

## *Figures*

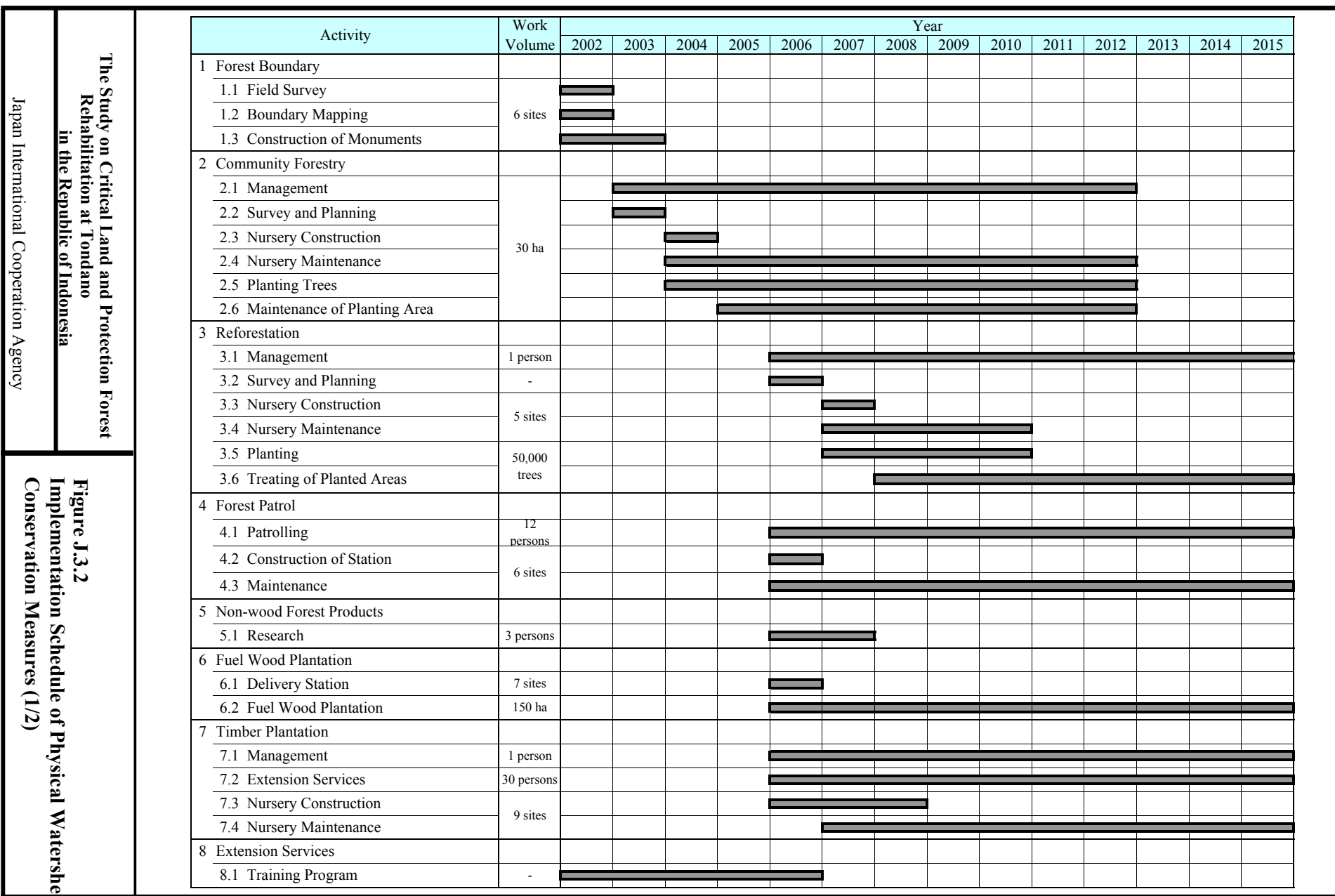
Component	Year2002	Year2003	Year2004	Year2005	Year2006	Year2007	Year2008	Year2009	Year2010	Year2011	Year2012	Year2013	Year2014	Year2015
1 Physical Watershed Conservation Measures														
1.1 Forestry Management and Rehabilitation														
(1) Boundary survey for protection forests														
(2) Community forestry plan														
(3) Reforestation plan														
(4) Strengthening plan of forest patrol														
(5) Research plan for non-wood forest products														
(6) Fuel wood planting plan														
(7) Timber tree planting plan														
(8) Strengthening of extension services														
1.2 Agriculture and Agroforestry Improvement Plan														
(1) Agriculture														
(2) Agroforestry														
1.3 Erosion Control Facilities														
2 Institutional Development Plan														
(1) Community institutional development														
(2) Technical institutional development														
(3) Institutional development of forestry services														
(4) Accurate village boundary mapping														
(5) Institutional integration and strengthening of legal and regulatory framework														
(6) Strengthening of watershed conservation capacity at University of Manado														
(7) Strengthening of local NGO														
3 Community Empowerment Plan														
(1) Micro planning of sustainable land use														
(2) Awareness raising and environmental education														
(3) Organizing of local people and reorienting of officials														
(4) Strengthening of social safety network														
(5) Gender and conservation														
4 Monitoring and Evaluation System Development Plan														
(1) Engineering items														
(2) Socio-economic items														
5 Operation and Maintenance														

Bv Year 60

The Study on Critical Land and Protection Forest Rehabilitation at Tondano Watershed in the Republic of Indonesia

Japan International Cooperation Agency

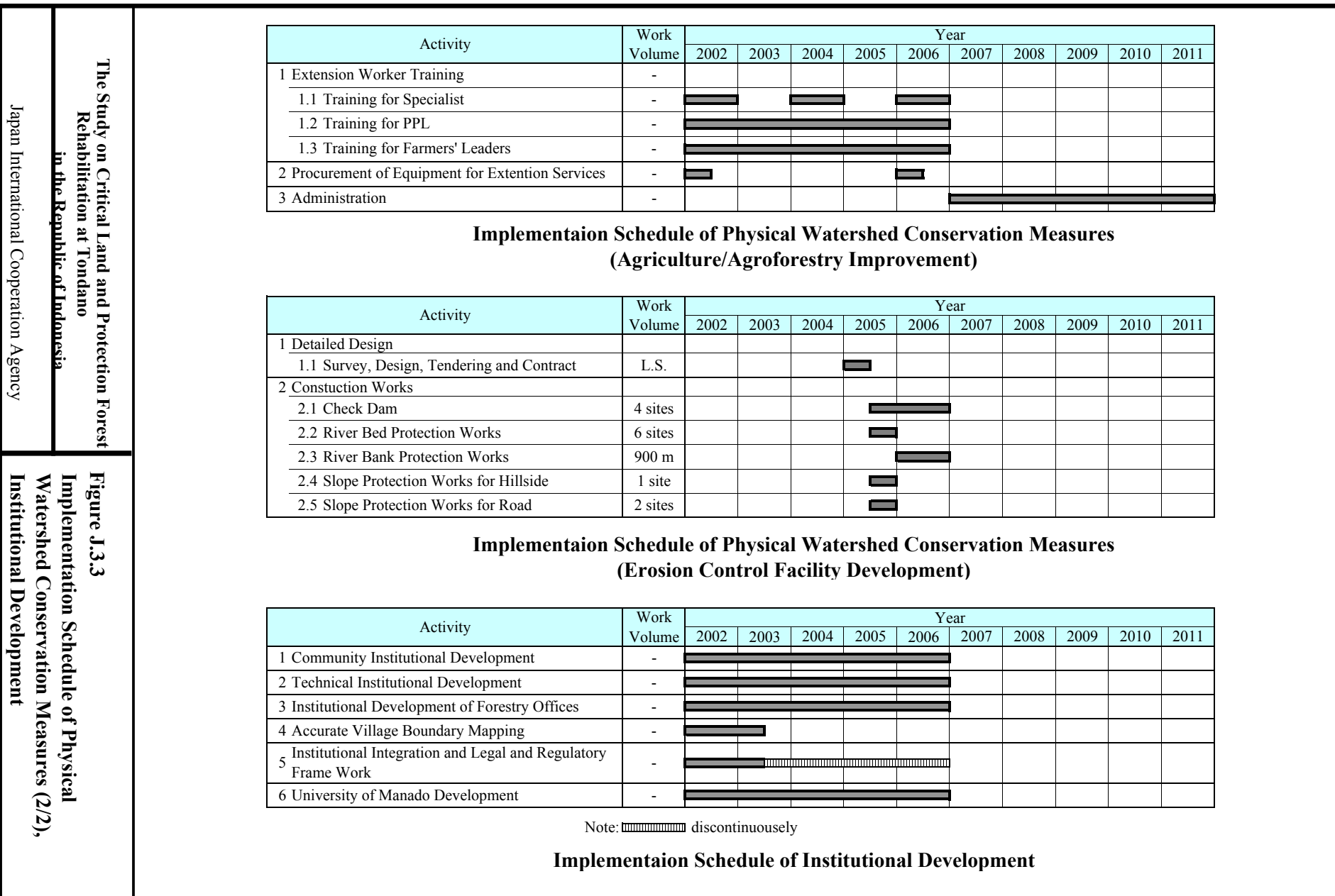
Figure J.3.1  
Implementation Schedule of the Project



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Figure J.3.2  
Implementation Schedule of Physical Watershed Conservation Measures (1/2)



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**Figure J.3.3  
Implementation Schedule of Physical  
Watershed Conservation Measures (2/2),  
Institutional Development**

Activity	Work Volume	Year									
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1 Micro Planning for Sustainable Land Use											
2 Awareness Raising and Environmental Education											
3 Organizing of Local People and Reorientation of Officials											
4 Strengthening of Social Safety Net											
5 Gender and Conservation											

**Implementaion Schedule of Community Empowerment**

Activity	Work Volume	Year									
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Engineering Items											
1 Constuction Works of Monitoring Stations											
1.1 Erosion and Sedimentation	3 sites	<div></div>									
1.2 Water Balance Monitoring	35 sites	<div></div>									
2 Purchase of Monitoring Appratus	-	<div></div>									
3 Monitoring of Erosion and Sedimentation	3 Sites										
3.1 Monitoring of Erosion	Weekly	<div></div>									
3.2 Monitoring of SDR	Weekly	<div></div>									
3.3 Monitoring of Sedimentation	Once in five years						<div></div>				
4 Monitoring of Water Quality	38 Sites										
4.1 Monitoring of Water Quality	4times/year	<div></div>									
4.2 Sediment Sampling & Analysis	Once in five years						<div></div>				
5 Monitoring of Water Balance	35 Sites	<div></div>									
6 Monitoring of Torrent and Slope	all area	<div></div>									
Socio-Economic Items											
1 Monitoring and Evaluation		<div></div>	<div></div>	<div></div>	<div></div>						

**Implementaion Schedule of Monitoring System Development**