastern part of the country features a volcanic arc stretching from Sumatra – Java - Nusa Tenggara - Sulawesi. The remainder features old volcanic mountains and lowlands partly dominated by marshes. They make for a high potential and proneness to disasters, including volcanic eruptions, earthquakes, tsunamis, floods and landslides. Data suggest that Indonesia has a high seismicity among countries of the world, with an occurrence rate more than ten times that of the United States (Arnold, 1986).

Tectonic plate movement-induced earthquakes that happen under the sea often

generate tidal waves. Highly predisposed to tectonic plate movement, Indonesia often experiences tsunamis. Tsunamis in Indonesia are mostly generated by tectonic earthquakes occurring along subduction zones and other seismic active areas (Puspito, 1994). Between 1600 and 2000 there were 105 tsunamis of which 90 percent were generated by tectonic earthquakes, 9 percent by volcanic eruptions and 1 percent by landslides (Latief et al., 2000). Indonesia's coastal areas are prone to tsunamis. These areas include the west coast of Sumatra, the south coast of Java, the north and south coast of Nusa Tenggara, the Maluku islands, the north coast of Irian Jaya and the greater part of the coast of Sulawesi. The Maluku Sea is the most tsunami-prone area. Within 1600-2000 it experienced 32 tsunamis of which 28 were generated by earthquakes and four by undersea volcanic eruptions.

Lying in the tropical climate zone, Indonesia only experiences dry and rainy seasons that are characterized by fairly extreme changes in weather, temperature and wind direction. Combined with the specific surface topography and physically and chemically diverse rock types, this condition creates fertile soil but at the same time potentially harmful consequences particularly hydro-meteorological disasters such as floods, landslides, forest fires and drought. Along with time and growing human activities, more environmental damage was made and this has triggered a higher frequency and intensity of hydro-meteorological disasters (floods, landslides, drought), which have taken place in turns in many parts of Indonesia. Examples include the landslide and flash flood disasters in 2006 in Jember, Banjarnegara, Manado, Trenggalek and several other areas.

Though designed to minimize environmental impact, Indonesia's development process has nevertheless caused environmental and ecological damage. Development which so far has relied upon the exploitation of natural resources (primarily at large scale) has taken away the carrying capacity of natural resources to sustain community life. Indonesia's forestry resources are declining by the year, while mineral mining has caused ecological damage and heightened risks for disaster.

On the other hand, development has enhanced public access to science and technology. Flawed policies on technology use, however, have given raise to higher technological failure with often fatal consequences, e.g. transportation accidents, industrial accidents and epidemics facilitated by increasingly easier movement of people.

Other disaster potentials of no less significance are posed by Indonesia's demographic diversity. In 2004, the population of the country reached 220 million people, made up of a mix of ethnicities, community groups, religious denominations and customs and traditions. Such diversity is an asset unique to Indonesia. However, as the rapid population growth was not accompanied by equitable and proper economic, social and infrastructural policies and development, disparity appears and this in turn creates social jealousy. This situation poses a dire potential for communal conflict that may eventually lead to a national disaster.

2.2. Disaster Threats in Indonesia

Disasters in Indonesia increase by the year. BAKORNAS PB counted within the period of 2003-2005 alone 1,429 disaster incidences with hydro-meteorological disasters comprising the bulk at 53.3 percent. Of this figure, floods occur most often (34.1percent), followed by landslides at 16 percent. Although geological disasters (earthquakes, tsunamis and volcanic eruptions) comprise only 6.4 percent of the total, they caused tremendous loss and fatalities. Most fatalities were accounted for by the combined earthquake and tsunami disaster in the Province of Nanggroe Aceh Darussalam and North Sumatra on 26 December 2004 and the massive earthquake in Nias, North Sumatra on 28 March 2005.

2.2.1. Earthquakes and Tsunamis

Earthquakes occur relatively frequently in Indonesia because of tectonic plate movements and volcanic eruptions. Tectonic plate movements often occur along Sumatra's west coast where the Asian Plate adjoins the Indian Ocean Plate; Java's south coast and the islands of Nusa Tenggara where the Australian Plate meets the Asian Plate; and Sulawesi and Maluku where the Asian Plate meets the Pacific Ocean Plate. They produce an earthquake belt in Indonesia with thousands of epicentres and hundreds of hazardous volcanoes.

Undersea earthquakes may trigger tsunamis. It is especially true for deep-sea earthquakes which are followed by ocean bottom deformation, as happened at Sumatra's west coast and Papua's north coast. Volcanic eruptions may also trigger

tsunamis, as was the case with Mount Krakatau.

Earthquakes and tsunamis normally inflict devastating losses of lives and assets, and place a need for lengthy rehabilitation and reconstruction. It is quite alarming as buildings and infrastructure built over years of development are wiped out in an instant.

The tsunami which triggered the most immense and widespread destruction in modern history took place in the Indian Ocean following a 8.9 Richter scale earthquake nearby Simeulue, the Province of Nanggroe Aceh Darussalam, on 26 December 2004. It devastated Banda Aceh City, Aceh's west coast and Nias Island. The disaster also wreaks havoc in countries along the Indian Ocean including Thailand, Malaysia, Andaman and Nicobar, Sri Lanka and even the coast of East Africa. Aceh and Nias (North Sumatra) counted a death toll of 165,862 (including the 37,066 reported missing). The total economic loss is estimated at 41 trillion rupiah, exclusive of indirect losses caused by interrupted productive and economic activities.

A massive earthquake hit Nias Island only three months afterwards, i.e. on 28 March 2005. Occurring at the seabed around Nias Island, it measured 8.2 on the Richter scale. While not triggering a tsunami, it caused wide-spread destruction in the districts of Nias and South Nias, both part of North Sumatra Province, and the district of Simeulue (Aceh Province). A death toll of 915 was registered for both provinces, with most fatalities in Nias.

An earthquake measuring 5.9 on the Richter scale, which epicentre was at the southern part of Yogyakarta/district of Bantul impacted D.I. Yogyakarta and Central Java on 27 May 2006. As many as 5,749 were reported killed, 38,568 injured and hundreds of thousands lost their homes (provisional data of BAKORNAS PB as of 15 June 2006). The total economic loss is estimated at Rp 29.2 trillion (BAPPENAS, 2006).

2.2.2. Volcanic Eruptions

Presently there are 129 active volcanoes and 500 inactive volcanoes in Indonesia. Of the total active volcanoes, which accounts for approximately 13 percent of the world's total number, 70 are eruptive and 15 are critical.

The volcanoes form a belt covering in one straight stretch Sumatra, Java, Bali and Nusa Tenggara before making northwards turn to the Banda Sea and the northern part of Sulawesi. The belt's length is about seven thousands kilometres and it contains volcanoes of mixed characteristics. Presently more than 10 percent of Indonesia's population inhabit regions prone to volcanic eruptions. Over the last 100 years more than 175,000 have become victims of volcanic eruptions.

Indonesia experiences dry and rainy weather as it lies in the tropical climate zone. Therefore, aside from pyroclastic avalanches, volcanic eruptions also pose indirect hazards such as lahar flows or hazardous volcanic material movements.

Mount Merapi is one of the most active volcanoes in the world. It demonstrates a tendency to collapse its lava dome and produce pyroclastic clouds, locally known as "wedhus gembel" (shaggy goat). Its lava dome may collapse repeatedly over an extended period of time which may be months. It therefore demands sustained and accurate observations, visually or by using telemetry for measuring seismic activities. As an illustration, from 13 May to 21 June 2006, Merapi was at Code Red and did not show any significant signs of lowering its activities. Pyroclastics were erupted hundreds of times and flowed within a radius of six kilometres to cause danger to local settlements, in particular the districts of Sleman (D.I. Yogyakarta), Klaten and Magelang (Central Java). More than 17,212 people were temporarily evacuated and two died after being trapped in a bunker at Kaliadem, Cangkringan, Sleman. (Data from BAKORNAS PB Post as of 15 June 2006).

2.2.3. Floods

Floods reoccur annually in Indonesia, most notably during the rainy season. From a morphologic point of view, floods happen on account of the country's highly varied landscape and its many rivers. Floods generally occur in Indonesia's western region, which features a heavier rainfall than the eastern region. Indonesia's growing population and need for space to accommodate life support activities has indirectly contributed to floods. Logging has been resorted to address the demand for space, to increase sedimentation into rivers which in turn produce uncontrolled runoff and high groundwater saturation. It may cause runoff to reach such an extent to cause a flash

flood, as happened in 2003 in the sub-districts of Bahorok and Langkat (North Sumatra) and in the sub-district of Ayah (Central Java), all of which claimed considerable numbers of lives and assets.

In 2006 sizeable disasters have taken place, including landslides and flash floods in East Java, Jember, where 92 were killed and 8,861 displaced and Trenggalek, where 18 were killed. A flash flood accompanied by a landslide occurred in Manado (North Sulawesi) claimed 27 lives and displacep 30,000. A similar disaster happened in South Sulawesi in June 2006. More than 200 were killed and tens remained missing (provisional data from BAKORNAS PB, 23 June 2006).

2.2.4. Landslides

Landslides in Indonesia frequently occur in areas with steep slopes. Landslides are normally triggered by heavy rainfall. Data suggest that regions highly prone to landslides are Sumatra's Bukit Barisan mountains and mountain ranges in Java, Sulawesi and Nusa Tenggara. Fatal landslides also occur at drilling sites and mining shafts. Landslides also occur annually, in particular in regions with unstable land such as West Java and Central Java.

Most lands in tropical regions are prone to landslides because of high degrees of rock weathering, causing soil composition to be dominated by loose layers of material. Land stability is greatly influenced by damaged buffer zones in Indonesia. Extensive logging in buffer zones has only increased the potential for landslides. An example is West Java, which in 1990 registered 791,519 ha of forest areas (accounting for approximately 22 percent of its total area) to have it reduced to 323,802 ha in 2002 (approximately only 9 percent of total area). It could only be expected that landslides occur frequently in this province.

A landslide in Banjarnegara (Central Java) at the beginning of 2006 claimed 76 lives. An additional 44 were reported missing and feared to be buried under the avalanche. Other losses included the inflicting of heavy damage to rice fields and 104 homes.

2.2.5. Drought

If floods and landslides happen during the rainy season, droughts potentially occur during the dry season. Droughts pose an even more serious problem when impacting food crop-producing regions, as once happened in Bojonegoro which had 1,000 ha of its rice fields experience a harvest failure when the irrigation system dried up. A similar case happened at Java's north coast, where a drought struck 12,985 ha of food crop-producing areas.

Today droughts also impact the country's power supply as they lower output of power plants, in particular hydroelectric power plants catering to energy needs of Java and Bali. Droughts normally occur during long dry seasons in some regions especially Indonesia's Eastern Regions such as NTB, NTT and several areas in Sulawesi, Kalimantan and Papua.

Droughts also potentially promote the spread of tropical diseases such as malaria and dengue fever.

2.2.6. Forest and Land Fires

Forest fires happen at an increasingly alarming rate. Negative impacts caused by forest fires are considerable, including decreased biodiversity, reduced economic value of forests, declining land productivity, micro and global climate changes, and smoke hazes hazardous to health and disruptive to land, river, lake, sea and air transport. A considerable forest fire took place in Indonesia in 1997-1998 in Kalimantan and parts of Sumatra. Smoke hazes even reached Singapore, Malaysia and Thailand. Kalimantan and Sumatra are prone to land fire because the land there is composed of peat, which becomes easily burned following uncontrolled land clearing.

Data from the Directorate General for Forest Protection and Conservation suggest that between 1998 and 2002 forest fires have occurred annually, each time impacting between 3,000 and 515,000 ha of forest.

Forest and land fires are mainly triggered by natural factors and by human activities such

as land clearing. Low welfare and low education of communities living in and around forests are among the contributing factors. The more prominent factor contributing to forest fire is the logging activities conducted by forest concession holders who clear forests without heeding regulations and environmental considerations.

2.2.7. Epidemics, Disease Outbreaks and Extraordinary Events

Epidemics, disease outbreaks and extraordinary events are hazards caused by the spread of communicable diseases in a certain region. On a large scale, these may cause fatalities and increase the number of infected persons. Diseases that are currently being watched rigorously in Indonesia include dengue fever, malaria, bird flu, anthrax, hunger oedema and HIV/ AIDS. Their spread is generally very hard to contain, hence what started out as a local event may quickly turn into a national disaster claiming many lives. Poor environmental conditions, bad foods and life styles and climatic changes are some of the contributing factors.

2.2.8. Technological Disasters

Failure of a technological system leading to a technological disaster can always be traced back to a system error, which in turn is caused by a system design that is incompatible with the environment it operates in, design that fails to strike a balance between the technical and the social systems. It happens frequently in Indonesia to fatal consequences. Examples include transportation accidents (involving ships, aircrafts, land transport such as trains), industrial accidents (gas pipe leaks, poisoning, environmental pollution) and household accidents (short-circuits, fires). Transgenic technological disasters also pose a potential threat considering that Indonesia is an open market to transgenic products.

Transportation accidents constitute the bulk of technological disasters in Indonesia, claiming on average 30,000 victims a year. In this category, Indonesia ranks third among ASEAN countries.

A technological disaster that is ongoing now is a blow-out on an oil well in Sidoarjo, East Java. The mud blow-out happened following a faulty prediction which neglected

the characteristics of underground pressurized rock, causing water-saturated mud to flow continuously from the well to inundate business operations/rice fields and farmlands of locals and their homes. The mudflow has also led to the closure of nearby factories and the Surabaya-Gempol toll road disrupting distribution of industrial goods. It is feared that massive losses and environmental damage will be sustained should the industrial accident not be immediately addressed.

2.2.9. Social Unrest

Indonesia's social culture, made up of diverse ethnicities, races, community groups, languages and religions, is a rich national asset and at the same time a highly vulnerable feature. Those with vested interests have often taken advantage of it to incite conflict. Indonesia's proneness to conflict is made worse by gaping economic disparities and low education. Also contributing is a declining sense of nationalism as demonstrated by some regions aspiring to break away from the Unitary State of the Republic of Indonesia.

As of 1999 and until a few years back Indonesia had been marred by vertical and horizontal conflicts, which were marked by the onset of social unrest, in several of its regions, including Sambas (West Kalimantan), Maluku, Aceh, Poso and others, and which saw the displacement of almost a million people over 20 provinces. Though most of the displacement issue has been addressed, the potential for recurrence at any given time remains in event of social conflict. Preparedness and alertness is advised to reduce the risk.

PLATFORM FOR DISASTER RISK REDUCTION

III

Disaster Risk Reduction in Indonesia forms part of a similar effort at the regional and global levels. Several international forums have produced agreements that provide the basis for disaster risk reduction efforts at the national and local scales. To be effective and efficient, disaster risk reduction efforts in Indonesia requires a strong platform that refers to the above-mentioned international agreements and the national laws and regulations.

3.1. Global Platform

Awareness on the need for disaster risk reduction at the international level is an initial benchmark as well as platform for implementation of similar efforts on smaller scales. On an international scale, many disaster risk reduction efforts were initiated by the United Nations through several Resolutions appealing the world to place greater priority on disaster risk reduction as an inseparable part of sustainable development.

3.1.1. UN Resolutions

The United Nations started to observe disaster risk reduction issue with the issuance of General Assembly's resolution on its 2018th plenary session on 14 December 1971 on Assistance for Natural Disaster Situation and Other Disasters. It was then followed up by GA Resolution No. 46/182 in 1991 on Strengthening Coordination for Humanitarian Assistance in the United Nations.

On 30 July 1999 the UN Economic and Social Council (ECOSOC) issued Resolution No. 63/1999 concerning the International Decade for Disaster Risk Reduction. Through the

resolution the UN ECOSOC expects the UN member states to pay attention to the implementation of the International Strategy for Disaster Risk Reduction (ISDR). ISDR forms a platform for UN activities in disaster risk reduction and provides its institutional direction through the setting up of cross-agency/institution/organisation working groups. The disaster risk reduction strategy encompasses medium-term to long-term activities that will make use of science, technical and socioeconomic knowledge.

Key targets of ISDR are: (1) to enhance the community resilience against the impacts of natural, technological and environmental disasters; (2) to change protection against disaster approach into disaster risk management by incorporating risk prevention strategies into sustainable development activities.

The International Strategy for Disaster Risk Reduction has the following objectives:

1. Raising community awareness of natural, technological and environmental disasters
2. Ensuring the government's commitment to reduce risk to man, community life, social and economic infrastructure and environmental resources
3. Engaging community participation in implementation of disaster risk reduction activities by strengthening partnerships and broadening disaster risk reduction networks
4. Reducing economic and social losses resulting from disaster

The above objectives are expected to become a framework for disaster risk reduction efforts at all levels addressing local, national, regional and international interests.

The UN Economic and Social Council Resolution No. 63/1999 was followed up by General Assembly Resolution No. 56/195 on 21 December 2001 designating the International Day for Disaster Risk Reduction to advocate sustainable efforts on disaster risk reduction to be put as yearly calendar issues for the countries ratifying this resolution to follow-up.

3.1.2. The Yokohama Strategy

The Yokohama strategy was ratified in 1994. It is an international guideline for reducing disasters risks and impacts. It focuses on systematic efforts to incorporate disaster risk

reduction into sustainable development. It also focuses on efforts to increase community resilience through capacity building for managing and reducing disaster risks. These efforts are undertaken through a more proactive approach in providing information, motivation and community involvement in all aspects of disaster risk reduction. They must be supported by the allocation of special funds in the development budget to attain the objectives of disaster risk reduction. Budget mechanisms apply to national and regional levels and in the context of international cooperation.

Obstacles and challenges identified by the Yokohama Strategy include:

1. Governance, organizational, legal and policy frameworks
2. Risk identification, assessment, monitoring and early warning
3. Knowledge management and education
4. Reducing underlying risk factors
5. Preparedness for effective response and recovery

The five aspects above are key areas for developing a relevant framework for action for disaster risk reduction. These aspects are translated into basic principles of disaster risk reduction that include the following:

1. Disaster risk assessment is a required measure for the implementation of policies and efforts for proper and successful disaster risk reduction
2. Disaster prevention and preparedness are key in reducing the need for relief
3. Disaster prevention and preparedness cover integral aspects of development planning and policies at the national, regional and international levels
4. Capacity building and strengthening for preventing, reducing and mitigating disaster are key priorities of the International Decade for Disaster Risk Reduction
5. Effective early warning and dissemination of disaster information through the use of telecommunication facilities such as broadcasting services is key for successful disaster prevention and preparedness
6. Prevention efforts are most effective when involving local community, national, regional and international participation
7. Vulnerability towards disaster may be reduced by applying development designs and mechanisms focused on groups, by using appropriate education and training for society at large
8. The international community needs to share technology for preventing, reducing and mitigating disaster, and this should be done freely and timely as a technical cooperation component

9. Environmental protection is a component of sustainable development aligned with poverty alleviation and is key in natural disaster prevention and mitigation
10. Each country has the responsibility of protecting its people, infrastructure and other national assets from natural disaster impacts. The international community must demonstrate a strong political will to properly and efficiently mobilize existing resources including funds, science and technological equipment in an effort to reduce natural disaster, which is felt to be of particular importance to developing countries

3.1.3. The Hyogo Framework for Action

In observance of aspects related to disaster risk reduction, the World Conference on Disaster Risk Reduction convened in January 2005 in Kobe identified an expected outcome, i.e. the substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries. The realization of this outcome will require the full commitment and involvement of all actors concerned, including governments, regional and international organizations, civil society including volunteers, the private sector and the scientific community. To attain this expected outcome, the following strategic goals will be adopted:

1. The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction
2. The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards
3. The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities

Priority areas for 2005-2015 include the following:

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation
2. Identify, assess and monitor disaster risks and enhance early warning
3. Use knowledge, innovation and education to build a culture of safety and resilience

at all level

4. Reduce underlying risk factors
5. Strengthen disaster preparedness for effective response at all levels

The Hyogo Framework for Action has been followed-up by several regions and countries, including by the Pacific Island countries that have ratified the Framework for Action 2005-2015: An Investment for Sustainable Development in Pacific Island Countries; Africa set up the Africa Advisory Group on Disaster Risk Reduction and ratified African Regional Platform of National Platform for Disaster Risk Reduction; while Asia ratified the Beijing Declaration on the 2005 World Conference on Disaster Risk Reduction document. ASEAN countries ratified the ASEAN Agreement on Disaster Management and Emergency Response.

3.2. Regional Platform

The platform for disaster risk reduction at the global level has provided significant basis for similar platforms at regional level. At the Asia-Pacific level, several forums have produced agreements viewed as platforms for risk reduction at national and local level.

3.2.1. The Beijing Action Plan

The Beijing Action Plan formulates a strategy and a partnership mechanism for disaster management and reduction that engage all relevant stakeholders at the Asian regional level. Aside from reconfirming its commitment to the Hyogo Framework for Action, the Beijing Action Plan also asserts agreement by all Asian countries to make a disaster risk reduction plan as an immediate priority.

Asia is vulnerable to disasters; natural disasters, disease outbreaks or social disasters. Regional cooperation in disaster risk reduction in Asia is therefore needed and should be supported by the existing regional and sub-regional agencies and institutions.

3.3. National Platform

The 1945 Constitution contains several articles related to the duty of the country, the Republic of Indonesia, to protect the people from disaster. Paragraph IV of the Preamble of the Constitution clearly stipulates that "the Republic of Indonesia is responsible to protect the whole Indonesian nation and the entire motherland" with the aim to provide protection on life and livelihood, inclusive protection against disasters, in the framework of realization on general welfare, which is then translated into Article 12 and Article 33 point 3. Several laws and regulations have also been enacted in the effort to protect the people from disasters such as Law No. 6/1974 on Social Welfare, Law No. 20/1982 on General Rules on Safety and Security of the Country, Law No. 4/1984 on Communicable Diseases, Law No. 31/1992 on Health, Law No. 24/1992 on Landscape Planning, Law No. 23/1997 on the Management of the Environment, Law No. 41/1999 on Forestry, Law No. 22/2001 on Oil and Gas, Law No. 2/2002 on Police, Law No. 3/2002 on State Security, Law No. 32/2004 on Local Government, Law No.

7/2004 on Water Resources and Presidential Instruction No. 7/2005 on the Middle-term Development Plan.

In line with the agreements at the global and regional levels, Indonesia has put disaster risk reduction as one of the priorities of the national development. The Government of Indonesia is committed to immediately realize this commitment by mainstreaming disaster risk reduction measures into the national development framework, particularly in the National Middle-term Development Plan (RPJMN) and the Government's Annual Work Plan (RKP).

3.3.1. The National Middle-term Development Plan (RPJMN)

DThe National Middle-term Development Plan (RPJMN) does not address the issue of disaster risk reduction in particular but incorporates it in the areas of social welfare, natural resources and the environment. Programmes and activities related to disaster risk reduction are generally developed independently by the different sectors.

3.3.2. The Government's Work Plan (RKP)

The government prepares an RKP on an annual basis. The document sets out all programmes for each sector in the year in progress.

In Law No. 13/2005 on State Revenue and Expenditure Budget for fiscal year 2006, disaster risk reduction activities are allocated under the Natural Disaster Management policy through the following programmes:

1. Enhancement of natural disaster mitigation and climate forecasting
2. Spatial planning and natural resource protection zoning, including disaster-prone areas in coastal and sea areas
3. Development of a natural disaster management system and early warning system

In the RKP for 2007, which was passed into law through Presidential Regulation No. 19/2006, Disaster Mitigation and Management constitute one of the nine development priorities. Two key targets for Disaster Mitigation and Management for 2007 include: (1) continued rehabilitation and reconstruction of Aceh and Nias Islands (North Sumatra), completion of post-disaster rehabilitation and reconstruction in Alor District

(East Nusa Tenggara) and Nabire (Papua); and (2) completion of emergency response, rehabilitation and reconstruction in other regions affected by disasters in 2005 and 2006. Another important target is the strengthening of the preparedness of institutions and the community in preventing and mitigating the risks of future natural disasters.

Disaster Risk Reduction programmes are presently implemented by relevant departments/agencies using a sectoral approach and incorporated into their regular programmes. The action plan will try to facilitate the identification of all these disaster risk reduction-related activities of each department/agency.


SOSIALISASI RENCANA AKSI NASIONAL
PENGURANGAN RESIKO BENCANA
MAKASSAR, 1 DESEMBER 2010

ACTION PLAN FOR DISASTER RISK REDUCTION

IV

Efforts to reduce disaster risks in Indonesia have been set out in an implementation framework that focuses on several immediate key actions. RAN-PRB has identified several priorities for implementation that will later be elaborated in a more operational plan of action.

4.1. Priorities

Initiatives to reduce disaster risks in Indonesia will strive for sustainability and participation by all stakeholders. Strong commitment to selected priority actions will characterize these efforts. These priorities serve the purpose of laying a strong foundation for the implementation of an integrated sustainable disaster risk reduction programme that is in line with similar effort at the international level.

There are five key priority areas for disaster risk reduction that must be addressed:

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation
2. Identify, assess and monitor disaster risks and enhance early warning
3. Use knowledge, innovation and education to build a culture of safety and resilience at all level
4. Reduce underlying risk factors
5. Strengthen disaster preparedness for effective response at all levels

4.2. Action plan

Reflecting the shift of paradigm towards protection as part of the fulfilment of the

basic rights of the people, disaster risk reduction will need to have the following characteristics:

a. Recognizing the right for dignified life and livelihood and that the government is responsible to ensure the protection from disaster, which in essence is avoidable, with no risk creation in recovery process
b. Reducing disaster risk factors from unsustainable development practices that are worsened by the impact of climate changes
c. Being accountable to the risk community and/or disaster-affected community and sensitive to gender, participatory, equity and justice perspectives

Following are the key activities to be developed as part of the implementation of the National Action Plan for Disaster Risk Reduction:

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation, with the following activities:
    1) National institution and legal framework
        i. Supporting the creation and strengthening of national integrated disaster risk reduction mechanisms
        ii. Integrating risk reduction into development policies and planning, including in poverty reduction strategies
        iii. Adopting or modifying, where necessary, legislation to support disaster risk reduction, including regulations and mechanisms that encourage compliance and that promote incentives for undertaking risk reduction and mitigation activities
        iv. Recognizing the importance and specificity of local risk patterns and trends, decentralizing responsibilities and resources for disaster risk reduction to relevant sub-national or local authorities
    2) Resources
        i. Assessing existing human resource capacities for disaster risk reduction and developing capacity-building plans and programmes for meeting ongoing and future requirementsg
        ii. Allocating resources for the development and the implementation of disaster risk management policies, programmes, laws and regulations on disaster risk reduction
        iii. Governments should demonstrate the strong political determination required to promote and integrate disaster risk reduction into development

programming

3) Community Participation

Systematically involving community in disaster risk reduction, including in the process of decision-making for issues mapping, planning, implementation, monitoring and evaluation, through the creation of networking, including volunteer network, strategic human resource management, and by making legal regulations and defining responsibilities and delegation of authority.

2. Identify, assess and monitor disaster risks and enhance early warning, with activities:

1) Risk Assessment at National and Local Scale

i. Developing, updating and widely disseminating risk maps and related information to decision-makers and the general public

ii. Developing systems of indicators of disaster risk and vulnerability at national and sub-national scales that will enable decision-makers to assess the impact of disasters

iii. Recording, analyzing, summarizing and disseminating statistical information on disaster occurrence, impacts and losses

2) Early Warning

i. Developing early warning systems that are people-centered, in particular systems whose warnings are timely and understandable to those at risk

ii. Establishing, periodically reviewing and maintaining information systems as part of early warning systems

iii. Establishing institutional capacities to ensure that early warning systems are well integrated into governmental policy and decision-making processes

iv. Strengthening of coordination and cooperation among all relevant sectors and actors in the early warning chain in order to achieve fully effective early warning systems

v. Creating and strengthening effective early warning systems at smaller islands

3) Capacity

i. Supporting the development and sustainability of the infrastructure and scientific, technological, technical and institutional capacities needed to research, observe, analyze, map and forecast natural and related hazards, vulnerabilities and disaster impacts

ii. Supporting the development and improvement of relevant databases and the promotion of full and open exchange and dissemination of data for assessment, monitoring and early warning purposes

iii. Supporting the improvement of scientific and technical methods and capacities for risk assessment, monitoring and early warning, through research, partnerships, training and technical capacity building

iv. Establishing and strengthening the capacity to record, analyze, summarize, disseminate, and exchange statistical information and data

4) Emergency Regional Risks

i. Compiling and standardizing statistical information and data on regional disaster risks, impacts and losses

ii. Cooperating regionally and internationally to assess and monitor regional and trans-boundary hazards

iii. Researching, analyzing and reporting long-term changes and emerging issues that might increase vulnerabilities and risks or the capacity of authorities and communities to respond to disasters

3. Use knowledge, innovation and education to build a culture of safety and resilience at all level, with activities:

1) Information Management and Information Exchange

i. Providing easily understandable information on disaster risks and protection options, especially to citizens in high-risk areas

ii. Strengthening networks among disaster experts, managers and planners across sectors and between regions, and creating or strengthening procedures for using available expertise in developing local risk reduction plans

iii. Promoting and improving dialogue and cooperation among scientific communities and practitioners working on disaster risk reduction

iv. Strengthening the use and implementation of updated information, information and technology for disaster risk reduction purposes

v. In the medium-term, developing directories, inventories, and information exchange systems at the local, national, regional and international levels

vi. Institutions dealing with urban development should provide information to the public on disaster reduction options prior to constructions, land purchase or land sale

vii. Updating and widely disseminating international standard terminology related to disaster risk reduction

2) Education and Training

i. Promoting the inclusion of disaster risk reduction knowledge in relevant sections of school curricula

ii. Promoting the implementation of local risk assessment and disaster preparedness programmes in schools and institutions of higher education

iii. Promoting the implementation of programmes and activities in schools for learning how to minimize the effects of hazards

iv. Developing training and learning programmes in disaster risk reduction targeted at specific sectors (development planners, emergency managers, local government officials, etc.)

v. Promoting community-based training initiatives to enhance local capacities to mitigate and cope with disasters

vi. Ensuring equal access to appropriate training and educational opportunities for women and vulnerable constituencies

3) Research

i. Developing improved methods for predictive multi-risk assessments and socioeconomic cost–benefit analysis of risk reduction actions

ii. Strengthening the technical and scientific capacity to develop and apply methodologies, studies and models to assess vulnerabilities to and the impact of geological, weather, water and climate-related hazards

4) Public Awareness

Promoting the engagement of the media to stimulate a culture of disaster resilience and strong community involvement

4. Reduce underlying risk factors, with activities:

1) Natural Resources and Environmental Management

i. Encouraging the sustainable use and management of ecosystems, including through better land-use planning and development activities to reduce risk and vulnerabilities

ii. Implementing integrated environmental and natural resource management approaches that incorporate disaster risk reduction

iii. Promoting the integration of risk reduction associated with existing climate variability and future climate change

2) Social and Economic Development

i. Promoting food security

ii. Integrating disaster risk reduction planning into the health sector to safeguard hospitals from disaster impacts
iii. Protecting and strengthening critical public facilities (schools, hospitals, power plants, etc.) to safeguard against disaster impacts
iv. Strengthening the implementation of social safety net mechanisms
v. Incorporating disaster risk reduction into post-disaster recovery and rehabilitation processes
vi. Minimizing disaster risks and vulnerabilities caused by movement of people
vii. Promoting diversified income options for populations in high-risk areas to reduce their vulnerability to hazards
viii. Promoting the development of financial risk-sharing mechanisms such as disaster insurance
ix. Promoting the establishment of public–private partnerships to better engage the private sector in disaster risk reduction activities
x. Developing and promoting alternative and innovative financial instruments for addressing disaster risk

3) Land Use Planning and Other Technical Regulations
i. Incorporating disaster risk assessments into the urban planning and management of disaster-prone human settlements
ii. Mainstreaming disaster risks into planning procedures for key infrastructure projects, including design criteria, approval and the implementation of the projects
iii. Developing guidelines and monitoring tools for the reduction of disaster risk in the context of land-use policy and planning
iv. Incorporating disaster risk assessment into urban development planning
v. Encouraging the revision of existing or the development of new building codes, standards, rehabilitation and reconstruction practices

5. Strengthen disaster preparedness for effective response at all levels, with activities:
1) Strengthening policy, technical and institutional capacities in regional, national and local disaster management, including those related to technology, training, and human and material resources
2) Supporting dialog, information exchange and coordination among institutions dealing with early warning, disaster risk reduction, emergency response,

development and other relevant agencies

3) Strengthening and when necessary developing coordinated regional approaches and creating or upgrading regional policies, operational mechanisms, plans and communication systems in the event of cross-border disasters
4) Preparing or reviewing and periodically updating disaster preparedness and contingency plans and policies at all levels
5) Promoting the establishment of emergency funds to support response, recovery and preparedness measures
6) Developing specific mechanisms to engage the active participation and ownership of relevant stakeholders

IMPLEMENTATION V

RAN-PRB serves as a guideline for early prevention of disasters. The implementation of the action plan will be done in synergy with the long and medium-term development plans at the national and local levels. This effort calls for serious, concerted and consistent commitment of all relevant stakeholders.

5.1. Mechanism

Each priority programme that has been turned into an action plan will contain activities, related implementing institutions and funding sources. The action plan will be elaborated into annual plans that will be formulated by:

a. Relevant departments/non-departmental agencies, with necessary adjustments to fit in with the prevailing development planning mechanisms
b. Local governments (provincial/district/city) after identifying local disaster typologies/characteristics prior to the exercise

Relevant government institutions, in coordination with other related national and local government institutions, will implement the action plan. The National Development Planning Agency will coordinate the implementation of the action plans of the different departments/non-departmental agencies, while the National Body for the Coordination of Disaster Management will supervise, monitor and evaluate the implementation.

5.2. Institutional Arrangement

The implementation of the Action Plan calls for the following institutional arrangement:

1. To ensure consistency and coherence of disaster risk reduction efforts, the action plan will be enacted into a Regulation or Presidential Instruction that will require

all relevant departments/non-departmental agencies to implement the plan

2. To strengthen implementation of the action plan there is a need to build a network that will link government institutions, local governments, the private sector, the civil society and other relevant stakeholders
3. The civil society will be involved in the institutional arrangement and disaster risk reduction mechanism at all levels of the government

5.3. Funding

Funding for the implementation of the action plan will be allocated from the state budget, local budgets, private sector assistance and regional and international donors. Funding from the state and local budgets will be allocated on an annual basis to ensure sustained and consistent disaster risk reduction efforts.

Considering the government's limited funding capacity, the civil society and the private sector are expected to play a significant role in supporting the funding of disaster risk reduction measures. Support from regional and international donors is also expected, especially in the context of a broader scope disaster risk reduction.

Regions that depend themselves on extractive industry and exploitation of natural and environmental resources are expected to equally invest on the efforts of mitigation, preparedness, response and recovery from disaster impacts that have been or may be caused by those activities.

5.4. Indicators

To ensure the accountability of disaster risk reduction on development policy, measurable achievement indicators will be developed and the civil society will be involved in the monitoring through the development of control mechanisms at all levels, from the central up to the village level.

The efficacy and success of disaster risk reduction in Indonesia can be measured by the following indicators:

1. General

   In general, the efficacy and success of the implementation of disaster risk reduction initiatives can be measured with the following indicators:

   (1) Higher number of survivors in the event of a disaster
   (2) Lower number of injured victims caused by a disaster
   (3) Significant decrease of percentage of communities affected by a disaster
   (4) Percentage of affected population counted after a certain span of time after a disaster
   (5) The availability of building and land codes
   (6) Capacity for emergency response

2. Resilience against Disaster

   In the context of resilience against disaster, the success of disaster risk reduction can be measured with the following indicators:

   (1) Distribution of income levels
   (2) Level of education
   (3) Level of use of medical services
   (4) Level of unemployment
   (5) Availability and resilience of housing
   (6) Birth and mortality rates of social groups
   (7) Quality of life
   (8) Survival
   (9) Environmental resilience
   (10) Local economic resilience

3. Geographical Aspect

   At the national level the success of disaster risk reduction programmes can be measured with the Disaster Risk Index and the National Disaster Resilience Index.

   (1) The National Disaster Risk Index measures a country's level of disaster risks by looking into disaster indicators, physical indicators and society's social economic resilience
   (2) The National Disaster Resilience Index measures capacities for disaster risk management (DRM), institutional capacities, attention to disaster risks, funding availability and emergency response preparedness

Areas with high disaster risk index and low disaster resilience index will develop comprehensive strategies for disaster risk reduction.

4. Disaster Risk Reduction Policy and Implementation

The success of disaster risk reduction initiatives in a region cannot be separated from the policy implementation and the implementation of the activities, which can be evaluated with the following indicators:

(1) Extent of preparedness and time needed for emergency response
(2) Recovery period and efficacy of recovery
(3) Losses compared to recovery costs
(4) Cost of the disaster risk reduction system
(5) Scope of planning and disaster management
(6) Social support/social safety net programmes to support disaster resilience
(7) Continuity of funding and financial resources for disaster management
(8) Scope, relevance and capacity for research to identify disasters, risks and disaster resilience
(9) Process for reviewing, updating and maintaining the Action Plan for Disaster Risk Reduction on a regular basis
(10) Capacity to build networks for collaboration that can accommodate the interests of the government, the private sector, NGOs, professional associations and individuals

CLOSING VI

With the many disaster-prone areas in Indonesia and the growing awareness of the importance to protect communities from the adverse impacts of disasters, it is timely for the country to develop an integrated and coherent disaster risk reduction programme. The National Action Plan for Disaster Risk Reduction, which is formulated on the basis of global disaster management concepts while at the same time emphasizing local disaster contexts, is expected to serve as a solid reference for all actors dealing with disaster in Indonesia. Commitment of all relevant institutions and stakeholders is indispensable for the successful implementation of the plan.

The action plan will later be detailed into annual plans that will reflect priority disaster management needs and related government policies. It is expected that the plan will be regularly updated to stay abreast of changes in disaster situation in Indonesia and the wider international context.

APPENDIX

An

MATRIX OF STATUS AND ACTION PLAN FOR DISASTER RISK REDUCTION IN INDONESIA

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
1	**DRR as a national and local priority and institutional capacity building**							
a.	Setting up and strengthening an integrated DRR mechanism	Peace Trough Development Analysis (PDA) Resources Pack Book implemented	Reviewing the Grand Strategy for Conflict Management (continued)	BAPPENAS	■			
		Decentralized Conflict-Sensitive Planning (DCSP) conceptualized	Drafting of DCSP (continued)	BAPPENAS, UNDP	■			
		National-level HFA followed up on	Setting up a national platform for DRR in Indonesia	BAKORNAS PB dan BAPPENAS	■			
		SOP on DM and disaster data provisioning set up	Drafting SOP on DM and disaster data provisioning through activation of local resources in geological DM corresponding to guidance through the issuance of SNI (Indonesian National Standard)/geological disaster management	DESDM	■	■		
		Indonesian version of HFA published	Supporting dissemination to national and local governments and communities	MPBI	■	■	■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Disaster management institutionally debated at DPR Special Committee	Bringing closer together the process of the government and DPR through dialogue on institutional matters	MPBI, BAKORNAS PB, DPR	■			
		Lack of CBRR Framework	Creating a CBRR framework through a national seminar and publication	MPBI, IFRC/PMI	■			
		PSC set up in 6 provinces	Setting up PSCs in Districts/Cities and Provinces	DEPKES	■	■		
		Coordination from DRM at national level (GTZ-Good Governance)	Integrating DRM into Good Governance activities	DEPDAGRI-GTZ/Good Governance	■	■	■	■
		Preparations for Project Management of Georisk activities, forming part of the GLG project (2006-2009), part of Civil Society and Inter-Municipal Cooperation for better Urban Services/ Urban Quality (2003-2005). Help conceptualizing guidelines on multi- hazard DM in C Java, NTB and NTT. Help in devising a CBRR concept in Indonesia.	Helping in formulating the disaster management bill Promoting the introduction of the disaster management bill to the national policy-making level. Helping in combining mitigation activities into a single national mitigation strategy	BAKORNAS PB, DEPDAGRI, DEPKES, Dep. PU (didukung BGR/GTZ melalui Georisk Project)	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
b.	Integration of DRR into development policies and planning	DRR has yet to be incorporated into Medium Term Development Plan (RPJM) though it has been inserted into Govt Work Plans (RKPs).	Incorporating DRR into RKP 2007	BAKORNAS PB dan BAPPENAS		■	■	■
		The present DM Guidelines still make use of 1994 BAKORNAS PB DM directives	Drafting new national guidelines for DM	BAKORNAS PB	■	■		
			Developing HFA up to indicators, programming and activities at national level and selected regions.	MPBI – Care, BAKORNAS PB, BAPPENAS, SATKORLAK PB, SATLAK PB		■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Providing and managing geospatial data, supporting NAD and Nias rehabilitation and reconstruction, supporting BRR NAD and Nias. Atlas of the Aceh tsunami. Multi-hazard map (integration of disaster prone maps done by various govt institutions in line with each respective field of service)	Management of geospatial data supports rehabilitation and reconstruction of NAD and Nias and supports BRR NAD and Nias. National Atlas	BAKOSURTANAL, BRR, Dep. PU Bakosurtanal Relevant govt institutions				
		Information on geological disasters must be incorporated into regional planning of NAD.	Geological disaster mapping at provincial level will be prepared as a blueprint (provincial level planning)	BGR/GTZ/ Geological Agency/ Provincial Office for Mines and Energy of NAD				
		DKP and 15 provinces and 43 districts/ municipalities have done maritime baseline and thematic surveys, including on coastal hazards	Strategic planning on disaster and pollution management at coastal regions of W Sumatra, W Java, E Java, Bali and NTB	DKP and Bakorsurtanal				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Producing a map of disaster prone regions; geological hazard mapping for spatial planning, volcanic hazard mapping, landslide susceptibility mapping, erosion and ground movement hazard mapping, and technical recommendations for disaster management with assessments prioritizing settlements with dense populations and high activity and which feature vital and strategic buildings. Exploring abovementioned technical recommendations as input to Perda (local regulation).	Assessing geological hazards, infrastructural vulnerabilities and georisks at local level and disseminating the information to local governments as reference in drafting Perda. Compiling regulations, laws governing management of natural resources and hazards.	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Training in DM in Development Planning for executive and legislative branches at provincial, district/municipal level (Yogyakarta, Riau, North Maluku, Manado) in cooperation with INDES, UNDP. Producing information on disaster prone regions (volcanic hazards, landslides) in cooperation with Yayasan PIKUL.	Training in DM in Development Planning for executive and legislative branches at provincial, district/ municipal level for other areas. Producing information on disaster prone regions for other regions.	UPN Veteran Yogyakarta				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Belum dilaksanakan pelatihan manajemen bencana untuk perencanaan pembangunan bagi eksekutif dan legislatif provinsi, kabupaten/kota (Yogyakarta, Riau, Maluku Utara, Manado) Bekerjasama dengan INDES dan UNDP Belum ada informasi kawasan rawan bencana (gunung berapi, longsor) kerjasama dengan Yayasan PIKUL	Melaksanakan pelatihan manajemen bencana untuk perencanaan pembangunan bagi eksekutif dan legislatif provinsi, kabupaten/kota bagi wilayah lain Penyediaan informasi kawasan rawan bencana bagi wilayah lain	UPN Veteran Yogyakarta				
		Sedang disusun konsep manajemen risiko bencana berbasis masyarakat yang dapat diadopsi di seluruh wilayah Indonesia	Melakukan kegiatan-kegiatan mitigasi ke satu strategi mitigasi nasional	DKP				
		Banyak daerah belum memiliki rencana penanganan bencana (disaster management plan) di wilayahnya	Mendorong penyusunan disaster management plan untuk tingkat provinsi dan kabupaten	DKP				
c.	Adopting or modifying statutory regulations to support DRR	Ongoing drafting of the DM Bill involving all pertinent govt institutions, DPR RI and NGOs	Continue discussions on the bill with DPR	Government, DPR				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Preparing and studying possible legal umbrellas for conflict management in Indonesia.	Continue preparations of a legal umbrella for conflict management in Indonesia.	BAPPENAS	■	■		
		Ongoing drafting of the DM Bill.	Preparing a Government Regulation (PP) as executing regulation of the law in DRR.	BAKORNAS PB Satkorlak PB Satlak PB	■	■	■	■
		Collecting investigatory data on quake resistant buildings/ infrastructure. Collecting information on insurance companies underwriting disaster insurance, methods used in analyzing and calculating disaster risks of a region	Convening a seminar to review investigation results as input to PU (KIMPRASWIL). Available data will serve as input to a National Discussion to identifying building codes. Convening a seminar on disaster risk insurance	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM/ Dep. PU	■ ■	■ ■	■ ■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Conceptualizing a Presidential Regulation governing Geological Preservation Areas, including Disaster Prone Geological Areas (areas prone to volcanic, quake, tsunami, and landslide hazards)	Preserving specific and endangered geological areas and encouraging local governments to monitor conformity of land use with disaster prone principles.	DESDM				
		Lack of capacity for exploring substance of provisions, guidelines for policies and PB Bansos programming in the form of a book.	Preparing stipulations and guidelines for PB Bansos, e.g. general guidelines, technical guidelines, etc.	DEPSOS				
			Supporting drafting of a DM Bill in which are reflected disaster management planning and funding.	MPBI and DM Bill Pansus				
		Ongoing and will continue to be pursued.	Supporting review of DPR of the DM Bill during which are provided input with regard to international law, comprehensiveness of disaster management, civil law, state administrative law and constitutional law.	MPBI, Care International Indonesia, UNDP, OXFAM, IFRC, PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
d.	Identifying local disaster risks and decentralizing DRR authority pursuant to local government authority.	Continued observations of active volcanoes by observation posts, setting up ground movement observation points along landslide prone roads. And most importantly preparing the public in anticipating events of disaster.	Setting up a regional centre to build effectiveness, efficiency and accuracy to support volcanic early warning systems. Adding up number of ground movement observation points and sites at vital and strategic roads.	DESDM				
		Not every region has a DM Plan on hand.	Promoting the drafting of a DM Plan at Provincial and District level.	BAKORNAS PB Satkortlak PB Satlak PB				
		Preparing geological disaster risk assessments for C Java, NTB and NTT to ensuring that outcomes (maps of disaster prone areas and technical recommendations) will serve as input to local governments as bodies in which local authority are vested (Laws 32/ 2004, 22/ 1999 concerning Decentralization).	Setting up a method for conducting geological disaster, infrastructural hazard, georisk assessments in the country. Produce a geohazard map which will be overlain with socio-graphic data	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Disaster assessment reports and technical recommendations on geological disaster management/ mitigation are submitted to BAKORNAS PB and Pemda.	Encouraging Pemda to be wise in implementing technical recommendations on geological disaster.	DESDM				
		Cooperating with Pemda, both directly and otherwise, in preparing a detailed Disaster Prone Map (at District, Sub-district to Village level).	With the SNI in place, local governments are expected to conduct their own detailed mapping of disaster prone regions (prioritizing ground movement disaster).	DESDM				
e.	Human resources capacity assessment in	Knowledge of apparatus in Disaster Risk Management remains very limited. DRR, strengthening planning and capacity building programming	Preparing National and Sub-national CB Guidelines for DRR	BAKORNAS PB SATKORLAK PB SATLAK PB				
		Supporting BAKORNAS in convening a workshop on emergency management and contingency planning for government apparatus at Mentawai Is (7-10 Mar 06)	Evaluate together with UNTWG the series of implemented activities (evaluation in terms of implementation of the workshop, training material and coordination with local governments).	BAKORNAS PB UNTWG UNESCO				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		DKP has held a Training of Trainers (ToT) on disaster mitigation at coastal regions in 2005 and 2006.	Menyelenggarakan pelatihan pada tingkat provinsi di Sumbar, Jabar, Jatim, Bali dan NTB bekerjasama dengan IOTWS-USAID	DKP	■	■	■	
		Supporting Yayasan IDEP in implementing training activities for facilitators for "Community-based DM"	Implementing CBDM training activities through the organizational network of Pramuka.	UNESCO Yayasan IDEP MPBI	■			
		Setting up a speed framework to measure level of preparedness of the public in responding to tsunami and earthquake disasters (UN ISDR Project).	Testing of the speed framework to measure level of preparedness of the public at three pilot sites: Padang, Bengkulu, and twi villages in Aceh.	UNESCO LIPI	■			
		Preparing for exploring capacities of staff members of government and nongovernmental institutions in selected provinces.	Capacity building for disaster management preparedness of actors at provincial and district level.	Oxfam, Satkorlak PB, Satlak PB	■	■		
			Identifying vulnerable community groups in 5-10 provinces to implement Community Based DM (MPBBM) in.	Oxfam in cooperation with government and NGOs	■	■	■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Drafting MPBBM training material and tools for disaster vulnerable community groups in a number of provinces/ districts/ municipalities.	Oxfam in cooperation with government and NGOs	■	■		
			Conducting MPBBM outreach campaigns to local governments, NGOs and other actors.	Oxfam in cooperation with government and NGOs	■		■	
			Drafting MPBBM training material and tools for dissemination of ideas and lessons learned	Oxfam in cooperation with government and NGOs	■	■	■	
			Implementing a series of MPBBM Trainings at Basic Level, Facilitator Level and ToT.	Oxfam in cooperation with government and NGOs	■	■	■	
			Documenting and disseminating the MPBBM process	Oxfam in cooperation with government and NGOs	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Capacity building for regional road management	JICA, PU	■	■	■	
f.	Allocating resources to implement policies, programmes, legal and statutory regulations governing DRR	Assessment on community empowerment, local government apparatus/ governments (Project Mitigation for Geohazards, 2003-2005, Yogyakarta, Kulon Progo, Ende and Maumere), hazard mapping	Project Mitigation for Geohazards will be taken up by Georisk Project Strengthening the Geological Agency's task force capacity	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■	■	■
		Inception of an Expert Council made up of 30 members with various educational backgrounds and expertise	Increasing frequency of meetings with a variety of PB Bansos elements through workshops and training	DEPSOS, KLH	■	■		
		The period of 2004-2006 has been allocated for setting up a green belt at Demak's beach area Construction of disaster resistant fishing settlements	Construction of fishing settlements resistant to earthquakes, tsunamis and flooding in the districts of Tangerang, Pacitan, Tegal and Pekalongan. Planting a green belt/ beach vegetation and constructing other mitigation structures.	DKP, UNHAS	■	■ ■	■ ■	■ ■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
g.	The government must demonstrate a political will to implement risk reduction initiatives into development programming	Existing disaster management institutions are inadequate vis-a-vis the situation at hand	Revitalizing organizational structures of National Coordinating Agency for DM and Provincial Task Force (Satkorlak)/ District Task Force (Satlak)	BAKORNAS PB				
			Promoting a strengthened political commitment in DRR at regional, national and international level by means of a government institutional framework, statutory regulations, organizational development and public participation.	UNICEF, BAKORNAS PB, DEPDAGRI, DEPKES, DEPSOS, BKKBN, Dep. PU, Kemenko Kesra, Depkumham, Kejaksaan, Polisi, Depperin, Depdag, Depkominfo, BPS, Kemeneg PP, Pemprov and Pemkab/ Pemkot				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Budget allocations for DM remains inadequate	Increasing funding sources for DRR and DM activities	BAPPENAS, KLH, DEPSOS, TNI	■	■	■	■
h.	Strengthening public participation in DRR through policies and networking	The KBBM (Community Bsaed Disaster Preparedness) and PERTAMA (Community Based Integrated Risk Reduction) programmes implemented in 8 provinces (S Sulawesi, W Sulawesi, W Sumatra, Lampung, S Kalimantan, N Sumatram Aceh, DKI Jakarta) are coherently combined into a local development master plan.	Maintaining integrity of the KBBM and PERTAMA programmes in local policies and development planning.	PMI	■	■	■	■
		Community participation in DRR remains very poor.	Producing guidelines for CBDRM	BAKORNAS PB, Local Govts, NGOs	■	■	■	
			Helping in integrating popular opinion into spatial/ regional planning and contingency planning through early participation in decision making processes.	BAKORNAS PB and DEPDAGRI, DEPKES, Dep. PU (supported by BGR/ GTZ through Georisk Project)	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		In 2005 DKP produced campaign material for strengthening awareness on tsunami disasters in the form of a comic book handed out to students and the public. DKP planned community level training.	Training at district/ municipal level in each province	DKP				
		Community Based Risk Reduction (CBRR) implemented in N Sumatra (Langat and Labuhan Batu) and S Kalimantan (Banjar) will be finalized on 6 Aug 06.	Continuing the project with funding from the 4th Action Plan of SEA DIPECHO	DIPECHO PMI				
		Reviewing dissemination of information to the public on geological disaster management with participation of local governments	CBDRM to strengthen awareness of local decision makers and community	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				
			Facilitating the public in capacity building for disaster preparedness (implementation of the CBDM toolkit)	UNESCO Pramuka				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Community Based DM Training in disaster prone regions in cooperation with UNDP. Producting a Participatory Research Guideline for Community Based DM in cooperation with Oxfam (2000) MPBI (2005) Publication of disaster management scientific and environmental journals in cooperation with HIVOS (2006)	Community Based DM Training for communities in disaster prone regions (scaling up of activity)	UPN Veteran Yogyakarta, BAPPENAS, UNDP				
		Encouraging the drafting of a government regulation and community based awareness and preparedness on industrial disasters	Promoting the drafting of a government regulation, community awareness and preparedness for industrial disasters	MPBI – ITS				
2.	**Identifying, assessing and monitoring disaster risks and early warning**							
a.	Developing and disseminating a disaster risk map and related information with DRR efforts	Conducting a disaster risk assessment and providing technical recommendations on geological disaster mitigation management/ mitigation	Monitoring implementation of technical recommendations in the regions	DESDM BAKORNAS PB Pemda				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Publishing and disseminating booklets, leaflets and posters on volcanic, seismic, tsunami and ground movement disasters	Maximizing and increasing number of booklets, leaflets and posters disseminated on volcanic, seismic, tsunami and ground movement disasters in regions prone to geological disasters	DESDM				
		Producing a disaster vulnerability map and technical recommendations for disaster management/ mitigation at a scale described in PP No 25 of 2000 and Keppres No 165 of 2000	Reviewing, updating the disaster vulnerability map and disaster assessment prioritized for assessments prioritizing settlements with dense populations and high activity and which feature vital and strategic buildings	DESDM				
		Producing Guidelines for Mapping of Areas Prone to Volcanic Disasters	Creating a uniform method in producing a Volcanic KRB Map	DESDM				
		Sending out disaster vulnerability maps, disaster data, and posters, leaflets, booklets on geological disasters to the regions	Increasing sending out disaster vulnerability maps, disaster data, and posters, leaflets, booklets on geological disasters to the regions	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Cooperating with Pemda, both directly and otherwise, in preparing a detailed Disaster Prone Map (District, Sub-district to Village level)	Educating Pemda in mapping vulnerable regions according to SNI (prioritizing ground movement disasters)	DESDM				
		Producing disaster vulnerability maps: destructive earthquake/ tsunami hazard maps, ground movement hazard maps, volcanic hazard maps	Producing disaster vulnerability maps for several regions in Indonesia: destructive earthquake/ tsunami hazard maps, ground movement hazard maps, volcanic hazard maps	DESDM				
		Setting up a volcanic early warning information flow from volcano observation posts-DVMBG-Pemda-community, closest by airport also associations of civil aviation safety, written down in a SOP. Sending out information on regions prone to landslide to Pemda.	Sending out information on regions prone to landslide to Pemda.	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Research cooperation with the Vulcano Disaster Assistance Program (VDAP) of the United States Geological Survey on vulcanology in Minahasa, N Sulawesi	Joint geological mapping exercise in Kaldera Tondano, installing seismic and deformation instruments by USGS at M Lokon, Mahawu, Soputan and M Tangkoko, setting up a Vulcanology Regional Office in N Sulawesi. Short training in the US and Indonesia	DESDM	■	■	■	■
		In 2006, DKP commissioned a tsunami risk mapping exercise for Kota Padang, Pangandaran, Pacitan, Denpasar, Mataram and Buru.	Tsunami disaster risk surveying and mapping for coastal cities.	DKP	■	■	■	
		Production, printing and dissemination of brochures and posters on how to response to an earthquake finalized	Developing information in the form of brochures and posters for the public in reducing disaster risks.	PMB-ITB in cooperation with DEPDIKNAS, donor agencies	■	■	■	■
		Disaster risk assessment for Bandung (1998), Bengkulu (2001), Palu, Denpasar, Menado (2002), Padang, S Coast/ Painan (2003)	Disaster risk assessment for Banda Aceh, Meulaboh and Padang Disaster risk assessment for Nias and Gunung Sitoli	PMB-ITB	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Probabilistic seismic hazard analysis and seismic zoning for Sumatra as input to the Indonesian Earthquake Resistant Building Code	Refining/improving the Indonesian Seismic Zoning Map using 3D Seismic Source Analysis.	PMB-ITB, RISTEK, PU		■	■	■
			Mapping of Tsunami Zones in Indonesia	ITB		■	■	■
		Seismic risk mapping	Seismic and tsunami mapping	BMG	■			
		Setting up a seismic and tsunami early warning information flow	Sending out information on potentially tsunami prone regions to Pemda	BMG	■			
		Disseminating early warnings of disaster	Disseminating early warnings	BMG	■			
		Results of mapping of disaster prone regions are made available and disseminated to the regions, disseminating SNI, disseminating information on landslide prone points along main and alternative roads	Results of mapping of disaster prone regions are made available and disseminated to the regions, disseminating SNI, disseminating information on landslide prone points along main and alternative roads, and beefing up early warning systems	DESDM	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Disaster risk assessments for Bandung (1998), Bengkulu (2001), Palu, Denpasar, Menado (2002), Padang, S Coast/ Painan (2003) (IUDMP)	Disaster risk assessments for Banda Aceh and Meulaboh (2005-2006)	ITB	■			
		Flood hazard mapping	Flood hazard mapping (continued)	BAKOSURTANAL, PU, BMG, LAPAN	■			
		Climate, flood and draught/ forest/ estate fire mapping	Climate, flood and draught/ forest/ estate fire mapping (continued)	LAPAN, BMG, Dep.PU	■	■	■	
		Several regions/ provinces have done geomedic mapping	Geomedic mapping in districts/ municipalities and provinces Workshop on geomedic mapping for each province	DEPKES	■	■	■	■
		Disaster profiling (incidences and hazard mapping)	Disaster profiling continued (incidences and hazard mapping)	DEPKES	■	■	■	■
		Seismicity mapping	Increasing scale of map/ outreach	BMG BAKOSURTANAL	■	■		
		Ground acceleration mapping	Tsunami hazard mapping	PU, DESDM	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Flood, landslide and fire hazard mapping for districts in cooperation with Dep. ESDM and Bakosurtanal,	Broaden geographical scope of flood, landslide, draught and forest fire hazard mapping	DEPHUT, KMNLH, UGM, ITB, Pemda, Instansi terkait lannya				
		Draught and forest fire hazard mapping in cooperation with Dep Kehutanan (FDRS = Fire Danger Rating System)	Multihazard mapping (integration of disaster maps of various government institutions produced in line with each respective task and function)	DEPHUT, KMNLH, UGM, ITB, Pemda, Instansi terkait lannya				
		Disseminating disaster profiles	Broaden coverage for dissemination of profiles	DEPKES				
		Ongoing (fire and drought danger rating system)	Ongoing (fire and drought danger rating system)	LAPAN, BMG, DEPHUT				
		Strengthening coordination with the Meteorological and Geophysical Agency of Indonesia (BMG) in identifying disaster prone points in Indonesia	Establishing a Joint Team	LAPAN, BMG, DEPHUB				
			Characterizing mass movement disasters in Kulonprogo	BPPT				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Geological hazard mapping (volcanic hazard mapping, geological hazard mapping for spatial planning, landslide susceptibility mapping) which would later be made known and disseminated to the public, local governments in disaster prone regions	Advocacy of mapping results will be made known to pertinent stakeholders (government apparatus, community figures)	BGR/GTZ (Georisk Project) – Geological Agency/ DESDM	■	■		
		A food insecurity map for Indonesia is available (district level)	Updating the food insecurity map for all districts in Indonesia	WFP, DEPTAN		■		
		Nutrition map and analysis for Indonesia is available (sub-district level). Comprising 3 indicators: malnutrition for under-five children, infant mortality rates, and population with energy intakes < 1700 kkal.	Disseminating nutrition mapping results to the provincial level Using the nutrition map for health and nutrition interventions Using the nutrition map in combination with other information sources, e.g. Food Insecurity Map, Poverty Map, etc.	WFP, BPS, DEPKES, Menkokesra and other pertinent govt institutions	■	■		
		Baseline mapping and disaster vulnerability mapping for Indonesia (with a special focus on WFP's geographical scope: Aceh, NTT, NTB, S Sulawesi and Jabodetabek)	Baseline mapping and disaster vulnerability mapping for Indonesia	WFP, Satkorlak PB, other pertinent govt institutions			■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Collecting latest information on disaster prone regions, existing	Collecting latest information on disaster prone regions, existing	OCHA and other pertinent govt institutions				
		Natural disaster management participatory mapping (landslides: Kebumen C Java, Kulonprogo DI Yogyakarta, Bawakaraeng S Sulawesi, volcanic eruptions: Merapi C Java, Egon Flores)	Natural disaster management participatory mapping (landslides: Kebumen C Java, Kulonprogo DI Yogyakarta, Bawakaraeng S Sulawesi, volcanic eruptions: Merapi C Java (continuing and extending geographical scope)	UPN Veteran Yogyakarta				
		Building a disaster occurrence information system	Building a District/ Municipality Disaster Risk Index	UPN Veteran Yogyakarta				
		Collecting data on disaster occurrences in Indonesia	Building a disaster risk information system	UPN Veteran Yogyakarta				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Hazard analysis and seismic zoning for Sumatra using a 3D seismic source probabilistic method as input to the Indonesian Earthquake Resistant Building Code Seismic characteristics study for Aceh and Nias for improving Planning of Earthquake Resistant Buildings in Indonesia Evaluation for improving the Indonesian Earthquake Resistant Building Code (SNI-1726-2002) in the wake of the earthquake in Aceh-Nias-Padang	Incorporating analysis results to improve the Indonesian Earthquake Resistant Building Code	PMB-ITB, RISTEK, PU	■	■		
		Collecting and assessing seismic data in Indonesia in conducting seismic mapping for Indonesia (1994-2006).	Collecting seismic data and assessing probabilistic seismic hazards using a 3D seismic source to improve seismic zoning in Indonesia.	ITB	■	■	■	■
b.	Developing a disaster risk and vulnerability indicator system at national and local scale	Developing a national disaster risk indicator system	Developing a national disaster risk indicator system (continued)	LAPAN	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Standard Guidelines for Risk Mapping/ Indicators remain absence	Developing Standard Guidelines for Disaster Risk Mapping	BAKORNAS PB BAKOSURTANAL	■	■		
		A robust system for early warning information remains absence	Developing a central and local communication network for early warning purposes (in cooperation with France)	BAKORNAS PB SATKORLAK PB SATLAK PB	■	■	■	
			Food Insecurity Mapping Environment Based Regional Potential Mapping Integrated Natural Disaster Multihazard Mapping Research on utilizing IFSAR and Aster data for deformation studies Disaster Rapid Response Mapping	Bakosurtanal Pertinent govt institutions	■	■		
			Guidelines for Disaster Risk Mapping National Natural Disaster Risk Mapping	BAKORNAS PB, BAKOSURTANAL, DESDM, BMG, PU, UGM , ITB	■	■		
		Ongoing monitoring of air transportation services in disaster areas	Developing an integrated air transportation database system for disaster analysis	DEPHUB	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Preparing a coast/ coastal city hazard index for Indonesia	DKP		■	■	
		Developing a flood/ landslide danger rating system and participating in developing a tsunami early warning system	Developing a flood/ landslide danger rating system and participating in developing a tsunami early warning system (continued)	LAPAN	■			
		Producing hazard maps, result will serve as a benchmark for decision makers, to assess environmental, social and economic impacts of a disaster.	Advocacy Results of the benchmark will be made known to all pertinent stakeholders. National Natural Disaster Assessment	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■		
			Hazard mapping, e.g. seismic micro-zonation mapping, liquefaction potential mapping, MMI mapping, tsunami hazard mapping and mapping of other hazards for disaster prone cities	PMB-ITB, Pemda-Pemda, RISTEK		■	■	■
		Disaster Preparedness Assessment	Rapid risk assessment fir 14 cities in Indonesia	PMB-ITB in cooperation with RISTEK	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		In cooperation with the Study Centre for DM of UPN 'Veteran' Yogyakarta, developing a Potential Disaster Risk Index covering all districts of Indonesia	Potential disaster risk mapping for selected locations to soliciting information for programming purposes.	Oxfam, UPN, pertinent govt institutions	■	■		
		Capacity building of the government, with a focus on DEPKES, DEPTAN, BKKBN, for food, nutrition and livelihood monitoring (planning ongoing)	Reviewing, discussing, disseminating and conducting trainings for focal points at pertinent government institutions in 30 provinces	WFP, DEPKES, DEPTAN, BKKBN	■	■		
			Developing a seismic risk assessment method as a way to mitigate earthquake disasters in urban areas in Indonesia	PMB-ITB		■		
c.	Collecting, analysing and disseminating statistics on disaster occurrences, and resultant losses	Collecting and assessing seismic data for Indonesia for seismic zone mapping (1994-2005)	Collecting and assessing seismic data for Indonesia for seismic zone mapping at a more detailed scale	ITB, BMG	■	■	■	■
			Developing a database for coastal villages and their disaster vulnerability based on BPS' village potentiality data	DKP		■	■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Collecting, analysing and disseminating statistics on disaster occurrences based on remote sensing and field data obtained from other government institutions/ sources	Collecting, analysing and disseminating statistics on disaster occurrences based on remote sensing and field data obtained from other government institutions/ sources	LAPAN	■	■	■	■
		Helping in conceptualizing a CBRR Concept adoptable by all regions in Indonesia	Helping in extracting broad knowledge from disaster occurrences from the last decade	BAKORNAS PB, DEPDAGRI, DEPKES, Dep PU (Georisk Project BGR/ GTZ)	■	■	■	■
		Setting up a data structure, at present approximately 7000 unique disaster events over a time span of the last decade in this country have been recorded	Will be updated continuously. More than 10,000 disaster events have to be recorded before a first disaster probability scenario can be devised	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■	■	■
d.	Developing an early warning system	The Fire Danger Rating System (FDRS) has been adopted by DEPHUT (resulting in a Forest Fire Brigade) and an AWS (Automatic Weather Station) has been installed	Installation of 29 AWS units in 13 provinces (21 AWS units in 2005 and 8 starting 2006)	BPPT	■	■	■	
		Two German-Indonesian Tsunami Early Warning System (GITEWS) buoys for Aceh and surroundings. Fire Danger Rating System (FDRS)	Installation of 15 GITEWS buoys	BPPT	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Developing an Early Warning System	Dep. PU	■	■	■	■
		Scouting of locations for deployment of TEWS buoys	Identifying locations for TEWS buoys	BMG	■			
			Institutionalizing and disseminating warning information to the populace	BAKORNAS PB and DEPDAGRI, DEPKES, Dep. PU (supported by BGR/ GTZ through Georisk Project)	■			
		Procuring software and hardware for the early warning system	Developing in cooperation with IFRC and PNS a nationwide early warning system	PMI, BAKORNAS PB	■	■		
			Developing and operating the Southeast Asian ITWS	BMG BAKOSURTANAL BPPT	■	■		
			Tsunami Early Warning System	LIPI DESDM	■	■	■	■
		Exploring possibilities for setting up 8 seismographs for monitoring volcanic eruptions	The project will fund and set up 8 seismographs for deployment in NTB and NTT	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■	■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Setting up a volcanic early warning information flow from volcano observation posts-PVMBG-Pemda-community, written down in a SOP	Setting up a volcanic EW information flow from volcano observation posts -PVMBG-LG-community, Disseminating information on regions prone to landslide to Pemda	DESDM	■	■	■	■
		Supporting BMG in scouting for locations for deployment of TEWS buoys (UNESCO-ERTR UNDP Project)	Identifying locations for TEWS buoys	BMG	■			
		Supporting BMG in building a seismic and tsunami early warning system (UNESCO-ERTR UNDP Project)	Building a tsunami early warning system (continued)	UNESCO BMG	■			
		Being planned	Monitoring food, nutrition and livelihood conditions in Indonesia (first phase will take place in NTT and NTB)	WFP – DEPKES, DEPTAN, BKKBN	■	■	■	■
		Producing bulletins on early warning systems (rainfall prediction, flood prediction, forest fire monitoring, food balance, etc) periodically	Continuing production of bulletins	WFP, LAPAN, BMG	■	■	■	■
		Producing bulletins on natural disaster threats (rainfall prediction, flood prediction, forest fire monitoring, food balance, etc) (monthly/ periodically)	Continuing production of bulletins	WFP, LAPAN	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Strengthening community radios for early warning systems in regions prone to volcanic eruptions (Merapi)	Strengthening community radios for early warning systems in regions prone to volcanic eruptions (NTT) and landslides (C Java, E Java)	UPN Veteran Yogyakarta				
e.	Reviewing and maintaining the information system as part of the early warning system	Early Warning Infectious Disease Surveillance (EWIDS) system Food and Nutrition Surveillance (FNS) system	Ensuring continuity of the EWIDS and FNS systems	DEPKES				
		Setting up a communication framework Rehabilitation of software/ hardware	Improving the communication and information system	BMG				
		Strengthening and developing a PB Bansos information and communication system.	Strengthening and broadening cooperation in information networking with mixed elements with a focus on systems and methods. Making available IT facilities.	DEPSOS				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Limited capacity for exploring substance of stipulations, guidelines for PB Bansos policies and programmes in a book form. There is a limitation in facilities/ tools and capacity for exploring substance/ information communicated to the public through visual media (film, posters, leaflets, etc).	Integrating accesses through periodic meetings and joint traninings. Enhancing quality of publications.	DEPSOS				
		Updating the database and statistics on disaster at PMI at all levels (national, local, chapter)	Revising and updating the database and statistics on disaster at PMI at all levels (national, local, chapter).	PMI				
		Installing and monitoring GPS, tide, geodynamic evaluation	Installing and monitoring GPS, tide, geodynamic evaluation	Bakosurtanal and pertinent govt institutions				
			Making use of remote sensing technology, SIG and GPS for conducting social economic censuses in disaster prone regions	BAKOSURTANAL				
f.	Capacity building of institutions managing early warning systems	Drafting Implementation Guidelines (Juklak) for Community Based Early Warning Systems	Integrating and applying community based early warning systems at all villages/ sub-villages which have implemented the KBBM and PERTAMA programmes	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Ongoing (in cooperation with related government institutions)	Capacity building of institutions managing early warning systems	LAPAN, Dep. PU	■	■	■	
		Preparations of a tsunami early warning system (capacity building component) GTZ – National are ongoing	Coordination from Working Group VI of the TEWS project	GTZ, RISTEK and pertinent govt institutions	■	■	■	
		Ongoing discussion and collecting relevant information	Measuring tools will be used in detecting stability after ground movement. Comprehensive training to pertinent govt institutions	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■	■	
		Monitoring active volcanoes on an ongoing basis through volcano observation posts, building ground movement observation points along roads prone to landslides. And most importantly, preparing the public for anticipating disasters.	Inception of a Regional Office of Volcanology to enhance effectiveness, efficiency and accuracy in support of a volcano early warning system. Adding up number of ground movement observation points and locations along vital and strategic roads.	DESDM				
		Supporting the BMG in organizing a Tsunami Early Warning Operations System Training at the Pacific Tsunami Warning Centre, Hawaii, USA.	Supporting a ToT for BMG staff members in Indonesia in Tsunami Early Warning System Operations.	UNESCO BMG	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
g	Strengthening multi-sectoral and multi-stakeholder coordination and cooperation within an early warning chain	Setting up a volcanic early warning information flow from volcano observation posts-DVMBG-Pemda-community, closest by airport also associations of civil aviation safety, written down in a SOP. Sending out information on regions prone to landslide to Pemda	Setting up a volcanic early warning information flow from volcano observation	DESDM, pertinent Pemda				
		There is a lack of a reliable early warning information systemi	Strengthening coordination among sectors in multisectoral early warning	BAKORNAS PB				
			Setting up an early warning network	BAKORNAS PB and DEPDAGRI, DEPKES, Dep PU (supported by BGR/ GTZ through Georisk Project)				
		Discussions on capacity building for managing and disseminating disaster information and statistics	Assisting capacity building of the pertinent government institution (Geological Agency)	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Networking with multiple partners	Networking with multiple partners	OCHA, other pertinent govt institutions	■			
		Strengthening cooperation with institutions responsible for monitoring, assessing and building a disaster early warning system.	Strengthening cooperation with institutions responsible for monitoring, assessing and building a disaster EWS	OCHA, DESDM, BMG	■			
h	Creating and strengthening an effective early warning system at small islands					■	■	■
i	Supporting infrastructural development and scientific capacity building for conducting research	Inventorying health human resources in crisis mitigation and other health issues	Continuing inventorying health human resources in PK-MKL	DEPKES	■	■		
			Capacity building of institutions and funding by promoting domestic and international cooperation	UGM	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Installing and monitoring GPS, tide, geodynamic evaluation	Installing and monitoring GPS, tide, geodynamic evaluation	Bakosurtanal and pertinent govt institutions	■	■	■	■
j	Supporting database development and improvement		Developing a general directory for disaster needed in emergency situations	OCHA together with other UN Agencies, pertinent govt institutions	■			
			Database development and updating to reflect: Contact details of SATLAK dan SATKORLAK in Indonesia List of contact details of persons from the international community working in disaster management in Indonesia	OCHA, BAKORNAS PB, Satkorlak PB, Satlak PB	■			
		Building a database holding data of geological disaster occurrences and victims	Updating of the database	DESDM	■	■	■	■
		Building a database holding data of flood disaster occurrences and victims	Updating of the database	Dep. PU	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
k	Supporting improvement of scientific methodologies		Modelling of technological/ industrial DRR structures for Kota Surabaya	ITS			■	
			Bioengineering modelling of technological/ industrial DRR structures for Kota Surabaya	ITS			■	
l	Building and strengthening capacity and sharing statistical information	Capacity building for managing and disseminating information and disaster statistics through monthly reports sent out to pertinent government institutions and website	Capacity building for managing and disseminating information and disaster statistics through monthly reports sent out to pertinent government institutions and website	LAPAN	■	■	■	■
		Helping in devising a Community Based Risk Reduction Concept adoptable by all regions in Indonesia.	Disaster data and knowledge sharing.	BAKORNAS PB and DEPDAGRI, DEPKES, Dep PU (supported by BGR/ GTZ through Georisk Project)	■			
		Preparing production for a training module for collecting, managing and disseminating data	Capacity building for collecting data on disaster impacts for standardization purposes in selected provinces	Oxfam, Satkorlak PB	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
m	Collecting and standardizing statistical information on disaster risks and losses	Standardizing risk data and statistics, impacts and losses at regional scale through collaboration with pertinent government institutions	Standardizing risk data and statistics, impacts and losses at regional scale through collaboration with pertinent government institutions	LAPAN	■	■		
		Standardizing reporting of landslide occurrences from sub-national to national level, standardizing mapping of areas prone to ground movements, standardizing mapping of areas prone to volcanic disasters	Standardizing disaster terminology	DESDM		■		
		Standardizing reporting, mapping of disaster occurrences	Working out a method adoptable by the entire region of Indonesia to ensure standardized data and statistics on risks and losses due to disaster	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■	■	
		Preparing production of tools for standardizing data and information	Introducing tools, complementing data and applying the tools	BAKORNAS PB, Oxfam, Satkorlak PB, Satlak	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
n	Collaborating at regional and international level		Implementing APELL in East Java	ITS	■			
			Developing an operation centre with France	BAKORNAS PB	■	■		
			Developing an operation centre with Japan	BAKORNAS PB	■	■		
o	Analysing and reporting long term change and increase in vulnerability and disaster risks	Developing a tsunami early warning system	IIdentifying local capacities for disaster management	KEMENEG RISTEK and pertinent non-departmental agencies (LPND)	■			
		Collating seismic and tsunami statistics	Analysing earthquake/ tsunami related risks	BMG	■			
3	**Using knowledge, innovation and education for building a culture of safety and resilience**							

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
a	Developing information on disaster risks and safety measures to take in a way that is easy to understand by populations in high-risk areas	Disseminating information on geological disaster management/mitigation to the public and Pemda apparatus and performing early warning (in event of a volcanic eruption and ground movement), distributing posters, leaflets and booklets on geological disasters.	Adding up of regions to which to disseminate and hold training in on geological disaster management/ mitigation	DESDM				
		Brochures and posters on actions to take during an earthquake (IUDMP 1999)	Developing information in the form of brochures and posters for the public on reducing disaster risks	ITB				
		Results of mapping of disaster prone regions are made available and disseminated to the regions, disseminating SNI, disseminating information on landslide prone points along main and alternative roads	Results of mapping of disaster prone regions are made available and disseminated to the regions, disseminating SNI, disseminating information on landslide prone points along main and alternative roads	DESDM				
		Sending out maps of disaster prone regions, disaster data, posters, leaflets, booklets on geological disasters to the regions	Sending out maps of disaster prone regions, disaster data, posters, leaflets, booklets on geological disasters to the regions	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Schools are lacking disaster risk information facilities	In cooperation with the local government, preparing disaster risk information facilities, especially in conflict prone regions	DEPDIKNAS	■	■	■	
		Publishing and distributing booklets, leaflets and posters on volcanic eruptions, earthquakes, tsunamis and land movement	Maximizing and adding up booklets, leaflets and posters on volcanic eruptions, earthquakes, tsunamis and land movement in geological disaster prone regions	DESDM, BMG	■	■	■	■
		Helping in devising a Community Based Risk Reduction Concept adoptable by all regions in Indonesia	Disseminating information to populations residing in disaster prone regions	BAKORNAS PB and DEPDAGRI, DEPKES, Dep PU (supported by BGR/ GTZ through the Georisk Project)	■			
			Producing sketches and illustrations on rescue during natural disaster	Dep PU	■	■		
			Producing a book on volcanic eruption, earthquake/ tsunami and ground movement	DESDM	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Decentralized Conflict Sensitive Planning (DCSP) conceptualized in cooperation with UNDP	Information sharing on DCSP	BAPPENAS	■			
		Threat, Vulnerability, Risk and Capacity mapping using a participatory approach at all pilot villages and sub-villages under the KBBM and PERTAMA programmes	Using the Threat, Vulnerability, Risk and Capacity map for raising public awareness on risk reduction, including in identifying evacuation routes.	PMI	■	■	■	■
		RDrafting syllabi, modules and guidelines – Awareness building on disaster preparedness and risk reduction measures through education of life skills for PMR Mula (SD), PMR Madia (SLTP) and PMR Wira (SLTA) and KSR Unit Perguruan Tinggi (2005)	Printing, promoting and disseminating awareness building on disaster preparedness and risk reduction measures through education of life skills for PMR Mula (SD), PMR Madia (SLTP) and PMR Wira (SLTA) and KSR Unit Perguruan Tinggi	PMI	■	■	■	
		Part of the information on geological disaster is available at implementing partners	Producing and identifying easy to recognize material for managing geological disasters	BGR/ Geological Agency/ Office for Mines and Energy of NAD	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Distribution through print media (poster, leaflet) and oral communication, whereas beforehand the public had been made to grow warm to the idea to ensure a positive response as existing traditions were not disregard	Reviewing and optimizing existing methodsn	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				
		Devising rescue measures in earthquake disasters in the district of S Siberut (available in Indonesian and Mentawain versions)	Documenting information sheets in a formal format to allow for distribution to other communities	UNESCO Co-Management Siberut				
		Being planned	Reproduction of knowledge material on earthquake and tsunami disasters in the public	UNESCO Geoteknologi LIPI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Awareness building to modify behaviour: developing knowledge, information, education, training and research	UNICEF, BAKORNAS PB, DEPDAGRI, DEPKES, DEPSOS, BKKBN and other national as well as local govt. institutions				
b	Strengthened networking of disaster experts and pertinent institutions both among sectors and regions	Absence of a network between disaster experts at universities and pertinent government institutions	Effecting a concerted effort to have disaster expert communication networks set up at each university in disaster prone regions	DEPDIKNAS				
		Coordination and cooperation with universities (education for students and joint researching) and with other institutions inside and outside the country	Coordination and cooperation with universities (education for students and joint researching) and with other institutions inside and outside the country	DESDM				
		Networking to a maximum extent with pertinent agencies, research institutions and universities inside and outside the country	Networking to a maximum extent with pertinent agencies, research institutions and universities inside and outside the country	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Strengthening cooperation ties among institutions inside and outside the country in the field of disaster management	UGM				
		Strengthening partnership ties and networking with national and international partners	Strengthening and maintaining partnership ties and networking in disaster management Organizing routine meetings with national and international working partners to strengthening cooperation within the KBBM and PERTAMA programmes	PMI				
		Networking to a maximum extent with pertinent agencies, research institutions and universities inside and outside the country	Networking to a maximum extent with pertinent agencies, research institutions and universities inside and outside the country	DESDM				
		SPlanning process is ongoing	Organizing a workshop for stakeholders (Geological Agency, DESDM, BAKORNAS PB, RISTEK, LIPI, BPPT, LAPAN, BMG, etc.) for coordination and cooperation	BGR/GTZ (Georisk Project) – Badan Geologi/ DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
c	Strengthening cooperation and communication among scientists and practitioners working in the field of disaster management	Substandard services of hospital emergency units have created the need for evaluation and improvement	Revising guidelines/ standards for hospital emergency units in event of disaster (natural, chemical, biological, nuclear, man-made) Disseminating such guidelines/ standards	DEPKES (Yanmedik)				
		Inception of a Steering Committee on Emergency and Health Problems	Organizing routine professional meetings (from planning, implementation to evaluation)	DEPKES (Yanmedik)				
		There is an absence of a receptacle for collaboration and communication in the field of disaster management	Promoting and facilitating scientists, with a focus on those working for universities, to work with practitioners	DEPDIKNAS				
		Participating in seminars, workshops, exhibitions related to geological disasters inside and outside the country	Organizing seminars, workshops, exhibitions related to geological disasters	DESDM				
		An international workshop on volcanology scheduled for Sep 06 in Yogyakarta, a joint programme with Volcano International Gathering UPN	Sharing research results and discussing future plans for cooperation in the field of volcanology	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Networking to a maximum extent with pertinent agencies, research institutions and universities inside and outside the country	Networking to a maximum extent with pertinent agencies, research institutions and universities inside and outside the country	DESDM				
		Yearly evaluation meetings with PK-MKL	Continue organizing yearly evaluation meetings with PK-MKL	DEPKES				
		Medical referral networking is presently not optimal (order in chaos)	Strengthening pre-hospital and hospital emergency and disaster-related medical referral networking	DEPKES (Yanmedik)				
		Researching/ management planning for regions with critical ecosystems (Dieng, Pening Marshlands, Biru Marshlands, Papua, Lake Toba, Wonogiri Dam, etc.) Producing a grand design for natural resources and watershed management at Bengawan Solo, Pemali-Comal, Jratun Seluna, Bogowonto, Progo, etc.)	Strengthening cooperation through promotional activities and training educations	UGM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Regular meetings are hold to update and share scientific papers, as disaster management is interrelated to issues supporting its interrelatedness, e.g. development issues in the area of urban and regional spatial planning, poverty and gender.	Strengthening cooperation which involves scientists and practitioners working in the field of disaster management in int. conference (EWC III in Bonn) and participating in scientific seminars inside the country on geology and disaster	BGR/GTZ (Georisk Project) – Geological Agency/ DESDM				
		Engagement of UNESCO in the United Nations Technical Working Group on Disaster Risk Reduction (UNTWG DRR)	Collecting resources from each respective UN Agency to be hand over to those impacted by disaster through coordination with UNOCHA	UN Agencies, govt institutions, local and int. NGOs				
		Participating in seminars, workshops, exhibitions related to DRR	Participating in seminars, workshops, exhibitions related to DRR	UN Agencies, govt institutions, local and int NGOs				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Capacity building of related government institutions, e.g. BAKOSURTANAL, BPS, BAKORNAS and local governments, for producing a database on disaster preparedness and mapping	Producing a database on disaster preparedness Disseminating and training in maintaining and utilizing the database	WFP and related govt institutions	■ ■	■ ■		
		Created and developed a cooperation and communication network (KOMPAK – Cooperation among Urban Disaster Mitigation Organizations)	Reviving the cooperation and communication network	PMB-ITB in cooperation with MPBI	■	■	■	■
		Organizing a workshop on DRR	Periodic organizing of workshops on DRR	BRR, govt institutions, UN Agencies, local and int NGOs	■			
			International seminar on disaster management	ITS		■	■	■
d	Strengthening use of aerospace information, communication and technology in DRR	Ongoing (cooperation with pertinent government institutions, e.g. BAKORNAS PB, KLH, DEPTAN, DEPHUT, LIPI, etc.)	Using aerospace technology in disaster management	LAPAN	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Providing and managing geospatial data in supporting the rehabilitation and reconstruction of NAD and NIAS, supporting BRR NAD-Nias	Managing geospatial data in supporting the rehabilitation and reconstruction of NAD and NIAS, supporting BRR NAD-Nias	Bakosurtanal, BRR	■	■		
		Aceh Tsunami atlas	Producing a national atlas	Bakosurtanal, pertinent govt institutions	■	■		
			Developing SIPBI (Indonesian DM Information System)	Bakosurtanal, UGM	■	■	■	■
		An information system using the website of Ditjen Perhubungan Udara will be built	Implementing the information system (in stages)	DEPHUB	■	■	■	■
		Developing website	Using PPK's website	DEPKES	■	■	■	■
		Developing an information and communication system	Using the information and communication system		■	■	■	■
		Using GPS/ RS technology in monitoring volcanic disaster risks (M Guntur)	Using GIS technology in disaster mitigation	ITB	■	■	■	■
		Ongoing (inventorying multiresolution remote sensing baseline data for disaster)	Inventorying multiresolution remote sensing baseline data for disaster	LAPAN	■	■	■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		DMIS (DM Information System) set up at PMI and functioning properly	Sharing disaster information with BAKORNAS, the Government, ICRC, IFRC, Perhimpunan Nasional, national and international NGOs, other UN Agencies	PMI				
			Landslide disaster mitigation using remote sensing and SIG technology in Sumedang, W Java	BPPT				
		Ongoing	Setting up landslide disaster database network	BGR/GTZ (Georisk Project) – Geol. Agency/ DESDM				
		Study on local wisdom at Simeuleu Is in relation to setting up a local level early warning system (experience of communities with the tsunami disaster of Dec 04)	Field study to Simeuleu Is (Apr 06)	UNESCO LIPI				
e	Developing a directory, inventory and a user-friendly information exchange system	Developing a National Research Information Centre for Natural Disaster Mitigation (PIRBA)	Improving the system Institutionalizing it as one of the disaster information centres in Indonesia	PMB-ITB, RISTEK, KOMINFO				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Implementing training of facilitators for the "Community-based DM"	Implementing CBDM training through Pramuka networks covering all of Indonesia	MPBI, UNESCO Yayasan IDEP				
		Improving/ updating data for the PB Bansos Directory	Creating and distributing the PB Bansos Directory	DEPSOS				
		There is a pressing need from districts/ municipalities to develop TAGANA and its accompanying network extending all the way to the village level in all	Enhancing in stages quality and frequency of training in community based disaster management through Tagana, TRC, Satgassos, Satgas	DEPSOS				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		regions of Indonesia, and a need for a legal umbrella for TAGANA. At present time, the number of trained PB Bansos personnel in each province numbers 2,871 for TAGANA; TRC 3,720; logistics 75; Dumlap 1,790; DM Instructors 1,860; DM Satgassos 3,900; with an overall number of 15,291.	Logistik, Posko at every district/ municipality most vulnerable to disaster. Preparing a legal umbrella for TAGANA. Preparing facilities and tools providing operational supportto TAGANA in the form of: documentation and audio visual tools for extension services. Disseminating information to a broad range of stakeholders on TAGANA through informal discussions, etc.	DEPSOS				
f	Providing information to the public on DRR	Earthquake preparedness leaflets, posters and brochures produced	Reproducing the material and distributing them to a broader audience. Developing the material for other types of disasters, e.g. tsunamis, landslides, flooding, etc.	PMB-ITB in cooperation with nat and int donor agencies				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Disseminating information on volcanic disasters and landslides in W Java, W Sumatra, Bali, NTB, NTT and N Maluku	Providing information and knowledge on ground movement and volcanology, focusing on populations residing in disaster prone areas	DESDM				
		Disseminating information on tsunami in Bengkulu Province	Providing information and knowledge on tsunami among government apparatus and the public in Bengkulu Province	DESDM				
		Disseminating information on geological disaster management/ mitigation to the public and local government apparatus, and organizing early warning (in event of volcanic eruption and ground movement), distributing posters, leaflets and booklets on geological disasters	Adding up number of regions to which to disseminate information to and hold trainings in on geological disaster management/ mitigation	DESDM				
		Producing a book on volcanic eruption, seismic/ tsunami and ground movement	Producing a book on volcanic eruption, seismic/ tsunami and ground movement	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Helping in awareness building of the community through information regarding causes and consequences of natural disaster	BAKORNAS PB and DEPDAGRI, (with support from BGR/ GTZ through the Georisk Project)	■			
		Finalized	Continue production of brochures, posters, stickers and film to keep the public informed	MPBI	■	■	■	
g	Collating and distributing international DRR terminology	School libraries have yet to feature a reference of internationally accepted DRR terminology	Efforts will be taken to have every school library feature a reference of internationally accepted DRR terminology	DEPDIKNAS	■	■	■	■
		In cooperation with other institutions and universities, standardizing geological disaster terminology	In cooperation with other institutions and universities, standardizing geological disaster terminology	DESDM	■	■	■	
		Internationally accepted DRR terminology produced	Promotional campaigns will be held at pertinent government institutions working in the field of disaster management	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Preparing material for promotion of internationally accepted DRR terminology	Developing material that is easy to understand and to use	Oxfam, pertinent govt institutions				
		Disseminating the Sphere Humanitarian Standard	Training, campaigning	MPBI				
		Providing information on threats in the form of a booklet on seismicity, flooding and landslide disaster, rights to protection of displaced persons	Publishing a book titled 'Living with Risk', White Book on Disaster Management	MPBI				
		Only a small number of disaster management actors have an understanding of CBDRM	Capacity building of the public through CBDRM training	MPBI				
			Developing a web site on disaster management	MPBI				
h	Incorporating DRR into school curricula, focusing on teenagers and children	School curricula have yet to incorporate knowledge on disaster risks	Adjusted curricula will have knowledge on disaster risk management incorporated	DEPDIKNAS				
			Developing material on DRR knowledge for school curricula	ITB UNESCO				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Training, extension services and community assistance in raising awareness on disaster risks for communities in villages and sub-villages under the pilot programme of KBBM and PERTAMA	Educating and raising awareness on disaster risks through life skills education for community members in disaster vulnerable regions and children and teenagers outside school	PMI				
		Training for all-Indonesia elementary school teachers (ToT) in earthguake preparedness, in cooperation with DEPDIKNAS (IUDMP 2001-2003), DIKNAS (2003-present) 7 batches	Earthquake School Safety Programme in NAD Province, in cooperation with UNCRD and DIKNAS, 2005-2006	PMB-ITB and UNCRD				
		Being planned	Incorporating disaster reduction knowledge into school curricula as both formal and informal education	MPBI, ITS, UNESCO				
		Material/ curricula for school earthquake preparedness	Implementing the material into local curricula	UNESCO Yayasan IDEP and MPBI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Providing a course on disaster management at university geology departments Thematic (disaster management) students' community service for disaster prone regions of Aceh (2005), Jember and Banjarnegara (2006)	Developing a disaster management curriculum for implementation in other fields of science Developing a thematic students' community service in numerous other regions	UPN Veteran Yogyakarta				
			Disaster management courses for kindergarten, elementary, junior and senior high school teachers and the public	ITS				
i	Implementing risk and disaster preparedness assessments at schools and institutions of higher education	Incorporating PK-MKL into community health curricula at university medical departments Incorporating disaster epidemiology into community health curricula at university medical departments	Continuing effort to have PK-MKL incorporated into curricula of university medical departments and community health departments	DEPKES				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Opening a master's degree programme (M.Sc Geo Information for DM in cooperation with UGM-ITC Holland)	Continuing master's degree programmes (M.Sc Geo Information for DM in cooperation with UGM-ITC Holland)	UGM	■	■	■	■
		Plan	In cooperation with CLCC networking, implementing risk assessments and disaster preparedness at schools	UNESCO-ED, UNICEF, DEPDIKNAS	■			
		Training of elementary school teachers in regions prone to volcanic eruptions (Merapi and Egon) and landslides (Kebumen and Kulonprogo), working in cooperation with MPBI, UNDP	Training of elementary school teachers in other regions prone to volcanic eruptions and landslides	UPN Veteran Yogyakarta	■	■		
		Drafting an earthquake disaster preparedness programme for elementary schools which may be provided as an extra-curricular activity	Disseminating programme material to teachers in Indonesia by means of ToT	PMB-ITB in cooperation with DEPDIKNAS	■	■	■	■
		Being planned	Opening a short course on disaster mitigation	ITB, UNU, PEMDA-PEMDA		■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
j	Implementing programme and activitiy at schools to learn to minimizing impacts of disaster	Risk assessment and disaster preparedness have yet to be implemented at each school and university	Facilitating risk assessments together with school principals, teachers, school committees and Education Councils	DEPDIKNAS				
		Curricula are dense as they are and do not allow for the implementation of programmes and activities at school	Facilitating and encouraging Dinas Pendidikan to make technical policies for implementation of programmes and activities part of both normal curricula and extra-curricular activities	DEPDIKNAS				
		Lack of education and training programmes at schools	Facilitating Dinas Pendidikan in producing education programmes and disaster risk management trainings	DEPDIKNAS				
		School earthquake disaster preparedness curricula available	Implementing earthquake disaster preparedness curricula in local curricula	IITB in cooperation with DIKNAS				
k	DRR education and training programmes for selected sectors (disaster management planners and managers)	Providing ToTs in geological disaster at provincial and district level	Enhancing human resources and number of regions receiving training	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Research collaboration with the German Federal Institute for Geosciences and Natural Resources (BGR) in the field of volcanology	Conducting a joint research at M Anak Krakatau	DESDM	■			
		Joint researching with the Disaster Prevention Reduction Institute, Kyoto University, Japan, in the field of volcanology	Conducting a joint research and installation of seismic and deformation instruments at M Semeru, M Bromo and M Lamongan in the framework of setting up a Regional Vulcanology Office in E Java	DESDM	■	■	■	■
			Routine training for volcano observers and experts in implementing early warning to Pemda and the public. Engaging active participation of the public and Pemda	DESDM	■	■	■	■
		Under discussion with DEPDAGRI	National seminar and DRR training participated by all Regional Heads/ Pemda Staff of Indonesia	BPPT		■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Preparing a discourse and discussion with the regions on GS and DCSP	Drafting substance and dissemination agenda of a Grand Strategy and Decentralized Conflict Sensitive Planning, including preparations for training to local government apparatus	BAPPENAS	■			
		Producing SOPs	Training in dealing with natural disaster	Dep. PU	■	■		
			Training in Building Codes and Control System	JICA, Dep. PU	■			
			PTraining in seismology, seismic techniques and disaster mitigation	JICA, Building Research Institute, Dep PU	■	■		
			Training in seismic disaster mitigation strategies in mega-urbans	JICA, Kobe University	■			
		Assisted in establishing and developing Kota Bandung's DM RUPUSDALOPS Urban emergency response technical planning in anticipation of earthquakes	Continuing similar programmes/ activities to assisting staff of other municipalities in developing disaster SOPs	PMB-ITB, PEMKOT			■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Having experience in organizing trainings, e.g. earthquake preparedness training for schools, training in earthquake resistant building codes for consultants and contractors	Assisting municipal governments mitigation disaster by providing technical advise: EWS, community trainings, earthquake resistant building codes, training in earthquake preparedness for schools, disaster management unit planning and development, training of officials/ local governments, cooperation with local university networks	PMB-ITB, DIKNAS, Pemda Tk 1	■	■	■	■
			Seminar on disaster management for all-Indonesia municipal governments	PMB-ITB	■	■	■	■
			Workshop on developing disaster risk assessments for Indonesia's urban areas	PMB-ITB			■	■
			Workshop on developing SOPs on disaster management in urban areas	PMB-ITB			■	■
		Increasing preparedness and alertness in dealing with disaster	Developing the method to be implemented	PMB-ITB in cooperation with RISTEK	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Mapping have been done of foci of earthquakes caused by faults and plate tectonics, volcanic activity, and territorial jurisdiction of Indonesia, as the above are disaster	Disseminating information to pertinent working units on mapping of disaster prone areas	DEPHUB, BMG	■	■	■	■
		Routine training for volcano observers and experts in implementing early warning to DVMBG, Pemda and the public	Routine training for volcano observers and experts in implementing early warning to DVMBG, Pemda and the public. And engaging active participation of the public and Pemda	DESDM	■	■	■	
		Joint researching with the National Institute for Geophysics and Volcanology (INGV), Italy, in the field of vulcanology	Conducting a joint research and installation of seismic and deformation instruments at M Marapi, M Talang and M Tandikat (W Sumatra) in the framework of setting up a Regional Vulcanology Office in W Sumatra. Short training courses in Italy and Indonesia	DESDM	■	■	■	■
			Training in volcanic eruption risk management, debris flow and landslide mitigation	JICA, Geological Agency	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Information management training in maritime affairs and disaster prevention	JICA, DKP				
			Training in operations management and operations of an earthquake/ tsunami and volcanic eruption	JICA, Nagoya University, BMG, Geological Agency, RISTEK				
			Training in global seismological observation	JICA, Building Research Institute, BMG, Geological Agency, PU, RISTEK				
			Training in watershed environmental management	JICA, Hokkaido University, Dep PU				
			Training in Maritime SAR and disaster prevention for policy planners	JICA, Japan Coast Guard, Basarnas				
		In cooperation with BGR Jerman	Training in DRR in BGR, Hannover, Germany	BPPT				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Integrating disaster preparedness and risk reduction into training curricula of PMR and KSR units of universities	Training of core trainers and facilitators for disaster risk awareness from PMR Wira, KSR Markas/ University Unit KSR, SIBAT and Satgana PMI, covering at least PMI chapters in disaster prone regions	PMI				
		Technical training in medical management, other technical issues pertaining to health and PK-MKL support to medical officers	Continuing technical training in medical management, other technical issues pertaining to health and PK-MKL support to medical officers	DEPKES				
		Training in PK-MKL management to medical officers at Provincial/ District/ Municipal Dinkes, Hospitals and Puskesmas	Continuing training in PK-MKL management to medical officers at Provincial/ District/ Municipal Dinkes, Hospitals and Puskesmas	DEPKES				
		Capacity of hospital directors for emergency and disaster management is not uniform	Holding HOPE training courses at hospitals	DEPKES (Yammedik)				
		Training in MDHF (Mitigation of Disaster on Health Facility)	Continuing training in MDHF	DEPKES				
		Technical medical training for physicians and nurses	Continuing technical medical training for physicians and nurses	DEPKES				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Technical training in sanitation, nutrition, surveillance, logistics, etc., for medical officers in addition to complementary training	Continuing technical training in sanitation, nutrition, surveillance, logistics, etc., for medical officers in addition to complementary training	DEPKES				
		National policies and strategies on PK-MKL Technical training in medical management, other technical issues pertaining to health and PK-MKL support to medical officers at all administrative levels	Continuing technical training in medical management, other technical issues pertaining to health and PK-MKL support to medical officers	DEPKES				
		Conceptualizing Decentralized Conflict Sensitive Planning (DCSP) in cooperation with UNDP	Training in DCSP for government apparatus	BAPPENAS				
		Threat, Vulnerability, Risk and Capacity mapping using a participatory approach at all pilot villages and sub-villages under the KBBM and PERTAMA programmes	Disseminating the map and sharing pertinent information with Pemda officials and other stakeholders	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Training in Disaster Prone Area Mapping (Basic Level) – 3 weeks Training in RS/ GIS application in the Indonesian Disaster Management Information System (SIPBI) - (Supervisor Level) – 3 weeks Training in GIS for use in the Indonesian DM Decision Support System – (Manager Level) – 5 days	Training to be supported by departments pertinent to disaster management and by BAPPENAS for national/ regional budget allocation planning	UGM				
		Drafting syllabi, modules and guidelines – Awareness building on disaster preparedness and risk reduction measures through education of life skills for PMR Mula (SD), PMR Madia (SLTP) and PMR Wira (SLTA) and KSR Unit Perguruan Tinggi (2005)	Orientation and awareness on DRR efforts for PMR officers and technical officers at University KSR PMI Units	PMI				
		Training for all-Indonesia elementary school teachers (ToT) in earthquake preparedness	ToT for all-Indonesia elementary school teachers in earthquake preparedness for schools	ITB				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		BLS/ PPGD curriculum for laypersons BTLS/ BCLS/ PPGD curriculum for nurses ATLS/ ACLS/ GELS curriculum for general practitioners DVI training for physicians, dentists and forensic officers	Trainings for medical officers	DEPKES				
		Advocacy to region heads Integrated Emergency Medical Service System (SPGDT) Establishing a Public Safety Centre (PSC) Establishing and evaluating BSB officers	Regional or provincial level meeting	DEPKES (Yanmedik)				
		Training for elementary teachers in earthquake preparedness for schools at Siberut Is, Mentawai Is (2005 and 2006)	Training for elementary teachers in earthquake preparedness for schools at Mentawai Is (islands of Sipora, N Pagai and S Pagai)	PMB - ITB				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Master's and doctorate programmes and trainings inside and outside the country in vulcanology and seismology	Concluding master's and doctorate programmes for staff members currently studying in Japan and at ITB	DESDM	■	■		
			Courses and trainings in technological/ industrial/ environmental disaster preparedness	ITS			■	■
I	Strengthening community based training initiatives for local capacity building	PMI policies in place prioritizing PMI capacity building for implementing Preparedness and Risk Reduction Initiatives through the KBBM (Community Bsaed Disaster Preparedness) and PERTAMA (Community Based Integrated Risk Reduction) programmes	Advocating, promoting and disseminating PMI and IFRC policies for KBBM and PERTAMA, both internal and external, and encouraging all local PMI and PMI chapters to implement the KBBM and PERTAMA programmes, focusing in particular on highly vulnerable villages.	PMI	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Revising book and standardizing trainings in KBBM, PERTAMA, disaster emergency response, logistics, disaster management, ATCPA, VCA/ PRA, etc., conforming to PMI and International Red Cross standards.	Printing revised book and making consistent use of the book in training in, awareness building on and implementing of KBBM and PERTAMA programmes.	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Mapping available of human resources capacity of National PMI, Regional PMI and PMI Chapters for disaster management and risk reduction (2005). Plans in place for capacity building through refreshers or new trainings for Lead Trainer and members of National PMI Satgana (disaster response teams), Regional PMI Satgana, Satgana at PMI Chapters, and members of SIBAT (community based response teams) (2005). Training for Lead Trainers of KBBM and PERTAMA at national, regional, chapter and community levels (2002, 2003, 2004, 2005)	Recruiting and training Satgana PMI members at 30 Regional PMI offices and at least 100 PMI chapters. Establishing and training SIBAT members from village/ sub-village communities at at least 100 PMI chapters which are vulnerable to disaster. Training of Lead Trainers of KBBM and PERTAMA in newly initiated regions. Training in mitigation and risk reduction efforts for staff, Satgana and PMI officials, with a frequency of at least twice a year at national level, and once at regional and chapter level. ToT in emergency preparedness in 30 provinces. Training in disaster risk awareness for SIBAT members at all villages/ sub-villages under the KBBM and PERTAMA programmes.	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		PDeveloping and promoting the Safe Community concept. promoting the Safe Community concept. Piloting Safe Community by setting up a Public Safety Center (PSC). Implementing PSC (in a number of regions).	Continuing the concept of Safe Community to ensure that regions implement Safe Community by producing a PSC.	DEPKES	■	■		
		7 (seven) pilot Safe Community areas (healthy and safe community)	Follow up and evaluation	DEPKES (Yanmed)		■		
		Under discussion with tourism actors in Bali	Seminar and training for tourism actors in Bali	BPPT	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		VCA, PRA and Baseline Survey have been implemented at all pilot villages/ sub-villages under the KBBM and PERTAMA programmes.	Promoting and disseminating VCA, PRA and Baseline Survey results collated from all pilot villages/ sub-villages under the KBBM and PERTAMA programme for planning, preparedness, mitigation and risk reduction purposes at community, PMI Ranting, PMI Chapter, Regional PMI and National PMI levels (bottom-up approach).	PMI				
		Training and promoting on EW Infectious Disease Surveillance and FNS	Continuing training and promoting on EW Infectious Disease Surveillance and FNS	DEPKES				
		Training in Basic Life Support (BLS) for laypersons and special laypersons	Continuing training in Basic Life Support (BLS) for laypersons and special laypersons	DEPKES				
		Integrating disaster preparedness and risk reduction components into the CBFA (Community Based First Aid) and Program PHAST (Participatory Hygiene and Sanitation Approach) programmes - 2002-present.	Implementing the Integrated CBRR programme by building it into risk awareness on climate change and capacity building in the area of health, livelihood and social awareness..	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Developing a community based flood mitigation mechanism for Bandung and Jakarta (CBFM) (2002-2004)	Capacity building for CBDRM of NU and Muhammadiyah communities (2006-2007)	ITB				
		Training in Disaster Prone Area Mapping (Basic Level) – 3 weeks Training in RS/ GIS application in the Indonesian DM Information System (SIPBI) - (Supervisor Level) – 3 weeks Training in GIS for use in the Indonesian DM Decision Support System – (Manager Level) – 5 days	Training will be held more intensively and in cooperation with ADPC (Asian Disaster Prepredness Center) Thailand, Bangkok.	UGM				
		Training in DMIS at regional and international level held by IFRC (2004).	Training communities, Village/ Sub-viullage Committees and SIBAT at pilot villages/ sub-villages under the KBBM and PERTAMA programmes in using early warning tools and instruments using a local wisdom approach	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Training for all-Indonesia elementary school teachers (ToT) in earthquake preparedness, in cooperation with DEPDIKNAS (IUDMP 2001-2003), DIKNAS (2003-present) 7 batches	Continuing the training in earthquake preparedness for schools programme held on a yearly basis A similar programme with NU and Muhammadiyah, 2006-2007	PMB-ITB in cooperation with DIKNAS				
			Program sejenis dengan NU dan Muhammadiyah, 2006-2007	PMB-ITB kerjasama dengan AusAid, NU dan Muhamadiyah				
		PPGD curriculum for laypersons PPGD curriculum for nurses GELS curriculum for general practitioners Training in DVI for physicians, dentists and forensic officers	Training for laypersons, nurses, general practitioners in emergency medical service	DEPKES				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Helping in strengthening social self-help capacity through advice and technical assistance	BAKORNAS PBP and DEPDAGRI DEPKES, Dep PU (supported by BGR/ GTZ through Georisk Project)	■			
		Held a technical training in earthquake resistant buildings for construction workers in Kota Bengkulu	Continuing technical trainings in earthquake resistant buildings for construction workers in a number of cities in Indonesia, focusing in particular on disaster vulnerable cities, and holding similar trainings for consultants and contractors	PMB-ITB, PU, PEMDA		■	■	■
		Held a training in building monitoring and control system for staff members of the Building Office (Dinas Bangunan) of Kota Bandung	Continuing the training for Building Offices in disaster vulnerable cities	PMB-ITB, PU, PEMKOT-PEMKOT		■	■	■
			Capacity building of the community for technological/ industrial DRR in Kota Surabaya	ITS			■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Planning for technological/ industrial disaster management management in E Java Identifying high risk industries Mapping disaster vulnerable regions Cost and benefit analysis Worst scenario modelling Structural modelling to reduce disaster risk Bioengineering modelling to reduce disaster risk	ITS				
m	Ensuring equal access of vulnerable groups to training							

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
n	Developing a risk prediction assessment method and a cost benefit analysis for DRR		Cost and benefit analysis for technological disasters which have taken place Cost and benefit analysis for technological disasters for when they happen	ITS				
o	Technical and scientific capacity building for applying methods, conducting assessments and modelling pertaining to potential geological, climatic and water disasters	Being planned	Developing an online monitoring system for disasters such as floods, volcanic eruptions, etc., and using the data for developing models of the disasters' mechanisms and strategies to anticipate future disasters	PMB-ITB				
		Being planned	Conducting tsunami assessments and simulations to obtain technical input in designing and installing early warning systems at tsunami vulnerable areas in NAD	PMB-ITB				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Developing a tsunami early warning system/ TEWS for Indonesia	Integrating and developing national capacity for earthquake and oceanographic monitoring and modelling and national capacity for ICT in order to be able to warn the public on an imminent tsunami 5 minutes after an earthquake	RISTEK and pertinent LPNDs	■	■	■	
		Technical and scientific capacity building through cooperation with pertinent institutions from inside and outside the country	Technical and scientific capacity building through cooperation with pertinent institutions from inside and outside the country	LAPAN	■	■	■	■
		a. Oil spill contingency planning for Malaka Strait, Makassar Strait and Mahakam Delta (1993-1998) b. Piloting erosion management at Balikpapan Beach, E Kalimantan (2003)	Applying an oil spill detection and management system in Kota Balikpapan and surroundings	BPPT	■	■		
		Developing a Spatial Decision Support System	Developing a Spatial Decision Support System	Bakosurtanal, MIT, Biotrop, govt inst., LGs				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Technical and scientific capacity building has been done for applying methods, conducting assessments and modelling pertaining to potential geological disasters	Technical and scientific capacity building has been done for applying methods, conducting assessments and modelling pertaining to potential geological disasters	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM	■	■	■	■
p	Strengthening the role of media in raising public awareness on disaster	In 1999 a journalism training in disaster mitigation was held for mass media	Continuing trainings targeting a broader audience which engage mass media (TV, radio, print) from various parts in Indonesia	PMB-ITB, KOMINFO, Media		■	■	■
		A training in disaster management together with DKP for journalists, press conferences, a roadshow and a talk show have been implemented	Promoting networking and cooperation with national and local media for coverage and enhancing their understanding through training	MPBI, Dep Kominfo, BAKORNAS PB	■	■		
4	**Reducing underlying risk factors**							
a	Enhancing ecosystem management, land use and good development activities	Usulan konservasi sumber daya air	Melakukan survei di lokasi rawan banjir dlm rangka pengelolaan sumber daya air	Dep. PU	■	■	■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		TWork plans for environmental management and natural resources use agreed upon by local communities and pertinent government institutions have been identified and drawn up Input has been produced for the drafting of a local regulation concerning environmental planning	Participatory environmental planning for disaster vulnerable regions and development vulnerable regions	KLH	■	■	■	
		Investigating groundwater quality of industrial sites in Kota Semarang, which is indicating a very high level of pollution	Conducting earth science assessments and investigations (how top soil reacts to earthquakes)	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM		■	■	■
		In 2003 the National Movement for Forest and Land Rehabilitation targeted 300,000 ha, 500,000 ha in 2004, and 600,000 ha in 2005	Gerakan Nasional Rehabilitasi Hutan dan Lahan (GNRHL/ GERHAN) akan dilaksanakan dengan sasaran 3 juta ha selama 5 th (2003-2007), tahun 2006 dengan target seluas 700.000 ha dan tahun 2007 dgn target seluas 900.000 ha	DEPHUT	■	■		

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			DRR measures: Environmental management Physical and technical measures Networking	UNICEF, BAKORNAS PB, DEPDAGRI, DEPKES, DEPSOS, BKKBN, Dep PU, and other relevant govt. officials				
b	Applying good natural resources and environmental management in relation to DRR	Good natural resources and environmental management is being built in relation to DRR	Applying good natural resources and environmental management in relation to DRR	LAPAN				
		Setting up green belts at dams	Enhancing and broadening green belts at dams	Dep.PU				
		Developing clean water management	Enhancing quality of clean water	Dep.PU				
		Preparations of emergency environmental activities at turf sites in C Kalimantan (Pulang Pisau, Palangkaraya and E Kota Waringin) and E Kalimantan (Kutai Kartanegara and E Kutai) finalized by Mar 06	Preparations of emergency environmental activities at turf sites with funding from the 4th Action Plan of SEA DIPECHO	DIPECHO, KLH, BAKORNAS PB, Satkorlak PB and Satlak PB, other pertinent govt institutions				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Developing a spatial decision support system	Developing a spatial decision support system	Bakosurtanal, MIT Biotrop	■	■	■	■
		Implementing good and prudent waste	Capacity building of waste scavengers and	UNESCO Yayasan Kirai,	■			
		Promoting environmental law enforcement to buffer disasters in disaster vulnerable regions	Promoting environmental law enforcement to buffer disasters through law	UPN Veteran Yogyakarta	■	■	■	■
c	Integrating risk reduction in relation to climate change	Taking active participation workshops, seminars, symposiums, national, regional and international summits addressing policies and regulations supporting risk reduction efforts	Integrating climate change and livelihood aspects into KBBM and PERTAMA programmes	PMI	■	■	■	
d	Strengthening food security at disaster vul-nerable regions, especially at agricultural based regions							

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
e	Integrating DRR into the health sector	An illustration has been made for a disaster management transportation system where system indicators for disaster vulnerable regions are known to ensure that the addressing of minimum facilities and infrastructure at selected airports are identifiable	Developing airports to meet minimum operational standards	DEPHUB				
		Capacity building for health service facilities in disaster vulnerable regions	Continuing capacity building of health service facilities in disaster vulnerable regions	DEPKES				
		IConstructing health service facilities in line with context of disaster vulnerable regions	Continuing construction of health service facilities in line with context of disaster vulnerable regions	DEPKES				
		Transect coordination meetings on health issues (TNI, Polri, PMI, NGOs and WHO)	Continuing transect coordination meetings on health issues	DEPKES				
		Ensuring participation of mixed sectors in the field of health when drafting guidelines, holding trainings and convening meetings	Continuing to ensure participation of mixed sectors in the field of health when drafting guidelines, holding trainings and convening meetings	DEPKES				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Plan	IIdentifying groundwater use during emergency situations during and after a disaster	Geoteknologi LIPI				
f	Protecting and strengthening public facilities and physical infrastructure from disaster risk	A programme for airport development has been designed for the purpose of natural disaster management and national level development of border regions	A airport development programme will be implemented in phases for the purpose of natural disaster management and national level development of border regions	DEPHUB				
			Identifying disaster risks at hospitals	BAKORNAS PBP and DEPDAGRI DEPKES, Dep PU (support by BGR/ GTZ through the Georisk Project)				
		Land use for school buildings has yet to strictly meet the requirement of building on earthquake-free sites	Optimum meeting of requirement of building schools on earthquake-free sites	DEPDIKNAS				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		School buildings have yet to the maximum extent conform to building codes	All school buildings in disaster vulnerable regions will be required to conform to building codes	DEPDIKNAS				
		Rehabilitation programming in disaster vulnerable regions will apply higher construction standards	Continuing the rehabilitation programme for ASDP port facilities	DEPHUB				
			Identifying safe ports, evacuation routes, evacuation places and medical aid centres	BAKORNAS PB dan DEPDAGRI, Dep. PU (didukung BGR/GTZ dgn Georisk Project)				
		PIn 2000 evaluated and analyzed physical vulnerability of school buildings and redesigned and provided recommendations for reinforcing selected school buildings in Bandung and Bengkulu	Study and assessment on design viability of state elementary, junior high and senior high school buildings in Indonesia to withstand seismic and tsunami hazards	ITB, DEPDIKNAS dan PU				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
g	Strengthening mechanism of social safety nets to protect the poor from disaster risks		Micro loans for economic resilience of coastal communities	DKP				
h	Incorporating disaster risk reduction into post-disaster recovery and rehabilitation processes		To develop for disaster area in NAD and Nias	BRR				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
i	recovery processes Ensuring that IDP management programmes do not heighten risks and vulnerability	Conventional relief distribution has been done using a buffer stock method whereby each province is provided with 50 tons of rice, other foodstuff, clothing, basic emergency facilities for sleeping and temporary shelter. Instant noodles will be distributed by means of delivery order. Improper packaging might cause relief goods become spoiled more faster. Relief such as social therapy, psychosocial therapy and referral has been piloted though it has remained partial and non-linear	Improving content and quality of assistance by applying a stringent selection process of needs Improving quality of packaging Adjusting economic nominal values of physical and non-physical assistance Redesigning relief methods for social therapy, psychosocial therapy and referral.	DEP:SOS				
j	Diversifying community livelihoods in high risk regions							

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
k	Developing a loss compensation mechanism (insurance)							
l	Strengthening relations between the public and the private sector in DRR	Kerjasama dengan swasta yang telah terjalin akan dikembangkan menjadi program kampanye pengurangan risiko bencana	Program Inisiasi Green Company Program Inisiasi Komunikasi pemasaran untuk tujuan kampanye pengurangan risiko bencana Program inisiasi marketing society	CDS-UII bekerjasama dengan Dir. PK-UII, Gugus pemasaran, Swasta Nasional dan		■	■	■
m	Setting up or developing a financial institution dealing with disaster risk	A special allocation grant for disaster management is not in place yet	Assessing the possibility of a special allocation grant for disaster management. Identifying a partner/ donor for the purpose of drafting a disaster management concept addressing social unrest in Indonesia (conflict).	BAPPENAS	■ ■	■ ■		
		Budget sharing for implementing the KBBM and PERTAMA programmes in villages/ sub-villages in pilot areas	Community empowerment and mobilization for fund-raising to ensure continuity of the KBBM and PERTAMA programmes which have run autonomously	PMI	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
n	Incorporating DRR into city and settlement planning	Developing settlements and social and public facilities	Enhancing social and public facilities and healthy settlements	Dep. PU				
		Active participation in relocation and resettlement initiatives for communities impacted by natural disaster	Promoting a shared commitment for developing settlements based on disaster risk awareness	PMI				
o	Prioritizing DRR considerations in planning procedures for key infrastructure projects	An airport development study has been conducted for disaster vulnerable regions	Development of airports in disaster vulnerable regions will take place in phases	DEPHUB				
		Simple guidelines for earthquake resistant buildings (IUDMP 2000)	Drafting guidelines for earthquake resistant buildings (2006-2010)	ITB				
		Building standardization	Promoting building standardization	Dep. PU				
		Construction of SABO dam	Enhancing and extending SABO dam	Dep. PU				
		To prioritize the incorporation of disaster risk considerations into planning processes of key infrastructure projects	Will implement activities in accordance with regulations prevailing in Indonesia	DEPHUB				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Assessing technical preparedness of regions re-identified as disaster vulnerable	A technical assessment or evaluation will be done against airport infrastructure	DEPHUB				
		Incorporating DRM/ DRR into construction planning for housing and infrastructure. Ongoing.	Reviewing the building code. Incorporating DRM/ DRR into planned activities of communities	GTZ-SLGSR (local governance programme) in cooperation with BGR and KfW				
p	Developing monitoring guidelines and facilities into land use policy contexts	Follow up to disaster planning at all provincial and district/ municipal hospitals	Monitoring and evaluation	DEPKES (Yanmed)				
		PPK as an on-duty echelon 2 unit	Continuing drafting guidelines, SOPs, standards, MoUs, etc.	DEPKES				
		Reviewing existing SOPs and guidelines	Continuing review of SOPs and guidelines	DEPKES				
			A PK-MKL SOP concept will be produced involving all stakeholders (DEPKES, TNI, Polri, professionals, etc.)	DEPKES				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Assisting in producing guidelines for spatial/ regional planning and nationwide building codes	BAKORNAS PB and DEPDAGRI DEPKES, Dep PU (supported by BGR/ GTZ through the Georisk Project)				
q	Incorporating disaster risk into regional development plan (mountain areas, flood plains and beach areas)							
r	Revising regulations and building standards	Surveying and collecting disaster data	Planning for rehabilitation of infrastructure damaged in natural disaster	Dep. PU				
		Producing a SOP on disaster management and disaster data	Producing a SOP on disaster management and disaster data by activating local resources for geological DM in accordance with the SNI	DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
5	**Capacity building for disaster preparedness at all levels**							
a	Strengthening policies, technical and institutional capacity for disaster management at local, sub-national and national level	Producing Guidelines for Disaster Risk Assessment at Provincial and District/ Municipal Level (2001), Guidelines for Geomedic Mapping, and promoting the guidelines	Continue promoting Guidelines for Disaster Risk Assessment at Provincial and District/ Municipal Level to ensure that risk assessment and geomedic mapping activities are taking place in the regions	DEPKES				
		Referral network SPGDT DVI Team	Setting up a call centre, transport and emergency ambulances, and communication and information tools	DEPKES				
		Many airports, including those within vicinity of disaster vulnerable areas, lack minimum standard facilities for emergency response needs	Airports located no further than 500 km from hub airports or no further than 250 km from disaster location must have minimum standard facilities for C-130 and F-27 aircraft operations	DEPHUB				
			Construction and development of minimum infrastructure to reduce disaster risks	DEPHUB				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Setting up a Disaster Preparedness Brigade (BSB) at provincial level (contract BSB doctors stationed at 28 hospitals in 21 provinces)	Developing BSB in all provinces and districts/ municipalities	DEPKES	■	■	■	
		A natural disaster management programme and a national border area development programme set up	Transport development programming targets disaster vulnerable areas in all of Indonesia, i.e.: Areas featuring faults and plate convergence Areas featuring active volcanoes which might potentially erupt and release debris	DEPHUB	■	■	■	■
		In 2005 DKP produced Broad Guidelines for Disaster Mitigation at Coastal Areas	Revised guidelines for disaster mitigation at coastal areas	DKP		■		
		Strengthened preparedness of PMI on account of overall revisioning, upgrading and developing of policies on disaster/ conflict management complying with plans and mandates of the GoI	Organizational capacity building for disaster management of PMI at all levels (national, regional, chapter)	PMI	■	■	■	■

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Medical referral network set up	Coaching of targeted regions by national and regional level Procuring standard equipment for disaster management and DVI at regional and national levels	DEPKES				
		Funding available for KBBM and PERTAMA programming sourced from IFRC, PNSs and international donors Support set up for emergency response and logistics for disaster victims at 2 central warehouses (Jakarta, Surabaya), 5 regional warehouses and at emergency storage at all Regional HQ of PMI pursuant to International standards. A DMIS (DM Information System) set up at PMI and functioning properly the	Building and extending existing logistic warehouses and developing central warehouses in Surabaya and Jakarta, and building regional warehouses in Manado, Biak and Palembang, which includes the procurement of logistics and relief (restocking) at a minimum capacity of 10,000 households for each warehouse	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Procuring software and hardware for Early Warning Systems	Collaborating with the French Red Cross to support the setting up of a National Centre, Operation Centre and Emergency Call Centres for early warning systems in 6 provinces (DKI, NAD, W Sumatra, Bali, Yogya, Jambi)	PMI, BAKORNAS PB	■	■		
		Training in DMIS at sub-national and international level by IFRC (2004)	Capacity building of staff and Satgana for delivering community-based disaster emergency information and early warning	PMI	■	■	■	■
		Preparedness simulations and drills, and DRR efforts at the S Coast, Bone, Wajo, Polewali, W Lampung and S Lampung	Capacity building of communities in KBBM and Pertama pilot villages/ sub-villages through disaster emergency response preparedness drills and simulations customized to local hazard and risk characteristics	PMI	■	■	■	

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Medical Referral Networking Integrated Emergency Medical Service System (SPGDT) Safe Community (SC) Programme SPGDT and DVI teams set up in 4 regions	MandE and Educational initiatives	DEPKES	■	■	■	■
		Drafting Guidelines for Volcanic DM	Producing SOPs on volcanic disaster management	DESDM	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		There is a need for overall strengthening of policies on and for technical and institutional capacity for disaster management at local, sub-national and national level.	Designing a training biro for BAKORNAS PB and its members Identifying the status of authority of SATKORLAK/ SATLAK for coordinating management of local and sub-national disasters Reviewing mandates and capacities of stakeholders Setting up a training module on disaster management for local governments (SATKORLAK/ SATLAK) Implementing a training in disaster management for local governments	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				
b	Developing dialogue, information exchange and coordination among relevant institutions	Collecting, updating and disseminating information on the situation and response during a natural disaster	Collecting, updating and disseminating information on the situation and response during a natural disaster	OCHA with pertinent govt institutions				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
c	Developing a sub-national approach in formulating policies, operational mechanisms and communication systems for disaster emergency response	Setting up a national-level Public Works Task Force (SATGAS PU) for Natural DM	Promoting provincial/ district/ municipal SATGAS Pus	Dep. PU	■	■	■	
		Distribution of the evacuation kit has reached 61 districts/ municipalities and covered 6 items: platoon tents, tents, camp beds, field kitchen equipment, rubber boats, life jackets.	Extending reach of distribution of evacuation kits. Preparing disaster management facilities or tactical transportation units for each province in Indonesia	DEPSOS	■			
d	Reviewing and updating disaster preparedness and contingency planning	Collecting baseline data on preparedness and resources for crisis management and other health issues	Continuing collecting baseline data on preparedness and resources in PK-MKL	DEPKES	■	■		
			M Semeru contingency planning	ITS, MPBI and Expert Council	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Supporting BAKORNAS in local capacity building, focusing in particular on disaster vulnerable regions, for holding workshops on emergency management and contingency planning at provincial level in W Sumatera	Reviewing and evaluating activities, modules, implementation mechanisms. Identifying future possibilities to bring the same training to other disaster vulnerable provinces.	WFP and other UNTWG members BAKORNAS				
		Emergency drill training combined with contingency planning has been done in Kota Ende.	Emergency drill training combined with contingency planning for sub-districts in Lombok (NTB).	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				
e	Promoting the allocation of emergency funding for disaster management	Allocation of disaster funding for disaster management at national level (starting from 2001). Allocation of disaster funding for disaster management at national level (starting from 2005).	Making efforts to have allocation of funding for disaster management at national, provincial and district level bypass routine accountability procedures. Making efforts to have disaster funding used not only for disaster management but also for preparedness efforts.	DEPKES				
		Centralized	Making funding available for emergency medical services	DEPKES				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Emergency funding made available for disaster management	Making emergency funding available for disaster management	LAPAN	■	■	■	■
		Emergency funding for emergency response operations available at National PMI, Regional PMI, and PMI chapters	Making emergency funding available again at National PMI, Regional PMI, and PMI chapters amounting at least 25 percent of the total annual budget	PMI	■	■	■	■
			Developing and implementing guidelines for local disaster mitigation, contingency planning and emergency drills for capacity building of the public and the private sector for disaster management	BAKORNAS PB and DEPDAGRI, DEPKES, Dep PU (supported by BGR/ GTZ through the Georisk Project)	■			

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Funding has been made available for KBBM and PERTAMA programming by IFRC, PNSs and international donors German Red Cross, British Red Cross, American Red Cross, Australian Red Cross, the Netherlands Red Cross, etc. Logistical support in place for emergency response, as are logistics at 2 Central Warehouses (Jakarta and Surabaya) and 5 Regional Warehouses (Banda Aceh, Medan, Padang, Bali and Makasar) for delivering relief to disaster victims, and emergency storage at all-Indonesia PMI chapters pursuant to Red Cross and International Red Crescent standards. DMIS (DM Information System) set up at PMI and functioning properly	Making funding available at National PMI, Regional PMI and PMI chapters for KBBM and PERTAMA programming, focusing in particular on real efforts for preparedness, mitigation and risk reduction. Allocating funding sourced from IFRC, ICRC, PNSs and international donors to implement the programmes according to need, which includes preparedness, mitigation and risk reduction. Setting up facilities, supplies and logistics for programme implementation. Making available KIE tools and media for Disaster Risk Awareness.	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
			Introducing an idea where a disaster vulnerable region will insure itself and where a few percentages of its annual budget (RAPBD) will be set aside to ensure that it has emergency funding in place for when disaster actual strikes.	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				
		Oxfam will do an assessment immediately after a moderate or large disaster. If necessary, Oxfam will distribute humanitarian aid in the area of public health using SPHERE's Minimum Standards.	Clean water: Providing clean water using SPHERE's Minimum Standards. Sanitation: Providing sanitation facilities using SPHERE's Minimum Standards. Promoting Hygiene and Public Health: Non-food Aid Personnel hygiene facilities (soap, toothpaste, detergent, tampons, etc.) and distribution of water holding tanks, mosquito nets, and cooking tools. Providing temporary shelter: Food security, including cash for work if necessary.	Oxfam Emergency Response Team in cooperation with local NGOs and pertinent govt institutions				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
f	Developing a special mechanism to encourage participation of all parties involved.	Strengthening community participation in setting up evacuation routes and evacuation places in anticipation of tsunami disasters.	Holding evacuation simulations in 3 cities.	RISTEK and pertinent LPNDs				
		Holding routine national workshops/ coordination meetings/ work sessions to those responsible for disaster management at Regional PMIs and PMI chapters. Facilitating and empowering the community for planning real actions for preparedness, mitigation and risk reduction as an integrated part of capacity building for emergency response in all KBBM and PERTAMA pilot villages and sub-villages.	Mobilizing and empowering the community for independently implementing preparedness, mitigation and risk reduction efforts and capacity building of the community for implementing real emergency response actions in all KBBM and PERTAMA pilot villages and sub-villages according to hazard, vulnerability and risk characteristics.	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Advocating and promoting principles, strategies, mandates and policies of DM services to developing and maintaining cooperation ties with National Associations, the government, IFRC, ICRC, International NGOs, Ministries, dinas offices, agencies and other stakeholders at national level.	Strengthening clear roles and responsibilities in disseminating DM Information internally and externally, nationally (Government, Ministries/ Dinas offices/ relevant agencies) and internationally (IFRC, PNSs and ICRC).	PMI				
		The KBBM and PERTAMA programmes which have been implemented in 8 provinces (S Sulawesi, W Sulawesi, W Sumatra, Lampung, S Kalimantan, N Sumatra, Aceh, DKI Jakarta) are coherently integrated into a local development master plan.	Broadening KBBM and PERTAMA programming by including 15 new provinces, including Papua and NTT.	PMI				
		Preparedness simulations and drills, and DRR efforts at the S Coast, Bone, Wajo, Polewali, W Lampung and S Lampung.	Holding at an annual basis a National DM Drill and National Satgana and SIBAT gathering.	PMI				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Under discussion.	Capacity building of the community for self-help. Strengthening participation of disaster vulnerable communities in decision making and spatial planning in DRR activities. Enhancing the position of empowered communities. Strengthening existing local social networks. Ensuring income and developing a sense of safety for people living in disaster vulnerable regions Broadening vision for dealing with natural disaster. Building national competence for service-based disaster management certified and audited by industry consultants, universities and other research institutions.	BGR/ GTZ (Georisk Project) – Geological Agency/ DESDM				

No	Priority Programmes/ Activities	Current Status	Planned Activities	Institutions	Time Frame			
					2006	2007	2008	2009
		Developing community-based flood mitigation methods in Jakarta (CBFM) (2003 - 2005)	Replicating community-based activities in other aras of Jakarta and promoting the activities at DKI Jakarta level.	UNESCO, ITB, Local NGOs (PPMA), Satkorlak PB	■			
		Coordinating with the government in identifying each geographical area of IRI activities, inclusive of disaster vulnerable regions.	Strengthening the communication mechanism with the government and stakeholders at all levels and proactively seeking for the latest information on disaster management.	Islamic Relief Indonesia	■	■	■	■
		Risk management Assessing situations on the ground Disseminating timely and accurate information on field assessments Facilitating emergency aid distribution in event of a natural disaster	Risk management Assessing situations on the ground Disseminating timely and accurate information on field assessments Facilitating emergency aid distribution in event of a natural disaster	OCHA, BAKORNAS PB, Satkorlak PB, Satlak PB	■ ■ ■	■		
		Being planned	Recommendations on formulating and improving emergency response strategies.	PMB-ITB, Pemda		■	■	■