

Lowest lowland area (<3% - refer to the coastal plain located at Elev 0 m to 10 m for coral reef and mangrove forest protection and management

Level to nearly level (0- 3%) - Very good land, can be safely cultivated and requires simple yet good agricultural practices. Either rainfed or irrigated and suitable for field crops production

Nearly level to gently sloping (3 - 8%) - Cropland, good land for cultivation, expansion for rice production . Can be utilized for upland crop cultivation, including high value crops , with simple soil conservation and management practices

Gently sloping to rolling (8-18%) (Upland) - Modified cropland Soil conservation measures : alley cropping with vegetative (grass or legumes) barriers; alley cropping or hedge row intercropping system

Rolling to moderately steep (18-30%) (Hillyland) - Diversified cropland, suitable for pasture or forest. This can be developed for agriculture by adopting farm-based agroforestry system. Can be utilized for cultivation with careful management and complex soil conservation practices (e.g. hedgerow intercropping , multistorey cropping system)

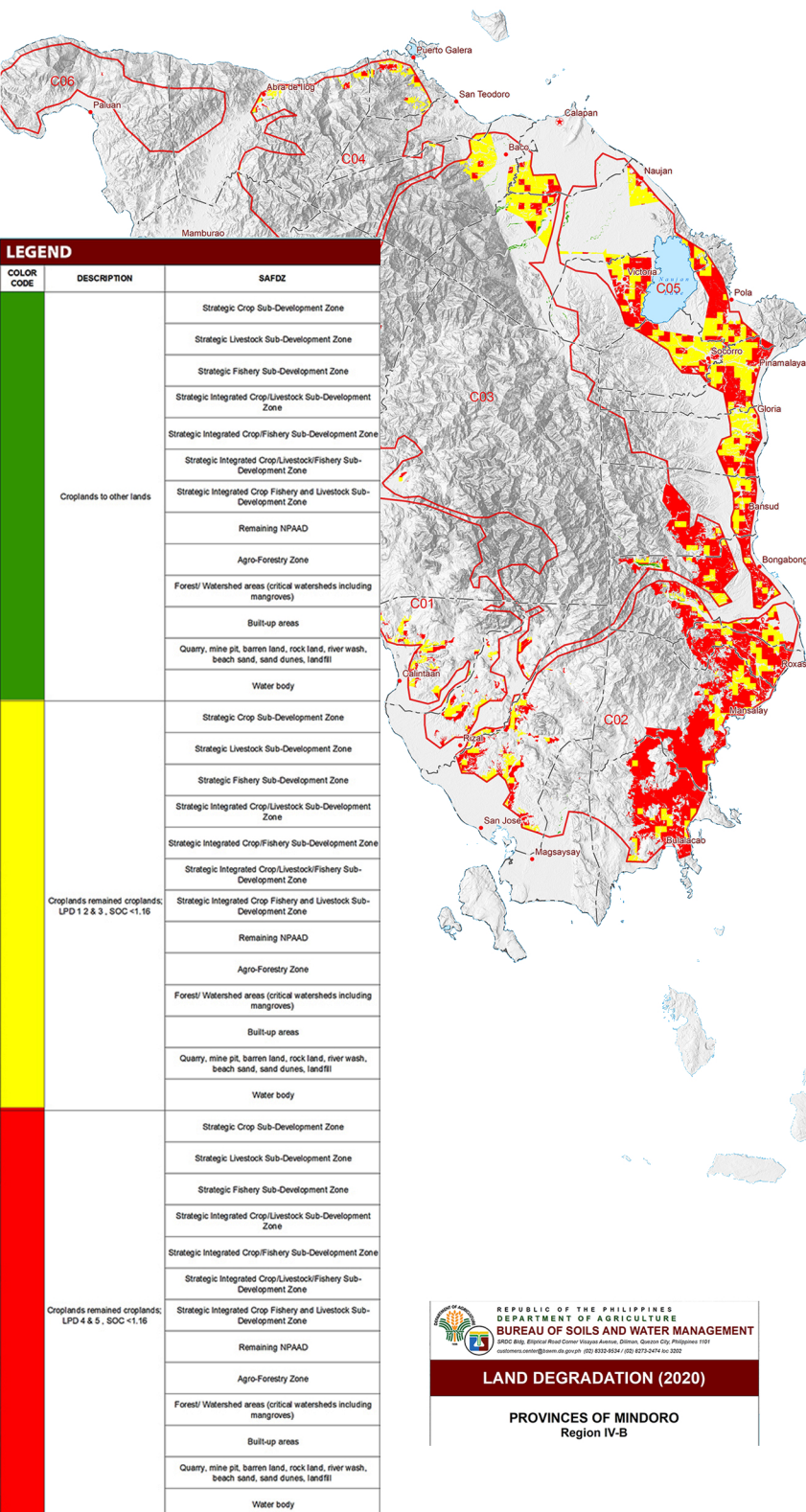
Moderately Steep to steep (30-50%)(Hillyland) - Best suited for forest and pasture . Can be developed by adopting farm-based agroforestry system coupled with soil conservation and management practices

Highland (>500 masl)
Moderately steep to steep (30-50%) to Very Steep (>50%); and Plateau Suitable for forest and Wildlife as protected areas. For rehabilitation through enrichment planting, replanting of damaged areas, and/or saturation planting with indigenous species. Planting of shade tolerant species. Those areas being cultivated for agriculture (i.e. Cordillera) including plateaus should consider appropriate soil and water conservation measures (e.g. terracing, contour farming, residue management)



BIODIVERSITY CORRIDOR

Watershed Landscape by Dr. Vic Tudiao, DENR



SUSTAINABLE LAND MANAGEMENT [SLM]

Sustainable Land Management is the use of land resources including soils, water, animals and plants for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions.

The BD Corridor Project will establish SLM exemplars as 'proof-of-practice' sites, demonstrating the viability and economic benefits of SLM and Biodiversity-Friendly Agricultural Practices (BDFAP) while arresting land degradation, and contributing to the enhancement of key biodiversity areas (KBAs). The Project aims to establish a total of 30 SLM exemplars (3-5 hectares each) across the two corridors (18 in Mindoro and 12 in Eastern Mindanao). Participants to the SLM exemplars include farmer cooperatives, people's organizations, traditional/indigenous people (IP) farmer groups, and/or individual farmers who will be trained and mobilized for farmer-to-farmer training and technology dissemination. As proof-of practice sites, these exemplars will serve as 'learning nodes' for other farmers within and across KBAs.

Farmers may not, however, fully 'replicate' technological packages, but may pick-up specific technologies, practices or system components (e.g., a tree species, contouring, composting) fitting into their contexts. The exemplars are, therefore, not meant for comprehensive replication but for inspiration that can trigger adaptation and innovation by farmers. Adoption can be voluntary and spontaneous for farmers who can afford SLM investments (e.g., non-IP or migrant farmers with cash fluidity). Hence, resource-poor farmers particularly IPs shall be given priority to access support through SLM 'incentive mechanisms' that the Project will be piloting or through government programs/projects implemented in the area.

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LAND DEGRADATION (2020)

PROVINCES OF MINDORO
Region IV-B

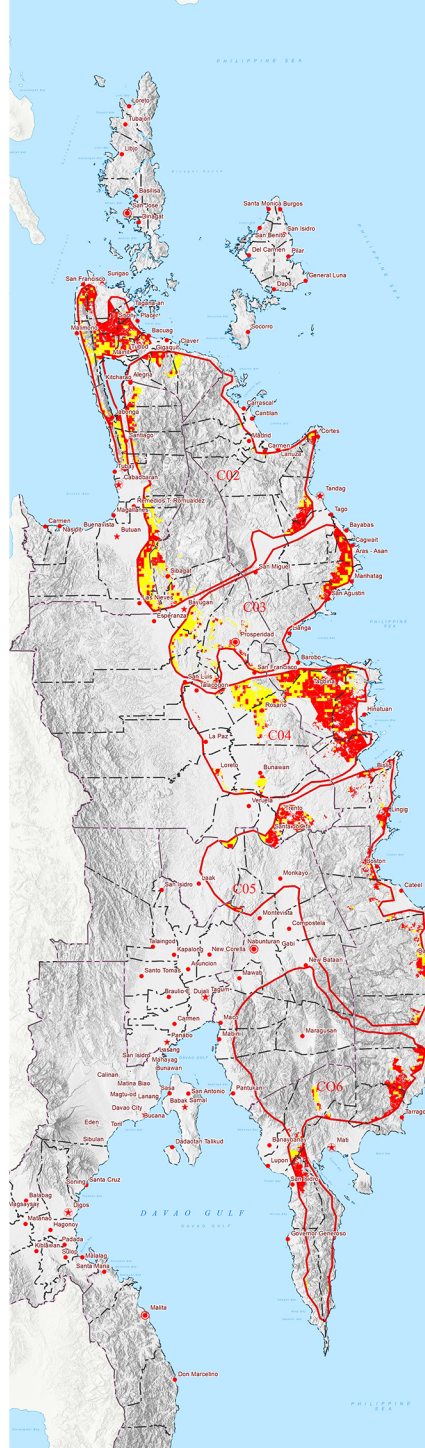
Rehabilitating Degraded Agricultural Lands

Both the Mindoro and Eastern Mindanao biodiversity corridors are undergoing rapid land degradation in relation to forest and wildlife habitat fragmentation. This is a result of dramatic forest cover change arising from conversion to agriculture and built-up areas, and proliferation of extractive industries such as logging and mining. Mixed factors drive these changes, including the rise in human population and demand for food, fiber and other raw materials. Hence, unsustainable agricultural practices on farmlands exacerbate different forms of land degradation such as soil fertility loss, declining productivity and low soil organic carbon (SOC). Thus the need for SLM adoption.

Mainstreaming SLM and BDFAP

Deploying SLM and Biodiversity-Friendly Agricultural Practices (BDFAP) among smallholder subsistence farmers can increase total farm productivity and income, enhance food security and livelihoods, and contribute to poverty reduction. At the same time, they maintain the resource base on which smallholders depend, enabling these resources to continue supporting future food security and ecosystem services.

A critical entry point is smallholder land users' wider adoption of sustainable land and water management (SLWM) and BDFAP, in order to ensure increased food production and income, while also improving the health and resilience of agro-ecosystems. These include (but are not limited to) simple practices and technologies such as contouring, terracing using natural or planted grasses and hedgerows, trash bunds, conservation tillage, residue management, relay and cover cropping, improved fallow management, bio-intensive gardening, natural composting. In addition, they include the more complex measures such as the hedgerow system, integrated pest management, multi-strata agroforestry and the comprehensive sloping agricultural land technology (SALT) package. If adopted, these will improve productivity, reduce soil erosion, increase forest cover, maintain soil fertility, improve soil moisture retention, and improve below- and above-ground biodiversity, thereby rehabilitating degraded farmlands and enhancing much-needed multiple landscape functions.



LAND DEGRADATION MAP		
PROVINCES OF EASTERN MINDANAO Region XI and CARAGA		
LEGEND		
COLOR CODE	DESCRIPTION	SAFDZ
Green	Croplands to other lands	Strategic Crop Sub-Development Zone
		Strategic Livestock Sub-Development Zone
		Strategic Fishery Sub-Development Zone
		Strategic Integrated Crop/Livestock Sub-Development Zone
		Strategic Integrated Crop/Fishery Sub-Development Zone
		Strategic Integrated Crop/Livestock/Fishery Sub-Development Zone
		Strategic Integrated Crop Fishery and Livestock Sub-Development Zone
		Remaining NPAAD
		Agro-Forestry Zone
		Forest/ Watershed areas (critical watersheds including mangroves)
Yellow	Croplands remained croplands; LPD 12 & 3, SOC <1.16	Strategic Crop Sub-Development Zone
		Strategic Livestock Sub-Development Zone
		Strategic Fishery Sub-Development Zone
		Strategic Integrated Crop/Livestock Sub-Development Zone
		Strategic Integrated Crop/Fishery Sub-Development Zone
		Strategic Integrated Crop/Livestock/Fishery Sub-Development Zone
		Strategic Integrated Crop Fishery and Livestock Sub-Development Zone
		Remaining NPAAD
		Agro-Forestry Zone
		Forest/ Watershed areas (critical watersheds including mangroves)
Red	Croplands remained croplands; LPD 4 & 5, SOC <1.16	Strategic Crop Sub-Development Zone
		Strategic Livestock Sub-Development Zone
		Strategic Fishery Sub-Development Zone
		Strategic Integrated Crop/Livestock Sub-Development Zone
		Strategic Integrated Crop/Fishery Sub-Development Zone
		Strategic Integrated Crop/Livestock/Fishery Sub-Development Zone
		Strategic Integrated Crop Fishery and Livestock Sub-Development Zone
		Remaining NPAAD
		Agro-Forestry Zone
		Forest/ Watershed areas (critical watersheds including mangroves)
TOTAL AREA		

