付属資料２．　PDM（オリジナルと中間評価時改訂版）

(1)　PDMオリジナル　The Integrated Sediment-Related Disaster Management Project for Volcanic Areas (ISDM)

Project name: The Integrated Sediment-Related Disaster Management Project for Volcanic Areas　Duration: 5 Years from April 1, 2001　Version 1.30
Project Area: Four Model Project Areas mentioned below　Target group: Residents in the Volcanic Areas　Date: Mar. 2, 2003

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal Damage by volcanic sediment-related disasters to human lives, assets and environment in volcanic areas in Indonesia is reduced			
Overall Goal Integrated sediment-related disaster mitigation measures are implemented in hazardous areas	1) No of the projects implemented according to the model established in the model area 2) Variety of disaster mitigation measures participated by trainees/counterparts 3) No./status of disaster prevention committees and voluntary evacuation drills by the villagers and opinions of residents	Report from Ministry of Settlement and Regional Infrastructure (MSRI) Report from MSRI The results of social survey, questionnaire, site inspection	Government policy on disaster mitigation measures dose not change drastically
Project Purpose Engineers involved in disaster mitigation and local residents become able to plan and implement disaster mitigation measures to reduce the impacts of sediment-related disasters on villages in volcanic areas	1) Technical guidelines for integrated sediment-related disaster mitigation measures are established and disseminated 2) No. of the trainees assigned to the disaster management project or related section 3) Status of peoples' awareness on disaster mitigation in model areas	Report from MSRI Report from MSRI The results of social survey, questionnaire, site inspection	Budgets for disaster mitigation projects are allocated properly
Outputs 1. Planning and implementation methodologies of sediment-related disaster mitigation measures are established through the cooperation between engineers on disaster mitigation and local residents (Establish integrated sediment-related disaster management model)	1) Status of utilizing hazardous maps 2) Status of utilizing disaster prevention and evacuation criteria 3) Comparison of existing sediment-related disaster mitigation works and integrated disaster mitigation from the view of cost-effectiveness and cost-benefit 4) States of damage and robberies of facilities and materials of sediment-related disaster mitigation works 5) No. of unharmed people, properties and regions 6) Results and No. of public hearings related to model works in model areas	Report from the Project Report from the Project Reference materials of MSRI, STC and the project The results of site inspection The results of survey, questionnaire, site inspection Report from the Project and the model sites	Trained sediment-related disaster mitigation works engineers keep working

2 Methodology to establish local organizations and systems for promoting disaster mitigation measures are established (Establish local organizations and systems for disaster mitigation)	1) Results and No. working committee meetings held, , and theme of discussion, effectiveness for information exchange 2) No. of seminars on disaster mitigation measures 3) Status of acceptance of evacuation routes/places by the local residents	Report from the Project and the model sites Report from the Project and the model sites The results of survey, questionnaire, site inspection	
3 Engineers to implement appropriate countermeasures on disaster mitigation measures are trained (Train engineers in disaster mitigation)	1) Technical criteria for disaster mitigation 2) No. of engineers qualified under the criteria above 3) Status of activities of trainees at their offices	Finished criteria Report from the Project Report from the Project	
4 Training programs for engineers involved in sediment-related disaster mitigation are established (Establish training programs for engineers)	1) No. of lecturers assigned to the training courses 2) Status of training facilities 3) Status of curriculum and training materials	Report from the Project Report from the Project Finished works	

Activities	INPUT		
	The Government of Japan	The Government of Indonesia	
1 (Establish integrated sediment-related disaster management model) (1) Conduct site surveys on model areas to obtain detailed data on local conditions (2) Hold meetings to exchange views on disaster mitigation measures (3) Establish systems to escape from sediment-related disasters 3-1 Develop hazard maps 3-2 Establish observation system on hazardous points 3-3 Develop criteria on precautions and escape 3-4 Develop methodology of precautions and escape (4) Plan and implement disaster management measures with the cooperation with local residents, NGOs, and local consultants *1 4-1 Plan and establish the management systems for sediment gathering 4-2 Plan and implement measures for conservation of hill slopes 4-3 Plan and implement measures for conservation of river banks (5) Establish management systems of local residents to manage established sediment-related disaster mitigation facilities (6) Develop guidelines for implementing integrated sediment-related disaster mitigation measures 2 (Establish local organizations and systems for disaster mitigation) (1) Establish working committee for disaster mitigation to be composed of local residents, NGO, engineers of central/local governments (2) Hold seminars on disaster mitigation for local residents and school teachers 3 (Train engineers in disaster mitigation) (1) Train engineers through model works at model sites (2) Train engineers through the training programs established at Sabo Technical Centre (3) Develop criteria for qualified engineers in disaster mitigation	1 Long-term Experts 1) Chief Advisor: 60M/M 2) Coordinator: 60M/M 3) Sediment-related disaster: 60M/M 4) Regional disaster mitigation: 60M/M 5) Disaster information: 60M/M 6) Sabo planning: 60M/M 2 Short-term Experts: As required 3 Equipment 4 C/P Training 5 Facilities *1 The model areas for conducting planning and designing of integrated sediment-related disaster mitigation measures are: 1) Mt. Merapi Model Area, 2) Mt. Agung Model Area, 3) Palu Model Area, 4) Mt. Semeru Model Area The model areas for implementing model works of integrated sediment-related disaster mitigation measures are: 1) Mt. Merapi Model Area, 2) Mt. Agung Model Area	1 Counterparts 1) Project Manager: 60M/M 2) C/P Sediment-related: 360M/M 3) C/P Regional disaster: 360M/M 4) C/P Disaster information: 360M/M 5) C/P Sabo planning: 120M/M 6) Counterparts for the model sites 5 C/Ps per site: 300M/M×4 sites 2 Facilities 2-1 Office and work space for Japanese experts 2-2 Space necessary for installation of the donated equipment 2-3 Experimentation fields, laboratories and training rooms 2-4 Land, buildings, facilities and equipment necessary for the Project 3 Local Cost Project implementation and management costs	C/Ps are assigned properly No large-scale sediment-related disasters occur during the implementation of the model projects Budget for STC is allocated as planned

4 (Establish training programs for engineers) (1) Establish training courses to distribute the concept of integrated sediment-related disaster mitigation measures with the cooperation of Gadjah Mada University (2) Develop curriculum of the training (3) Develop training materials of the training (4) Secure lecturers for the training courses Establish the system to monitor the results of the training 5. Related activities (Database development, others) (1) Collect and analyze information on sediment-related disasters in Indonesia (2) Develop database system (3) Establish management and maintenance system for the database (4) Develop Internet Homepage to publicize the Project outputs (5) Advise for reconstruction of devastated areas			Preconditions Model projects are accepted by local residents