Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Krueng Aceh Urgent Flood Control Project
Project Type	TC & ODA Loans
Project Site	The Krueng Aceh Basin, Aceh Province
Project Period	Preliminary Study: 1972-1973, Feasibility Study: 1979, Detail Design: February 1981 – November 1982, Construction: August 1983 – January 1993
Name of JICA Experts / Consultants	Oriental Consultants Co., Ltd. & Associates
Project Highlight:	Frequent floods occurred prior to the project appraisal (before 1983), but no considerable flooding has occurred since the project completion date
Background	Krueng Aceh is a major river in the northern part of Sumatra Island with a length of 145 km and river basin area of 1,775 km2, that flows from Suekek Mount through Banda Aceh City toward the Malacca Straits. This river had flooded almost every year, causing significant damage in the Aceh Besar Regency Region (with population of 1.65 million in 1980), including Banda Aceh Municipal. Typically, the flooding covered an area of 25,000 ha, comprising 2,700 ha of residential area, 7,500 ha of paddy field and 4,100 ha of coconut plantations and shepherding meadows. This situation was caused by a limited river capacity of 250 m3/s, compared to the 5-year flood discharge of 1,300 m3/s. Floods in 1953, 1971, 1978, 1983 and 1986 resulted in severe damage to local communities, and sometimes in loss of life
Overall Goal	The project outputs are consistent with national policy on water resources development i.e., "Conservation of River Channel and Improvement of River Function"
Project Purpose	To protect the city of Banda Aceh, located in the downstream reach of the Krueng Aceh River, from damage caused by recurrent five-year floods, by improving existing river channels in the section from the estuary to Indrapuri and constructing of a new floodway
Outputs	Stage 1: River improvement and embankment construction between the river mouth and Bakoi Embankment construction along the left side of the river between Bakoi and Sibreh, small river improvements within the city Stage 2 (Phase 1): Construction of flood control channels (River channel of 12km, 900m3/s)

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Medan Flood Control Project
Project Type	TC & ODA Loans
Project Site	Medan City, North Sumatra Province.
Project Period	Study on Blawan Padang Integrated River Basin Development (Master Plan & Feasibility Study) : March 1990 – March 1992, Detail Design : March 1995 – September 1996, Construction : January 1999 - January 2009
Name of JICA Experts / Consultants	CTI Engineering International Co.Ltd. & Associates
Project Highlight:	The Project was formulated with the flood control scale of 25-year return period, consisting of river improvement and floodway construction in Medan city of North Sumatra Province
Background	GOI initiated the 1st study with cooperation of ADB on 1978, as the master plan for "Medan Urban Development Project". After that, "Blawan-Padang Integrated River Basin Study" has been granted by JICA in 1995, then GOI and Japanese Government have made loan agreement for "Medan Flood Control Project" in 1998. Project has been implemented since 1999
Overall Goal	Contribution to the stabilization and enhancement of the people's livelihood, and the economic development of the project area
Project Purpose	To protect Medan city from flooding by constructing a floodway in Medan and river improvement on the Percut river and the upper Deli river
Outputs	Percut river improvement works 28km, Medan Floodway construction 3.8km, New Road Bridge 13 units, and diversion and improvement works of upper Deli river 1.0km)

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Ular River Flood Control and Improvement of Irrigation Project
Project Type	TC & ODA Loans
Project Site	Deli Serdang Regency, North Sumatra Province
Project Period	Urgent Works (JICA & IP-197) : 1969 - 1976, Master Plan, Feasibility Study, Detail Design & Construction (IP-236) : 1976 - 1989, Sustainability Works (IP-347) : 1989 - 1995
Name of JICA Experts / Consultants	IDEA Consultants, Inc. & Associates
Project Highlight:	Sustainable yield of paddy and plantation products
Background	The project area is located at about 30 km southeast of Medan, the capital city of North Sumatra Province. The alluvial plain located downstream of the Ular river has suffered from floods which took place several times every year due to breaches of levee of the Ular river
Overall Goal	To promote sustainable economic development
Project Purpose	1. Prevention of flood damage for 24,500 ha 2. Improvement of irrigation facilities for 18,600 ha
Outputs	1. River improvement works for about 34 km stretches with design scale of 30-year return period, including dredging and construction of leeve 2. Improvement and construction of intake weirs, main/secondary/tertiary canals 3. Construction of 6 span 192 m prestress PC bridge

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Lower Asahan River Flood Control
Project Type	TC & ODA Loans
Project Site	Kisaran and Tanjung Balai City, Asahan Regency, North Sumatra, Lower Asahan River Basin
Project Period	Master Plan: 1984 - 1985, Detail Design : February 1988 – February 1990
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	The detailed design of the Lower Asahan River Flood Control consisting of river improvements works and flood forecasting and warning system, including additional design for tributary treatment and improvement of inland drainage
Background	To cope with frequent flood damages in the river dikes, the lower basins of the Asahan and SIlau rivers had been constructed for protecting the developed land from flooding of the rivers. However, the capacity of the existing flood control facilities in the area was still low. In order to prevent the area from repeated floods of the Asahan and SIlau rivers, implementation of a flood control project was considered to be urgently needed
Overall Goal	To prevent flood damage in the lower Asahan area by means of river channel improvement
Project Purpose	1) To update the flood control plan in the study in 1985 2) To conduct detailed design of flood control plan after its definite plan 3) To facilitate implementation of the project
Outputs	1) Master Plan Study on Lower Asahan River Basin Development 2) Detail design for 43 km long section of the Asahan River and 19 km long section of the Silau River, and Detail Design for flood forecasting and warning system

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Padang Area Flood Control Project
Project Type	TC , ODA Loans & GA
Project Site	Padang City & Padang Pariaman Regency, West Sumatra Province
Project Period	Master Plan & Feasibility Study (JICA) : 1982 - 1984, Detail Design (IP-292) : 1987 - 1990, (Stage 1) Construction (IP-360) : 1991 - 1996, (Stage 2) Construction (IP-451) : 1996 - 2002, Post Earth-quake Rehabilitation Works (JICA Grant Aid) : 2009 - 2011
Name of JICA Experts / Consultants	IDEA Consultants, Inc. & Associates
Project Highlight:	No flooding after completion of Project
Background	Padang city is located on the alluvial lands formed by the Arau, Kuranji and Air Dingin rivers. These rivers originate in the steep slope of the Barisan Mountains runs in parallel with the coast, with 20 to 25 km distance. Therefore, the city had been suffered from frequent flood damages for many years
Overall Goal	To promote sustainable economic development
Project Purpose	Reduction/prevention of flood damages in Padang
Outputs	1. River channel improvement of Arau, Kuranj, Air Dingin Rivers and their tributaries (30 km in total, 25-year design scale) 2. Improvement of drainage conditions in Padang (10-year design scale) 3. Protection works for Padang coast

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	South Sumatra Swamp Improvement Project
Project Type	ODA Loans
Project Site	Air Sugihan/Pulau Limau, South Sumatra Province
Project Period	Detail Design : January 1993 - September 1996, Construction : February 1994 - July 1999
Name of JICA Experts / Consultants	EUROCONSULT in association with Oriental Consultants Co., Ltd
Project Highlight:	a) Review and study of existing swamp development schemes b) Detailed design of project infrastructures and facilities c) Implementation of rehabilitation and improvement of drainage system d) Implementation of rehabilitation and improvement of transportation facilities e) Implementation and improvement of domestic water supply facilities f) Provision of facilities and equipment for O & M g) Consulting services for the above
Background	During the 5th. National Development Plan(1989-1994), the GOI placed the highest priority on programs to rehabilitate and maintain the existing irrigation/drainage systems in the agricultural sector. These development schemes constructed an open drainage system, but there were virtually no structures to control the water and only a minimum of required social infrastructure. Until 1992, these projects were still in the initial stage of development; consequently, there were many constraints on the efforts of farmers to develop their agriculture. Crop productivity remained low, and cropping intensity on the land had not reached the expected level. Possible causes included: (1) Deterioration of the drainage facilities and related structures of the existing schemes, (2) inadequate water control structures, and (3) Lack of supporting services on credit, research work and farmers' institutions. Given these circumstances, there was an urgent need to upgrade the existing swamp schemes and intensify agricultural activities in order to raise the living standard of the inhabitants to a subsistence level
Overall Goal	To raise the living standards of farmers in the existing swamp scheme areas by increasing farm income and contributing to self-sufficiency in food production through the rehabilitation and improvement of the existing infrastructures, including the drainag
Project Purpose	i) Improve the existing drainage facilities ii) Practice efficient on-farm water management and train farmers for the purpose of improving their farming practices iii) Improve basic social infrastructure such as farm roads and domestic water supply facilities
Outputs	1) New/Rehabilitation of Primary canal : 143.9 km 2) New/Rehabilitation of Secondary canal : 583.5 km 3) New/Rehabilitation of Tertiary drains : 1,726.1 km 4) Flood protection dike : 31.2 km 5) New water control structures : 64 units 6) Tertiary structures : 1,984 units 7) Road construction : 38.8 km 8) Construction of new bridge : 1,012 units

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Batutegi Dam Project (Way Sekampung Irrigation Project)
Project Type	ODA Loans
Project Site	Way Sekampung River, Bandar Lampung, Lampung Province, Way Sekampung River Basin
Project Period	Construction : February 1994 – November 2003
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	Construction of Batutegi Dam and Expansion of irrigation system to Bekri area.
Background	The Batutegi Dam was planned to be constructed as a part of the Way Sekampung Irrigation Development Project. To increase irrigated area in dry season by utilizing the excessive river flow in the rainy season., construction of the Batutegi dam had been eagerly longed. In addition to this primary function, the Batutegi dam was expected to contribute for power generation and flood control also
Overall Goal	To enhance regional and national development in Lampung region
Project Purpose	1)To increase in the harvest area of rice and other main food crops in the project area largely by increasing of irrigation water supply especially during the dry season by constructing the Batutegi dam and expansion of irrigation areas. 2) To maximize the effect of the past investment through rehabilitation of irrigation systems and also to generate benefits with an economical investment for creating new irrigated crop areas
Outputs	1)Batutegi Multipurpose Dam (rockfill, center core type) H : 122 m, V : 9,640,000 m3, L : 701 m, 2)Flood Control Design Discharce : 1,930m3/s 3)Irrigation (76,790 ha in total) Waterway type : circular concrete lined, L :414.4 m D : 1.95 m 4)Hydroelectric Power: 28 MW (2 x 14 MW) 5)Transmission line 150 Kv

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	The Project for Urgent Reconstruction of East Pump Station of Pluit in Jakarta
Project Type	GA
Project Site	Pluit Pump Station in the North Jakarta
Project Period	January 2011 - March 2014 (Tentative)
Name of JICA Experts / Consultants	Yachiyo Engineering Co., Ltd.
Project Highlight:	Urban Flood Management, Pump Station, Rehabilitation of existing Facility, Reconstruction of Pump Station and Sea Tide Dike, Urgent Measures for Flood Control
Background	On February 17th 2009, piping phenomenon underneath the bottom slab of East Pump House happened suddenly in the East Pump Station of Pluit Pump Station. All functions of East Pump Station are stopped. It was found that the reconstruction was difficult for DKI financially and technically because the site is on the very soft foundation facing the sea, and land subsidence in a large area due to dewatering have occurred constantly. Therefore, GOI made a request for Grant Aid for the Project for Urgent Reconstruction of East Pump Station of Pluit in Jakarta to the Government of Japan
Overall Goal	To minimize the impact by the flood in Jakarta urban area
Project Purpose	To recover the function of water discharge of Pluit Pump Station
Outputs	1) Reconstruction of East Pump Station (RC structure, 3-story building, floor area: 400m2) 2) Installation of Pump Facility in East Pump Station (Discharge pump facility 5.0m3/sec/unit: 3 sets, Emergency generator facility : 1 set, Screen and auxiliaries: 3units, Horizontal conveyer: 1 unit) 3) Reconstruction of Sea Tide Dike (Length: approximately 145m)

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Jakarta/Jabodetabek Flood Control Project
Project Type	TC , ODA Loans & GA
Project Site	JABODETABEK Area
Project Period	West Jakarta, Detail Design & Construction (IP-264 & IP-273) : 1985 - 1992, East Jakarta, Detail Design & Construction (IP-328, IP-347 & IP-373) : 1988 - 1999, Ancol Pumping Station, Detail Design & Construction (IP- 373) : 1991 - 1998, Ciliwung-Cisadane, Master Plan, Feasibility Study & Detail Design (JICA & IP-496) : 1994 - 2008, Mobile Pumps (Grand Aid) : 2003 - 2004
Name of JICA Experts / Consultants	IDEA Consultants, Inc. & Associates
Project Highlight:	Cideng P/S (40 m3/s) is the biggest pump capacity in Indonesia
Background	Jakarta, the capital city of Indonesia, and surrounding area (JABODETABEK area) are located in the flat area through which the Ciliwung and many other rivers drain catchments extended southward covering the hilly and rainy area. Reflecting its natural set-up, these areas had suffered from recurrent floods since olden days
Overall Goal	1. To promote sustainable economic development 2. Poverty alleviation
Project Purpose	Reduction/prevention of flood/inundation damages in Jabodetabek
Outputs	1. Construction of Cideng P/S (40 m3/s) 2. Construction of Grogol-Sekretaris Interceptor (25-year design scale) 3. D/D of East Banjir Canal 4. Improvement of major river/drainage channels (25-year design scale) 5. Construction of Ancol and Sunter P/S 6. Grant of mobile pumps (10 units)

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Capacity Development of Jakarta Comprehensive Flood Management
Project Type	TC
Project Site	Ciliwung River Basin
Project Period	October 2010 to September 2013
Name of JICA Experts / Consultants	Takaya TANAKA, Yachiyo Engineering Co.,Ltd
Project Highlight:	Comprehensive Flood Management Plan, Urban Flood Management, Capacity Development
Background	JABODETABEK is an area of vital political and economic center in Indonesia. However the frequency of the flood disaster has been currently increasing due to the increase of run-off water in accordance with unregulated development. Moreover, there are concerns that flood damage will be serious in the future due to the intensification of localized heavy rain arising from climate change. And, as extensive land subsidence has been continued in JABODETABEK, resulting in having been increasing area under high tide water level at the coastal area. Meanwhile, as can be seen in the discussion on the utilization of Situ (pond) as run-off control facilities, interest in run-off control is growing up in JABODETABEK
Overall Goal	The comprehensive flood management (CFM) measures are implemented in Jakarta based on the legalized Comprehensive Flood Management Plan (CFMP)
Project Purpose	CFM measures are implemented in the Project area based on CFMP
Outputs	1. Clarification of respective roles of related organizations 2. Formulation of Comprehensive Flood Management Plan (CFMP) and Comprehensive Flood Management Action Plan (CFMAP). Starting legalization process 3. Establishment of the Mechanism for monitoring, evaluation and feedback for CFMP 4. Establishment of sustainable coordination and collaboration mechanism among river basin stakeholders (Public, Private and Resident)

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Upper Citarum River Basin Flood Control and Farm/Forest Land Conservation Projects
Project Type	TC & ODA Loans
Project Site	The Upper Citarum River Basin, West Java Province
Project Period	From 1987 to 2010, 1) Study on the Flood Control Plan of the Upper Citarum Basin (Master Plan & Feasibility Study) : 1987-1988, 2) Upper Citarum Basin Urgent Flood Control Project Detail Design (ODA Loan, IP-347) : 1992-1993, 3) Upper Citarum Basin Urgent Flood Control Project (Stage I) Construction (ODA Loan, IP-405) : 1994-1999, 4) Upland Plantation and Land Development Project at Citarik Sub-Watershed (ODA Loan, IP-455) : 1995-2006, 5) Upper Citarum Basin Urgent Flood Control Project (Stage II) Construction (ODA Loan, IP-497) : 2000-2007, 6) Preparatory Survey for Upper Citarum River Basin Tributaries Flood Management Project (Preparatory Survey) : 2010
Name of JICA Experts / Consultants	Oriental Consultants Co., Ltd. & Associates
Project Highlight:	River improvement works by the Upper Citarum Basin Urgent Flood Control Project of Stage (I) and Stage (II), Upland Plantation and Land Development Project in order to alleviate sediment runoff and enhance farm productivity
Background	The Upper Citarum River Basin has incurred frequent floods for many years due to its topographical and geological characteristics. These floods have caused enormous damage, especially to economic sectors such as the agricultural and textile industries. The basin has also been struck with a series of vast sediment runoff. At the same time, the farm productivity lessened by sediment runoff has come to a serious issue. Thus, GOI (Government of Indonesia) considered the countermeasures had urgently needed to be implemented for sustainable development of economy and industries in the Upper Citarum River Basin
Overall Goal	Contribution to the development of the Indonesian economy and industries by the project implementation for "Urgent Flood Control" and "Upland Plantation and Land Development" in the Upper Citarum River Basin
Project Purpose	The "Urgent Flood Control Project" mainly aimed at river improvement works for Citarum Main River and its tributaries to accommodate the flood discharge of a 5 year return period in terms of single 5 days rainfall, while the "Upland Plantation and Land Development" purposed conservation of farm/forest land and stabilization of torrents and their banks in the targeted sub-watersheds of the Citarik River
Outputs	The total length of 77.57km for river improvement works has been implemented by the "Urgent Flood Control Project" of Stage (I) and (II). Terrace development (7,735ha), Check dam construction (229 units), Revetment works (12.2km), Training of village people (63 villages), etc. were carried out through the "Upland Plantation and Land Development Project". JICA Preparatory Survey for Upper Citarum River Basin Tributaries Flood Management Project was carried out in 2010

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Capacity Development Project for River Basin Organizations in Practical Water Resources Management and Technology
Project Type	TC
Project Site	Bandung and Solo
Project Period	From July 2008 to July 2011
Name of JICA Experts / Consultants	SUGI Masakazu, OJIMA Satoshi, OHARA Katsuhiko
Project Highlight:	Establishing the scheme of capacity development of RBO staff on practical water resources management
Background	The Water Resources Law No.7/2004 was enacted to improve water resources management in its river basins. In 2006, 30 River Basin Organizations (RBOs, currently existing 31 RBOs) were established across the country under the jurisdiction of the Ministry of Public Works. (Currently 31 RBOs) While the law states that authorities and responsibilities of the Government, they were not fully prepared at the time of the RBO's formation and many needed to be revised to better suit the actual conditions of river basins in Indonesia. In addition, while RBOs are responsible for the management of water resources, RBOs did not have a sufficient capacity to carry out the said responsibilities, partly due to the fact that they were founded on government project units, responsible for constructing facilities for river basins. Under such circumstances, the project, supported by JICA, to strengthen RBOs' organizational capacity and to strengthen their human resources started in July 2008
Overall Goal	The capacity of RBOs related to implementation of practical water resources management is enhanced at the basin level
Project Purpose	The capacity development system for RBOs by DUWRMT in practical water resources management is established
Outputs	1. Enhance the capacity of "Dissemination Unit for Water Resources Management and Technology (DUWRMT)" to conduct the training of River Basin Organization (RBO) staffs 2. Develop guidelines and manuals for practical water resources management and flood management 3. Establishment of counseling mechanism to RBOs on water resources management and flood management

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Capacity Development Project for Sabo - Volcanic Sabo Technical Centre (VSTC) Project - Sabo Technical Centre (STC) Project - Integrated Sediment-related Disaster Management (ISDM) Project
Project Type	TC & GA
Project Site	Yogyakarta
Project Period	VSTC: From August 1982 Until March 1990, STC: From April 1992 Until March 1997, ISDM: From April 2001 Until March 2006
Name of JICA Experts / Consultants	All JICA Experts for Sabo
Project Highlight:	Damage by sediment- related disasters to human lives, assets and environment in Indonesia is reduced
Background	In Indonesia, as local development takes place, risks of loss of life and assets by debris flow and other sediment are increasing in various regions. As one of the major issues in Indonesia is development of social infrastructure in hilly and mountainous areas, it is urgently needed to foster staff who are not only competent in civil engineering but also capable for preparing integrated regional plans for disaster management based on socio-economic characteristics of the regions, fomulating project implementation schemes, and establishing and implementing disaser prevention projects with community participation
Overall Goal	Integrated sediment-related disaster mitigation measures are implemented in hazardous areas
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
Outputs	1. Establishing Integrated Sediment-related Disaster Mtigation Guidance 2. Human Resources Development 3. Establishing Disaster Information System 4. Establishing Local organaization 5. Facilities of Sabo Technical Centre (Grant Aid)

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Volcanic Disaster Countermeasure Projects for Mt.Merapi
Project Type	TC & ODA Loans
Project Site	Yogyakarta and Central Java Area
Project Period	1. Mt. Merapi Urgent Volcanic Debris Control Project (Phase I) Detail Design & Construction: January 1987 - June1992, 2. Mt. Merapi and Mt. Semeru Volcanic Disaster Countermeasures Project (Phase II) Detail Design & Construction: July 1996 - November 2001
Name of JICA Experts / Consultants	Yachiyo Engineering Co., Ltd. & Associates
Project Highlight:	Urgent Countermeasure for Volcanic Disasters, Non-structural Measures for Disaster Mitigation
Background	In June 1984, Mt. Merapi made a huge eruption and volcanic materials of estimated 6.5 million m3 deposited on the south-western slope of the mountain for 6.7 km to the downstream. Mt. Merapi erupted in February 1992, spewing volcanic material of 4 million m3 to the western slope. Then, 2 years later, Mt. Merapi erupted again on November 22, 1994 and the pyroclastic material flowed down to the southern slope, leaving 63 deaths caused by pyroclastic flow. Due to those eruptions, pyroclastic material remained unstably on the western and southern slopes, threatening the area with the debris flow disasters.
Overall Goal	To contribute to uplift the welfare of Yogyakarta and Central Java Area
Project Purpose	To mitigate damage caused by lahar flow to public and private property and to agricultural land in the area close to Mt. Merapi
Outputs	Sabo/Check Dam: 24 units, Consolidation Dam/Groundsill: 72 units, Training Dike: 16.4km, Diversion Channel: 4.1km, Evacuation Road: 22.5km, Monitoring & Warning System, Review Master Plan

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Urgent Disaster Reduction Project for Mt. Merapi, Progo River Basin
Project Type	ODA Loans
Project Site	Yogyakarta and Central Java Area
Project Period	Detail Design & Construction: July 2005 – July 2014
Name of JICA Experts / Consultants	Yachiyo Engineering Co., Ltd. & Associates
Project Highlight:	Regional Development, Institution & Community Development, Volcanic Disaster Mitigation (Structural & Non-structural), Riverbed Stabilization, Urgent Measures for Volcanic Disaster
Background	Mt. Merapi is one of the most active volcanoes in the world. Recent eruptions since 1992 have deviated from the past conditions, endangering residents and assets with pyroclastic flows and debris flows. On the other hand, uncontrolled sand mining has caused serious problems. In the lower reaches of K. Progo, two bridges important for regional/national transportation system are in danger of collapse
Overall Goal	To contribute to uplift the welfare of Yogyakarta and Central Java Area
Project Purpose	To protect Yogyakarta and Central Java area against natural calamities caused and to be caused by Mt. Merapi's volcanic eruption and suceeding sand sedimentation
Outputs	Construction of Sabo Dam: 31 units Rehabilitation of Existing Sabo Dam: 7 units Rehabilitation of River Facilities: 22 locations Rehabilitation of Irrigation Facilities: 60 locations Construction of Groundsill: 2 units Monitoring, Forecasting & Warning SystemEvacuation Facilities (Road, Shelter, Signboard) Heavy Equipment & Workshop for Disaster Management Establishment of Community Base Sand Mining Management Organization Evacuation Drills in 4 sub villages x 3 times Establishment of Disaster Education Program for Child Sand Mining Management Plan, Manuals Disaster Management Event

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Integrated Water Resources and Flood Management Project for Semarang
Project Type	TC & ODA Loans
Project Site	Semarang City, Central Jawa Province
Project Period	Master Plan & Feasibility Study (by JICA) : 1992-1993, Detail Design (by JICA) : 1997-2000, Construction : 2007-2014
Name of JICA Experts / Consultants	CTI Engineering International Co.Ltd. & Associates
Project Highlight:	Special Issues of the Project are: 1. Provision of river amenity facilities as river in urban center 2. Conservation of hysterical structure namely Simongan Weir constructed in 1870 3. Dam reservoir development for tourism
Background	Semarang City has fallen into the critical level in shortage of municipal water supply and the habitual flood inundation associated with the current progressive land subsidence. The risk of overflow of West Floodway/Garang River also continues to be the mortal menace to the City. From these viewpoints, the JBIC SAPROF Study has been carried out in 2005 to re-clarify the necessity and viability of the Project
Overall Goal	To mitigate the prolonged economic problems and to enhance the economic development and stabilization of people's livelihood
Project Purpose	To mitigate flood and inundation damages along West Floodway/Garang River, to develop water resources for municipal use in Semarang City and to reduce inundation damages in the northern central area of Semarang City.To improve the environmental conditions along the river and the urban area.To upgrade the living conditions of inhabitants in the project area
Outputs	1. River Improvement Works along the West Floodway and Garang River (Improvement Length : 9.2km) 2. Construction of Jatibarang Multipurpose Dam (Reservoir Capacity : 20.4million m3, Purpose: Flood Control, Water Supply (Industry, Municipal Water)) 3. Simongan Weir Rehabilitation 4. City Drainage Improvement 5. Design of water supply system in Semarang City

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Wonogiri Multipurpose Dam Project
Project Type	TC , ODA Loans & GA
Project Site	Wonogiri Regency, Central Java, Bengawan Solo River Basin
Project Period	Master Plan of Bengawan Solo River Basin : June 1972 - March 1974, Detail Design & Construction : 1976 – 1983, Grant Aid : 2001 - 2004
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd
Project Highlight:	Construction of various element of the Wonogiri Multipurpose Dam
Background	Wonogiri multipurpose Dam Project was one of the most important schemes contemplated in the development plan of the Bengawan Solo Basin, which had been identified through a master plan study on the Solo River Basin Development
Overall Goal	To enhance regional and national development through irrigation, flood control, and power generation
Project Purpose	1) Flood control 2) Irrigation water supply for Year round irrigation in the existing crop land of 23,600 ha 3)Power Generation (12.4 MW)
Outputs	Technical Cooperation 1)Master Plan for Wonogiri ODA Loans 2) Wonogiri Dam (Flood Control and Hydro Power) 3)Power Plant 4)Dam: Rock-fill, H=38 m, L=832 m, V=1,800,000 m3 Power: 11,200 kW, Transmission Line : 150 kV/Length : 40 km Grant Aid 5)Removal works of garbage on intake trashrack 6)Repairing of gates and hoists 7)Dredging (about 239,930 m3) and removal of garbage 8)Installation of floating log boom 9)Procurement of echo sounding survey system

TC : Technical Cooperation
GA : Grant Aid
ODA Loans : Official Development Assistance Loans

Japanese ODA to Indonesia

Items of the Project	Details
Project Name	Madiun River Urgent Flood Control Project
Project Type	TC & ODA Loans
Project Site	Madiun, East Java, Bengawan Solo River Basin
Project Period	Master Plan of Bengawan Solo River Basin : June 1972 - March 1974, Detail Design & Construction : 1983 - 1995
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd
Project Highlight:	The improvement of the main stem and the tributaries including construction of short cut channels as new river courses
Background	The Madiun river was one of three primary sub-basins and the largest tributary of the Solo River. Unprecendented floods took place in the Madiun river basin in 1975, 1978 and 1979. Those floods caused serious damages in the Madiun river basin, especially at the Madiun city. In order to substantiate flood control measures to protect urgenly the Madiun city, the development of the Madiun River was contemplated
Overall Goal	To enhance regional and national development
Project Purpose	1)To relieving the Madiun urban area and its suburbs from menace of the flood inundation 2)To minimize back swamp areas due to insufficient drainage system
Outputs	1)Master Plan on Development of the whole Solo River Basin including Madiun River 2)Shortcut channel, new levee, heightening of existing levee, revetment, groyne and ground sill, sluiceway and drainage channel, new bridges, compensatory works for road relocation and irrigation facilities. 3)Improvement of 22 km long section of the Madiun River, improvement of river sections at the confluence of 4 tributaries, and construction of 3.8 km long short cut channel. 4)Excavation: 3,793,000 m3, Embankment: 1,882,000 m3, Revetment: 5.9 km, Drainage Ditch: 59.5 km 5)Bridge: 5 nos

TC : Technical Cooperation
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Items of the Project	Details
Project Name	Lower Solo River Improvement Project, Phase-I
Project Type	TC , ODA Loans & GA
Project Site	Solo River, East Java, Bengawan Solo River Basin
Project Period	Master Plan of Bengawan Solo River Basin : June 1972 – March 1974, Grant Aid : 1991, Detail Design : 1992 - 1994, Construction : February 1997 – August 2004
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	Construction of floodway and pumping station
Background	The Regional Government had been making great efforts to provide flood protection measures in the Lower Solo River Basin. Despite these efforts, the Solo river basin has been suffered from habitual flooding every year. This project was identified through a master plan study on the Solo River Basin Development to improve drainage condition in the Lower Solo River Basin
Overall Goal	To enhance regional development through improvement drainage and irrigation conditions of the area
Project Purpose	1)To mitigate huge flood damages in social and economic life of the people in the Lower Solo River basin. The beneficial area covers about 200 km along the lower Solo Rver 2)To develop water resources in the Lower Solo River Basin in accordance with the Government's strategy for regional development.
Outputs	1)Master Plan Study on Development of the Solo River Basin 2)Pumping Station (Grant Aid) 3)Floodway : channel excavation of 12.5 km, Jetty of 2.2 km, Intake gate of 1 no. Rubber dam of 1 no, Road bridge of 4 nos., Drop structure of 1 no, Sluiceway of 13 nos. 4)River Improvement including related structure Dyking = 89.7 km, Short cut channel L = 2.2 km/Width = 120 km, Sluiceway of 29 nos., Channel revetment LW = 3,075 m/ HW = 1,284 m 5)Babat barrage Gate weir width = 137.5 m, Barrage check gate with hoist = 6 nos 6)Comprehensive Development and Management Plan Study

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Items of the Project	Details
Project Name	Lower Solo River Improvement Project, Phase-II
Project Type	ODA Loans
Project Site	Solo River, East Java, Bengawan Solo River Basin
Project Period	Construction : September 2007 – November 2013
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	Construction of Bojonegoro barrage, Jabung ring dike, and installation of flood forecasting and warning system on the Solo River area
Background	The Lower Solo River basin covering around 12% of Java Island has a concentrated population, contains many of the country's most important industries, and lies in a geographically important region adjacent to the nation's second largest city of Surabaya. The Lower Solo River has been one of the most important water sources for the region, and has supported the region's economic development. Meanwhile, the Lower Solo River has frequently brought floods to the basin
Overall Goal	To enhance regional development through the prevention of flooding around the Solo River
Project Purpose	1)To construct Bojonegoro Barrage 2) To realize more efficient operation of flood control facilities and safer evacuation of local inhabitants from the floods
Outputs	1)Construction of the Bojonegoro barrage Storage capacity : 13 million m3, Weir length : 145 m, 7 radial gates : 15.0 x 7.3 m, 2 radial gates : 7.5 x 7.3 m 2)Jabung Ring Dike : Storage capacity : 30.5 million m3, Water Surface Area : 1,181 ha, Dike : 21 Km (L) x 2~5 m (H), Intake Gates : 16 nos 3)Installation Flood Forecasting and Warning System Control/monitoring office : 4 location, Rail fall station : 14 location, Water level station : 11 station, Combined station : 8 units 4)Detailed design of counter measure for sedimentation in the Wonogiri Dam reservoir 5)Capacity Building

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Items of the Project	Details
Project Name	Wonorejo Multipurpose Dam Project
Project Type	TC & ODA Loans
Project Site	Tulungagung Area, East Java, Brantas River Basin
Project Period	Detail Design & Construction : September 1982 – October 2000
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	Construction of the Wonorejo Multipurpose Dam Project as one of the component of the overall river basin development of Brantas River
Background	The Wonorejo Multipurpose Dam is one of the components of the overall river basin development of Brantas River (Brantas River Basin)
Overall Goal	To enhance regional development in the Brantas River Basin
Project Purpose	1)To supply raw water for Surabaya and its surroundings especially for municipal and industrial uses 2)To control flood in the downstream areas of the Song and Gondang River 3)To generate hydroelectric power by harnessing a water head to be created by Wonorejo dam as well as river water in the Gondang and Song rivers
Outputs	1)Wonorejo multipurpose dam (zoned rockfill, with center core, Dam height: 100 m, Crest length: 545 m) and power station (6.3 MW) 2)Segawe weir and connection tunnel 3)Tiudan Water Conveyance System 4)Tulungagung Pumping Station (3 nos., Capacity: 225 m3/min/unit) 5)Improvement of Mlirip gate and telecommunication system

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Items of the Project	Details
Project Name	Mt. Kelud Urgent Volcanic Disaster Mitigation Project
Project Type	ODA Loans
Project Site	Kediri, Blitar, Tulungagung Regencies in East Java Province
Project Period	Detail Design & Construction : October 1992 - May 1996
Name of JICA Experts / Consultants	Yachiyo Engineering Co., Ltd. & Associates
Project Highlight:	Sabo Facilities, Improvement Crater Lake Drainage Tunnel
Background	Mt. Kelud erupted periodically with interval of 15 to 20 years. On February 1990, Mt. Kelud released a large volume of volcanic debris, causing 31 death. Mt. Kelud is inclued in Brantas River basin, and tremendous volume has flow into Brantas River and Wlingi Reservoir resulting flood disaster along Brantas River and suspension of hydraulic power generation in Wlingi Dam
Overall Goal	To improve regional stability against 1990 Eruption damages
Project Purpose	To mitigate damage of property and agricultural lands, to reduce reservoir and river sedimentation in upper/middle reaches of Brantas River
Outputs	Check/Consolidation Dam: 8 units Griddle: 5 units Sand Pocket: 2 unit Strengthening of Existing Dike Improvement of Crater Lake Drainage Tunnel Improvement of Existing Diversion Channel Rehabilitation of Existing Irrigation Weir

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Items of the Project	Details
Project Name	Wlingi Multipurpose Dam Project
Project Type	TC & ODA Loans
Project Site	Tulungagung Area, East Java, Brantas River Basin
Project Period	Master Plan : August 1971 - March 1973, Detail Design & Construction :1975 – 1978
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd
Project Highlight:	Construction of the Wlingi Dam Project as one of the component of the overall river basin development of the Brantas River Basin
Background	The Wlingi Multipurpose was a multipurpose project aiming at irrigation, power generation, afterbay function of exsiting Karangkates Power Station, flood debris control, which had been formulated in close relation with the operation of Karangkates Dam and power plant
Overall Goal	To enhance regional development in the Brantas River Basin
Project Purpose	1)To secure irrigation water for Tulungagung Areas 2)To provide an afterbay for the Karangkates Power Station 3)To generate hydro electric power to meet demand 4)To mitigate flood of the Brantas River
Outputs	1)Brantas River Basin Development Plan 2)Wlingi multipurpose dam (irrigation, flood control, power generation) 1st stage: Dam: Rock-fill and earth-fill combined type, H=28 m, L=675 m, V=630,000 m3, Power= 27 MW T/L: 154 kV/25 km Irrigation: 13,600 ha 2nd stage: No.2 power unit installation: 27 MW Afterbay weir: Net storage capacity 5,000,000 m3 3)Lodoyo dam (Flow regulation, power generation)

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Items of the Project	Details
Project Name	Water Resources Existing Facilities Rehabilitation and Capacity Improvement Project
Project Type	ODA Loans
Project Site	Brantas River, East Java, Brantas River Basin
Project Period	Construction/Rehabilitation : December 2003 – December 2011
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	Seven (7) projects were selected as the priority projects for rehabilitation
Background	Natural disasters have caused much deterioration, requiring rehabilitation works. Such rehabilitation works have not necessarily been performed to a sufficient level due to budgetary and technical constraints of the Indonesia Government. In such circumstances, GOI has formulated the national policy to undertake adequate operation and maintenance works and has requested financial support from GOJ. Maintaining the original function of the infrastructure is necessary for the development of Indonesia. Implementation of the rehabilitation project is requested for the priority projects that would have the sufficient benefit
Overall Goal	To enhance restore the capacity and function of existing infrastructures, and it is an effective and efficient method of infrastructure investment under the current fiscal and economic conditions of Indonesia
Project Purpose	1)To strengthen the operation and maintenance capacity of the responsible O&M organizations, particularly in the light of the de-centralization policy 2)To rehabilitate the function and capacity of damaged or worn-out facilities that were built with the financial assistance of OECF/JBIC
Outputs	1) Civil Works for Upper Solo and Madiun River : improvement of river structure, rehabilitation of intake's rubber gate 2) Civil Works for Brantas River : improvement of the river structure, Sabo dam, dredging system, revetment 3) Civil Works for Mt. Kelud Urgent Sabo : improvement of Sabo Dam and bypass channel 4) Civil Works for Ural River irrigation : improvement irrigation structure [concrete fixed type floating weir, Earth canals with a part of earthen lining and concrete lining (43 km)]

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Items of the Project	Details
Project Name	Brantas Middle Reaches River Improvement Project
Project Type	TC & ODA Loans
Project Site	Brantas River, East Java
Project Period	Master Plan : August 1971 - March 1973, Detail Design :1978 – 1980, Construction :1980 – 1990
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	Improvement of the Brantas Middle Reaches River as one of the component of the overall river basin development of the Brantas River
Background	The Project area has been developed as a granary of East Java. The majority of inhabitants depend on agricultural production for living. However, the irrigation area alog middle reached of th Brantas River has suffered from threat of floods because of insufficient river discharge capacity. The project was planned to be implemented stagewise so that the capacity of the river channel could be enough to discharge a 10 year probable flood after completion of the 1st stage construction and a 50-year probable flood after completion of the 2nd stage construction respectively
Overall Goal	To enhance regional development in the Brantas River Basin
Project Purpose	To mitigate flood damage which may be caused by a 50-year probable flood and to relieve life and property of inhabitants along middle reaches of the Brantas River from threat of floods
Outputs	1)Brantas River Basin Development Plan 2)Bank raising, river bed dredging, revetment 3)Rubber Dam 4)Installation Flood Forecasting and Warning System 5)River improvement Total length: 99 km 1st stage: Design flood discharge: 1,350 m3/s, river bed dredging: 7,088,000 m3/s, levee embankment: 516,000 m3/s 2nd stage: Design flood discharge: 1,500 m3/s, river bed dredging: 7,525,000 m3/s, levee embankment: 857,000 m3/s, telemeterized flood forecasting and warning system

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Items of the Project	Details
Project Name	Surabaya River Improvement Project (SRIP) & Surabaya Urban Development Project (SUDP)
Project Type	TC & ODA Loans
Project Site	Surabaya City, East Java Province
Project Period	Master Plan & Feasibility Study (JICA) : 1971 - 1973, Detail Design & Construction of Stage I Works (SRIP I, IP-109) : 1975 - 1980, Detail Design & Construction of Stage II-1 Works (IP-308 & IP-362) : 1987 - 1996 Detail Design & Construction of SUDP (IP-400) : 1994 - 2002
Name of JICA Experts / Consultants	IDEA Consultants, Inc. & Associates
Project Highlight:	After improvement of the Mas river, greening and amenity facilities have been provided along the channel
Background	Surabaya city and its hinterland have been suffering from flood disasters such as flooding of the Surabaya, Mas, Marmoyo and Kedurus rivers and habitual inundations caused by local heavy rainfall
Overall Goal	1. To promote sustainable economic development 2. Poverty alleviation
Project Purpose	Reduction/prevention of flood damages in Surabaya, the second biggest city in Indonesia
Outputs	1. Improvement of Surabaya, Mas, Marmoyo, Kedurus rivers and other major drainage channels with 50-year design scale 2. Construction of Kedurus P/S (10 m3/s) with reservoir (35 ha)

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Items of the Project	Details
Project Name	Volcanic Disaster Countermeasure Projects for Mt. Semeru
Project Type	TC & ODA Loans
Project Site	Lumajang, East Java
Project Period	1. Mt.Semeru Urgent Rehabilitation Project (Phase I) Detail Design & Construction: 1986 - 1991, 2. Mt. Merapi and Mt. Semeru Volcanic Disaster Countermeasures Project (Phase II) Detail Design & Construction: July 1996 - November 2001
Name of JICA Experts / Consultants	Yachiyo Engineering Co., Ltd. & Associates
Project Highlight:	Urgent Countermeasure for Volcanic Disasters
Background	In accordance with Indonesia National Third Five Year Plan (1979/80-1980/84), DGWRD in Ministry of Publics Works insist to achive 1) To maintain the safety of agricultural areas, 2) To secure the fairness among local people, 3) To protect industrial areas against disasters. Mt. Semeru erupted on Feb. 1994 causing 6 death or missing. Pyroclastic material deposited on 3 rivers with 40 m height at maximum.
Overall Goal	To contribute to people safety and protect agricutural areas of the southeastern slope of Mt. Semeru and Lumajang City
Project Purpose	To mitigate damage caused by lahar flow to public and private property and to agricultural land in Lumajang Regency
Outputs	Sabo/Check Dam: 11 units, Consolidation Dam/Groundsill: 3 units, Training Dike: 20.8km, Rehabilitation of Irrigation Facilities

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Items of the Project	Details
Project Name	Integrated Disaster Mitigation Management Project for "Banjir Bandang"
Project Type	TC
Project Site	Jember District and Neighboring Area
Project Period	November 2008 - November 2011
Name of JICA Experts / Consultants	UENO Toshiyasu, SHIIBA Shusaku, YOSHIDA Keiji
Project Highlight:	Target disaster will be Banjir Bandang, which, in the project, will be defined as large scale flush floods or debris flow caused mainly collapse of natural dams
Background	"Banjir Bandang" occurs suddenly and flows down mixed with water, sand, rocks and so on. It happens due to a large-scale hillside collapse upstream of the river. Every rainy season has many "Banjir Bandang" disasters and a lot of people and properties in Indonesia suffer damage. In the Joint Committee of Indonesia and Japan on Disaster Reduction in 2006, "Banjir Bandang" was confirmed as one of big problem in Indonesia such as tsunami and earthquake
Overall Goal	Early warning and emergency measures for Banjir Bandang is established at the hazardous areas all over Indonesia
Project Purpose	Capability for Banjir Bandang disaster mitigation of PU and local organization concerned in the main hazardous area is strengthened
Outputs	1. The method for researching Banjir Bandang area is established at the model site 2. Early warning and emergency measures for Banjir Bandang is improved at the model site 3. Capability for researching Banjir Bandang hazardous area is strengthened in the main hazardous areas in Indonesia

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Items of the Project	Details
Project Name	Bali Beach Conservation Project
Project Type	TC & ODA Loans
Project Site	Sanur, Nusa Dua, Kuta and Tanah Lot – Bali Province
Project Period	The Study on the Urgent Bali Beach Conservation Project Feasibility Study : 1988 - 1989, Detail Design : November 1991 - February 1993, Construction : April 1998 – December 2008
Name of JICA Experts / Consultants	Nippon Koei Co., Ltd. & Associates
Project Highlight:	Tourism development in Nusa Dua and Sanur areas had been severely affected by deteriorations of the beaches. Coastal protection works were urgently required in order to prevent or reduce further deterioration of the beaches
Background	Bali Island had been worldwide famous resort area and the livelihood of most of the population depended on the tourism industry. However the erosion of the sand beaches threatened the activity of tourism and living of the people
Overall Goal	To conserve the sand beach and coastal resources against the beach and cliff erosion and to rejuvenate the tourism attractive points in the Bali Beach
Project Purpose	1)To restore the eroded sand beaches 2)To reduce the forces, both natural and development related which damage the beaches by using physical and legislative means 3)To converse the production and supply of coral sand
Outputs	1)Feasibility Study 2)Shore Protection Works for Sanur Beach 3)Shore Protection Work for Nusa Dua Beach with Quarry Development 4)Tanah Lot Protection Works 5)Shore Protection Works for Kuta Beach

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Items of the Project	Details
Project Name	Jeneberang River Basin Development Project
Project Type	TC & ODA Loans
Project Site	Makassar City, Gowa Regency, Takarar Regency, South Sulawesi Province
Project Period	[Study] 1. Feasibility Study of Lower Jeneberang River Flood Control Project by JICA (February 1979 - September 1980) 2. Feasibility Study of Jeneberang River Flood Control Project, Phase II by JICA (February 1981 - March 1982) [Construction] 1. Lower Jeneberang River Flood Control and Primary Drainage Channel Improvement in Makassar City (Detail Design : 1983 - 1984, Construction : 1988 - 1993) 2. Bili-Bili Multipurpose Dam (1992-99) 3. Municipal Water Supply System (Somba-Opu Water Treatment Plant and Water Transmission) (1995-01) 4. Environmental Improvement Works for Bili-Bili Dam (1993-01) 5. Pampang River Improvement Project (1996-01) 6. Bili-Bili Irrigation Project (1997-04) 7. Bili-Bili Hydroelectric Power Plant (2002-06)
Name of JICA Experts / Consultants	CTI Engineering International Co.Ltd. & Associates
Project Highlight:	Integrated regional development project composed of flood control, power generation, water supply, city drainage, watershed conservation, environmental Improvement works and irrigation
Background	Makassar City, the capital of South Sulawesi Province, is the largest urban center and the main export gate in the East Indonesia. However, the area had been seriously damaged by the flood mainly from the Jeneberang river in the wet season. On the contrary, it suffers from irrigation water shortage problem in the dry season, and Makassar City becomes critical in supplying water for both domestic use and industry.Under the above circumstances, the Government of Indonesia had decided to implement projects for the flood control and water resources development of the Jeneberang River basin
Overall Goal	Regional Economy & Social Stability - Drastic improvement of living environment and sanitary in the project area; - Provision of further industrial development;Increment of rice yield & farm income and - Enhancement of economic activity.
Project Purpose	Mitigation of the repeated flood damage in Makassar City and its surrounding areas by river improvement works,drainage system improvement and flood discharge regulation using the dam and reservoir; andDevelopment of water resources by impounding river water to meet the water demand for the municipal water supply, irrigation and hydropower generation
Outputs	Bili-Bili Multipurpose Dam (Reservoir Capacity : 375million m3, Purpose: Flood Control, Water Supply (Irrigation, Industry, Municipal Water), Power Generation)), Lower Jeneberang River Improvement Works (Improvement Length : 11.8km, Drainage Improvement 13.9km), Pampang River Improvement (Improvement Length : 11.2km, Pomp Station : 6 m3/s), RWTM (Pipe Length 16.3km) & Somba-Opu Water Treatment Plant (Nominal Capacity at 1 m3/s), Bili-Bili Hydroelectric Power Plant (Annual Output: 77 GWh), Bili-Bili Irrigation System (Service Area : 24,000 ha)

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Items of the Project	Details
Project Name	Urgent Disaster Reduction Project for Mt. Bawakaraeng
Project Type	TC & ODA Loans
Project Site	South Sulawesi Province
Project Period	Detail Design & Construction: July 2005 - July 2014
Name of JICA Experts / Consultants	Yachiyo Engineering Co., Ltd. & Associates
Project Highlight:	Excavation Works, Sabo Dam Construction, Regional Development, Countermeasures against Sedimentation Problem in Bili-Bili Reservoir
Background	On 26th March, 2004, gigantic collapse occurred in northern caldera wall of Mt. Bawakaraeng. The volume of collapsed mass is estimated at 200 to 300 million m3. The caldera wall collapse with a height of 700-800m brought tremendous damage to the surrounding area, accounting for 32 people death and total damage was estimated at about Rp. 22 billion
Overall Goal	To facilitate the stable water supply to downstream area by reinstating of the function expected to the dam, and contribute to uplift the welfare in affected areas
Project Purpose	To protect public and pribate assets such as Bili-Bili dam, farmland and private properties along the Jeneberang River, by repairing existig infrastructure, biulding sabo facility and installing forecasting system to debris flow coming from Mt. Bawakaraeng
Outputs	Exacavation at Edge of Reservoir and Riverbed: 4.5 mill. M3 Construction of Sabo Facility: 15 units Evacuation and Rural Road: 15.7 km Rural Water Supply: 1,000 households Vegetation Work in Caldera: 45 ha Bridge: 2 units Telemetry System Most Urgent Maintenance Dredging System Sabo Master Plan

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