

3. PRESENT CONDITION OF THE WATERSHED

3.1 Land Use and Terrace in Watershed (1/3)



Pine forest lands with ridge terrace owned by estate forest corporation, just planted seedling with maize by contacted farmers who maintained terrace and tree growth



Pine production forest lands owned by state corporation in Keduang watershed. Encroached by illegal cultivation of maize. Originally lands are equipped by traditional terrace



Pine forest lands with ridge terrace owned by the state forest corporation in Keduang watershed. Contracted farmers cultivate maize in the lands with young pine trees



Teak tree forest land on the communal land with traditional terrace assisted by GERHAN. Former land is upland with maize cultivation. Teak trees growth is very good



Irrigated paddy field in Tirtomoyo watershed. Irrigation water is supplied by small tributaries. Lip is well made and maintained, which results in very low annual erosion rate



Irrigated paddy field in Tirtomoyo watershed. Land preparation is now being made by local farmers for planting wet season paddy

3. PRESENT CONDITION OF THE WATERSHED

3.1 Land Use and Terrace in Watershed (2/3)



Upland with no treatment of any soil conservation practices, cultivated by cassava and maize in steep mountainous area in Tirtomoyo watershed



Upland with no treatment of any soil conservation practices, cultivated by cassava in steep mountainous area in Keduang watershed. Soil erosion rate is seriously high



Upland with traditional terrace, cultivated by cassava and maize in piedmont of mountainous area in Tirtomoyo watershed



Upland with traditional terrace, cultivated by cassava in piedmont of mountainous area in Keduang watershed



Upland with bad bench terrace in relatively flat lands, cultivated by maize and beans (Slogohimo, Keduang watershed)



Upland with bad bench terrace, in steep lands where no irrigation water is available are grown by maize. Below upland, paddy field extends (Keduang watershed)

3. PRESENT CONDITION OF THE WATERSHED

3.1 Land Use and Terrace in Watershed (3/3)



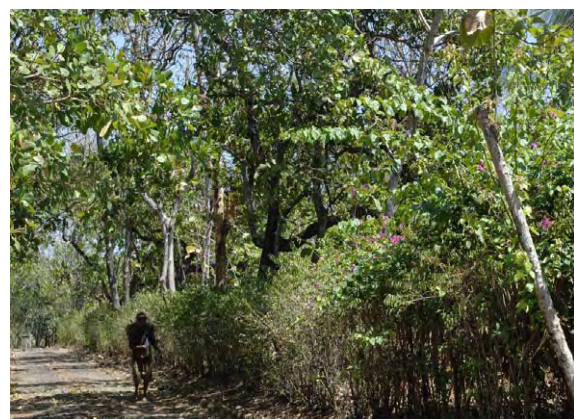
Upland area with good bench terrace in relatively flat lands owned by state corporation in Keduang watershed. Encroached by illegal cultivation of maize. Originally lands are equipped by traditional terrace



Upland with good bench terrace in steep land, grown by maize (Wuryantro watershed)



Upland areas with good bench terrace in steep lands in IBRD, grown by perennial fruits and maize. (Keduang watershed)



Plantation area with Cash nut trees in Keduang watershed



Upland in settlement area, equipped by bad bench terrace in Keduang watershed, usually cultivated by cassava and maize



Settlement area, in Keduang watershed

3. PRESENT CONDITION OF THE WATERSHED

3.2 Snap of Upstream Farmers' Life



Snap of upstream farmer's life



Snap of upstream farmer's life



Cashew nut processing and selection



Snap of upstream farmer's life near Wonogiri reservoir



Snap of upstream farmer's life in the Keduang watershed



Snap of farmer's life in the Alang River watershed

3. PRESENT CONDITION OF THE WATERSHED

3.3 River and Gully Erosion



Gully erosion in Sambirejo, Kuduang watershed



Gully erosion in Kerjo Kidul, Keduang watershed



Large scale gully erosion (width: 30m, length: 1km) in Sambirejo, Keduang watershed



Large scale gully erosion in Slogohimo, Keduang watershed



River bank erosion in Solo River



River bank erosion and protection in Giriwoyo, Alang watershed

3. PRESENT CONDITION OF THE WATERSHED

3.4 Land Slide and Road Bank Erosion



Land slide in Girimarto, Keduang watershed



Land slide in Girimarto, Keduang watershed



Road side erosion along village roads in Upper Solo watershed



Land slide in Keduang watershed



Road side erosion at settlement area in Wuryantoro watershed



Road side erosion at settlement area in Tirtomoyo watershed

3. PRESENT CONDITION OF THE WATERSHED

3.5 Activities for Watershed Management



Side ditch collecting rain from roof constructed by IBRD project in Keduang watershed



Water tank (about 20m³) in the settlement area for storing rainfall constructed by IBRD project in Keduang watershed



Pine tree seedling managed by the State Forest Corporation in Keduang watershed



Teak wood seedling for community program under GERHAN in Batuwarno, Temon watershed



Hedge row around home settlement area in Keduang watershed



Promotion of breeding of livestock, preparation of soil manure made of livestock dung that should improve soil structure and soil fertility in Upper Solo watershed

3. PRESENT CONDITION OF THE WATERSHED

3.5 Activities for Watershed Management



Reinforcement of terrace lip by vegetative measures by elephant grass that simultaneously provides animal feeds in Upper Solo watershed



Introduction of improved varieties of maize and other annual crops for poverty reduction as well as soil erosion in Keduang watershed



Introduction of medicinal crops (Kunyit) in the upland where agro-forest is carried as important factor as poverty reduction, in Tirtomoyo watershed



Scene of drying crop productions such as medicinal crops, clove, ginger, cashew nut etc, on drying yard in home settlement area in Keduang watershed



Promotion of agro-forest program by perennial fruit crops such as cashew nut, mango, Dorian, clove etc for soil erosion and poverty reduction, in Keduang watershed



Production and grading of Cashew nut, one of the component for poverty reduction in Keduang watershed

3. PRESENT CONDITION OF THE WATERSHED

3.5 Activities for Watershed Management



Gully Head Structure



Big Gully Plug



Big Gully Plug



Gully plug constructed under IBRD project in Keduang watershed



Broken gully plug in Keduang watershed



Urgent repairing of broken gully plug conducted by a community in Kerjo Lor, Keduang watershed

3. PRESENT CONDITION OF THE WATERSHED

3.5 Activities for Watershed Management



Promotion of Community teak forest reforested where GERHAN, In Kebonagun, Keduang watershed



Maintaining and promotion of Community forest planted by IBRD project, the 3rd planting of teak now, In Eromoko, Alang watershed



Provision of drainage channels in upland is now promoting for prevention from soil erosion, in Tambak Merang, Kudang watershed



Maintaining of lip and terrace rise of paddy field by grass in Keduang watershed



Maintaining farm pond by constructed by GERHAN in Keduang watershed



Check dam completely filled with sedimentation Constructed by IBRD project in Kamplong, Keduang watershed

3. PRESENT CONDITION OF THE WATERSHED

3.5 Activities for Watershed Management



Check dam in Keduang watershed



Check dam in Keduang watershed



Check dam in Keduang watershed



Maintaining of a small storage reservoir in Giriwoyo,
Alang watershed



Garbage overflowing on check dam in Keduang
River on December 14, 2006



River bank protection in Tirtomoyo River