



2019
Project Implementation Review (PIR)



PHL SLM

Basic Data	Empowered lives.
Overall Ratings	Resilient nations.
Development Progress	4
Implementation Progress	39
Critical Risk Management	40
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A. Basic Data

Project Information	
UNDP PIMS ID	5365
GEF ID	5767
Title	Addressing Land Degradation and Drought through the Implementation of Sustainable Land Management
Country(ies)	Philippines, Philippines
UNDP-GEF Technical Team	Ecosystems and Biodiversity
Project Implementing Partner	Government
Joint Agencies	<i>(not set or not applicable)</i>
Project Type	Medium Size

Project Description
<p>Brief Description</p> <p>Land degradation in the Philippines is largely caused by the susceptibility of its soils to erosion due to the hilly and mountainous landforms in many parts of the country. The widespread clearing of forest lands in steeply sloping and rolling topography leaves the bare soil highly vulnerable to accelerated erosion of topsoil caused by heavy rainfall and consequential erosive force of water run-off. The practice of kaingin (or shifting cultivation) and other forms of unsuitable upland farming in cleared forest areas further worsens the erosion problem and loss of fertile and productive top soils. Land degradation in the Philippines is manifested by (i) the loss of productive topsoil through water erosion, (ii) loss of soil fertility due to over-cultivation, (iii) loss of vegetation cover due to illegal logging and widespread forest tree cutting, and (iv) expansion of slash and burn agriculture in critical slopes. Other kinds of degradation which cover a relatively smaller part of the landscape include (i) water logging due to poor drainage and water management; (ii) soil salinization due to over-harvesting of ground water near coastal areas; and (iii) soil pollution from excessive pesticide application and contamination by industrial and household wastes.</p> <p>The proposed project would focus principally at the systemic and institutional levels, and hence strengthen the enabling regulatory, institutional and financial framework that would govern efforts to address land degradation in the Philippines. It will mainstream Sustainable Land Management (SLM) policies and programs into the development plans of LGUs through the guidance of government agencies such as Department of Agriculture, Department of Environment and Natural Resources, Department of Agrarian Reform, Department of Interior and Local Development and Housing and Land Use Regulatory Board to strengthen complementation among these government institutions concerned with land degradation and ensure that the incidence and spread of land degradation in vulnerable ecosystems will be avoided and/or reduced. The project is expected to improve the land productivity and socioeconomic well-being of small farmers. To achieve this, the project will follow a participatory cross-sectoral approach involving all the key stakeholders in project design and implementation. The promotion of SLM measures and technologies for the adoption of vulnerable farming communities will be the focus of the field investments of the project. Through the establishment of SLM demonstration sites, farmers will be able to learn and adopt various methods of soil conservation farming and water resources conservation that will improve their crop production and income.</p> <p>Therefore, the project aims to strengthen the SLM frameworks to address land degradation process and mitigate the effects of drought in the Philippines through the following outcomes: Outcome 1: Effective national enabling environment to promote integrated landscape management; and Outcome 2: Long-term capacities and incentives in place for local communities and LGUs to uptake of SLM practices in two targeted municipality in the Philippines.</p>

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Other Partners	<i>(not set or not applicable)</i>

B. Overall Ratings

Overall DO Rating	Moderately Satisfactory
Overall IP Rating	Moderately Satisfactory
Overall Risk Rating	Low

C. Development Progress

Description					
Objective					
Strengthening SLM frameworks to address land degradation processes and mitigate the effects of drought in the Philippines					
Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
Area of LD-intense municipalities where the causes of land degradation are addressed through the implementation of land use plans	0 ha	<i>(not set or not applicable)</i>	177,083 hectares	Off track. Project activities are on-going. The involved local government units have started and in the process of pilot-testing the Integrated Land Management Framework and Guidelines for Mainstreaming Sustainable Land Management into their Comprehensive Land Use Plans. This is done through using the tools and templates, steps and guidelines for preparing their Integrated Land Management/ Sustainable Land Management Plans, as well as filling-in of data gaps, including the required maps. The local government units are already introduced to the menu of SLM practices and technologies and templates for analyzing land degradation types, causes and effects. Some actions have already been taken by the Bureau of Soils and Water Management to assist the pilot local government units in completing the required maps.	Partially achieved. The achievement of the end of project target depends on the implementation of the approved Comprehensive Land Use Plans of Abuyog Municipality, Leyte and Malaybalay City, Bukidnon. As of this reporting period, the full mainstreaming of Integrated Land Management/Sustainable Land Management using the Integrated Land Management Framework Planning Tool is not yet completed by the two pilot sites. Also, the updating of the CLUPs of the pilot sites would outlive the project. The total area covered by these interventions is 146,588 hectares covering the total land area of the City of Malaybalay and Municipality of Abuyog. Meanwhile, the Integrated Land Management Framework (ILMF) and entry points for Mainstreaming in NEDA and DILG development Plans has been submitted for finalization. The ILMF has been prepared for mainstreaming SLM concerns in the strategic plans of DA (Agriculture and Fisheries Modernization Plan) and DENR (Philippine Master Plan for Climate Resilient Forestry Development). For NEDA and DILG, the identified development plans are the Provincial Development and

					<p>Physical Framework Plan (PDFFPs) and Comprehensive Development Plan (CDP), respectively. While the Guidelines for Mainstreaming SLM in the CLUP of LGUs is ready for adoption of the HLURB Board of Commissioners thru a Board Resolution on July 31, 2019. A user-guide/documentation for the development of composite land degradation index (CLDI) maps and the database of LGUs is being formulated. The CLDI is an index which is calculated from the three main indicators namely: type, extent and degree of land degradation. The type of degradation focuses on the kind of degradation occurring in the area i.e. erosion and other degradation types which are human induced or aggravated by human activities. The extent of degradation, according to Brabant, 2008 is an area of land subjected to a given type of subtype of degradation in a specific area, it is measured thru visual monitoring or remote sensing technique. Lastly, the degree of degradation is characterized by the severity of degradation reached in a specific field area, it can be determined by identifying the soil properties that are markers of its degree of degradation and that have negative impacts on crops yield like, gully density, reduction of thickness of humus layer, soil compaction, acidity, salinity, and imbalance nutrients; and based on the assumption that reduction in yield or in the level of land suitability indicate that the land is degraded. In addition, CLDI considers the two</p>
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					seasons in the Philippines such as the Dry Season and Wet Season reclassifying the type of land degradation into seasonal type of land degradation which can be visible and invisible.
Enhanced cross-sector enabling environment for integrated landscape management as per PMAT score: (i) Framework strengthening INRM (ii) Capacity strengthening to enhance cross-sector enabling environment	(i) Score 1 – No INRM framework in place (ii) Score 2 – Initial awareness raised (e.g. workshops, seminars)	<i>(not set or not applicable)</i>	(i) Score 4 – INRM framework has been formally adopted by stakeholders but weak (ii) Score 4 – Knowledge effectively transferred (e.g. working groups tackle cross-sectoral issues)	Off track. Project activities are on-going and at this stage, the Competency Development Program Guide has been completed. It is Part One of the whole SLM Training Manual. Completion of Part Two (Sustainable Land Management) is on-going, while Part Three (Adopting the Integrated Land Management Framework and Mainstreaming Sustainable Land Management in the Comprehensive Land Use Plan) has been completed and will be pilot tested. The Report on Mainstreaming SLM in the Selected Strategic Development Plans of the Department of Agriculture and the Department of Environment and Natural Resources was already presented to the Inter-Agency Technical Committee for its comments and concurrence. As the final outcome of mainstreaming, the report recommends the laying-out of the investment needed to mitigate land degradation and its adverse impacts through the promotion, demonstration and eventual adoption of SLM farming practices and technologies nationwide by farming communities through the facilitation by the Municipal or City Agriculture Office of the local government units.	Partially achieved. (i) Score 3 (INRM framework has been formally proposed but not adopted) - ILMF prepared for adoption of DA, DENR, NEDA, DILG, and DAR; Supplemental guidelines for mainstreaming SLM in the CLUP for adoption of the HLUB Board of Commissioners (ii) Score 4 – Knowledge effectively transferred (e.g. working groups tackle cross-sectoral issues). Conducted series of ToTs: KT on Implementation of Photo-Visual Monitoring, Mapping, and Assessment of Land Degradation; Creation of the National Inter-Agency Technical Committee (IATC) and Local Technical Working Groups (LTWG); Training on Environment and Natural Resource Accounting and Cost Benefit Analysis for Upland and Lowland Ecosystems; Training on Soil and Nutrient Management for Lowland Rice Production; Capability Enhancement in Managing Spatial Data for Sustainable Land Management; Orientation on Sustainable Land Management Practices in Upland Barangays of Malaybalay City and Tree Planting (1ST Batch); Training on the Participatory Approach on Photo-Visual Assessment and Monitoring of

					Farm Land Degradation (Training by Trainers)
The progress of the objective can be described as:		On track			
Outcome 1					
Effective cross-sectoral enabling environment at the national and local level in place to promote integrated landscape management					
Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
An integrated land management framework incorporating SLM practices and technologies	Presence of guidelines in mainstreaming CCA-DRR and biodiversity conservation in CLUP	<i>(not set or not applicable)</i>	A national integrated land management framework mainstreaming SLM practices and technologies developed and adopted by HLURB	<p>On-track</p> <p>The guidelines on mainstreaming Integrated Land Management Framework (ILMF) was presented in the 1st Inter-Agency Technical Committee Meeting in November 2017. The ILMF is a logical construct establishing the rationale of the planning process for the management of land resources for sustainable agriculture development. The ILMF identifies the actions (Policies, Programs, Projects and Activities) needed to attain SLM for agricultural development.</p> <p>In April 2018, the ILMF was pilot-tested with the two pilot local government units during the conduct of the "Training-Workshop on the Preparation of the ILMF Plan and Mainstreaming of SLM in the Comprehensive Land Use Plan." The two (2) pilot local government units were trained on preparing their own ILM Plan duly guided by the CLUP Specialist during the training workshop.</p> <p>The highlight of the discussion of the ILMF was the ILM Planning Process which consists of the following steps: 1) Setting the objectives, scope and limitation of land resources</p>	<p>Partially Achieved.</p> <p>The national ILMF mainstreaming SLM practices and technologies shall be adopted by the HLURB Board of Commissioners on July 31, 2019 along with the adoption of the Supplemental Guidelines for Mainstreaming SLM in the CLUP.</p> <p>The Final Integrated Land Management Framework has been submitted and routed to the members of the Inter-Agency Technical Committee.</p> <p>The Final ILMF includes entry points for mainstreaming SLM in the development plans of NEDA and DILG. Integration of SLM in NEDA's PDPFP and DILG's CDP would call the attention of the policy and decision-makers of the LGUs at the provincial and city/municipal levels in supporting and investing in the necessary interventions needed by agriculture-based localities. These interventions on SLM are expected to improve and sustain agriculture production and income of farmers contributing to higher levels of food sufficiency and food security in the country.</p> <p>The entry points for mainstreaming</p>

				<p>management study;</p> <p>2) Assessing the status of land resources' use – land degradation, their causes and effects;</p> <p>3) Defining land resources management issues and challenges;</p> <p>4) Preparing land resources development and management plan;</p> <p>5) Mainstreaming land resources management plan in CLUP; and</p> <p>6) Monitoring and evaluation of Performance of ILM Programs and Projects.</p> <p>The ILMF will also be mainstreamed in the Agriculture and Fisheries Modernization Plan (AFMP) of the Department of Agriculture and Philippine Master Plan for Climate Resilient Forestry Development (PMPCRFD) of the Department of Environment and Natural Resources – Forest Management Bureau. The two agencies were already provided copy of the report.</p>	<p>ILM/SLM in the PDPFP were identified per PDPFP Plan Components such as the following: Vision and Mission; Planning and Environment; Situation Analysis (Issues and Problems); Goals, Objectives and Targets; Development Strategies (Sector and Spatial Development); Land Use and Physical Development; Programs, Project and Activities; and Monitoring and Evaluation System for SLM.</p> <p>The Final ILMF contains the following:</p> <p>Acronyms List of Tables List of Figures List of Boxes Executive Summary Chapter 1 Context and Rationale of Integrated Land Management Framework Chapter 2 Gaps and Barriers in Sustainable Land Management Chapter 3 Benefits of ILMF Mainstreaming Chapter 4 Objectives and Scope Chapter 5 Approach and Methods Chapter 6 Land Degradation Types Chapter 7 Integrated Land Management Policy Framework Chapter 8 Typical SLM Practices and Technologies Chapter 9 Planning Framework for Integrated Land Management at the Municipal Level Chapter 10 Monitoring and Evaluation of Land Degradation Chapter 11 Summary of Results and Findings on the Pilot Testing of LMFP in Two Municipalities Chapter 12 Entry Points for</p>
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					<p>Mainstreaming ILM/SLM in NEDA and DILG Strategic Development Plans for LGUs</p> <p>References</p> <p>ANNEXES</p> <p>A Alternative SLM Practices and Technologies: BSWM</p> <p>B Application of ILMF Planning Steps: Case of Malaybalay City</p> <p>C HEA and CCVA Methods for Agriculture Sector</p> <p>D Template Matrix for Outlining ILMF Plan</p> <p>E ENRA-ARA Method and Results for Malaybalay City</p> <p>Draft Joint Memorandum Circular (JMC) between DA and DENR-FMB prepared. The JMC was drafted for review of the DA and DENR-FMB legal teams. It is for the Adoption of the ILMF Planning for Sustainable Agriculture and Agroforestry Development. The draft JMC contains the Prefatory Statement; Policy context for ILMF Planning; Objectives and Scope of the ILMF Plan, Definition of Terms; Integrated Land Management Framework Planning Process; Implementation Mechanism for ILMFP Preparation and Mainstreaming; and Effectivity and Repealing Clause</p> <p>The identified key entry points for mainstreaming ILM/SLM in NEDA's PDPFP and DILG's CDP should be considered by NEDA and DILG to have their own guidelines and included in their next year annual budget plan by 2021.</p>
Enhanced CLUP guidelines to	No existing procedural	<i>(not set or not</i>	Guidelines on	On-track	Achieved.

mainstream SLM	guidelines on mainstreaming SLM in land use, agricultural and forestry development plans	<i>applicable)</i>	mainstreaming have been applied in to pilot municipalities and further enhanced based on experience and findings of the testing exercise.	<p>The draft Guidelines on Mainstreaming SLM in the Comprehensive Land Use Plan of Local Government Units was accepted and endorsed by the Housing and Land Use Regulatory Board and the Bureau of Soils and Water Management in October 2017. It was presented to the Inter-Agency Technical Committee Meeting in November 2017. The draft Guidelines covered the following in the standard planning process:</p> <ol style="list-style-type: none"> 1) Vision setting; 2) Mission setting; 3) Ecological profile and Situation Analysis; 4) Analysis of issue and challenges; 5) Goals, Objectives and Target Setting; 6) Proposed or Devised Development thrust and Spatial Strategies; 7) Proposed Land Use Plan; 8) Formulation of Zoning; 9) Implementation of SLM Enhanced CLUP; and 10) Mainstreaming, Reviewing and Evaluating the CLUP. <p>The draft Guidelines on Mainstreaming SLM in the CLUP was pilot-tested with the Municipality of Abuyog, Leyte and Malaybalay City during the “Training-Workshop on the Preparation of the ILMF Plan and Mainstreaming of SLM in the CLUP” in April 2018.</p> <p>Relatively, the Report on Mainstreaming SLM in the Selected</p>	<p>The Guidelines on Mainstreaming SLM in the CLUP has been pilot tested in the two pilot sites last April 2018. The Report on Pilot Testing of the Draft Supplemental Guidelines in the two pilot LGUs contained the results and findings on the pilot testing of the Guidelines for Mainstreaming SLM in the CLUP of Malaybalay City, Bukidnon and Abuyog Municipality, Leyte. It also presents the main results and findings of the evaluation conducted by the LGU planners, agricultural officers and environment and natural resources officers concerning the availability of the data, clarity of the instructions and procedures and relative level of difficulty in the actual application of the guidelines and procedures for SLM mainstreaming. The pilot testing activity of the ILMF and SLM tools was conducted in a five-day training workshop participated in by senior planners from the difference offices of Abuyog and Malaybalay City LGU such as the City/Municipal Agriculture Office (C/MAO), City/Municipal Planning and Development Office, City/Municipal Environment and Natural Resources Office and City/Municipal GIS Staff.</p> <p>The conducted training workshop aimed at furnishing the planners from the two pilot LGUs with the knowledge and skills needed in the preparation of the ILMF plan and SLM-enhanced CLUP. It also served as an opportunity for them to work together and share their knowledge,</p>
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					<p>Local Government Units. This version was presented to and reviewed by the members of the Policy Development Group of Housing Land Use and Regulatory Board (national and regional offices) last April 2019. The Guidelines was revised according to the comments and suggestions of the review group and submitted to and endorsed by HLURB by May 2019. This will then be presented to the HLURB Board of Commissioners for adoption and implementation to the agriculture-based localities.</p> <p>Some of the comments to the final guidelines during the review are the following: clarification of the relationship of the ILMF to the mainstreaming process, clarification on the types, causes and effects of land degradation, correction of some statements, enhancement of tables among others. These were already addressed by the Consultant and included in the Final Guidelines.</p> <p>The following are the chapters of the Final Supplemental Guidelines Preliminaries: Acronyms Glossary List of Tables List of Figures List of Boxes Executive Summary Chapter 1: Introduction Chapter 2: Context and Rationale of Mainstreaming SLM in the CLUP Chapter 3: Objectives and Scope of Mainstreaming SLM in the CLUP Chapter 4: Integrated Land</p>
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					<p>Management Framework Plan Chapter 5: Interface between ILMF and CLUP Chapter 6: SLM Mainstreaming Process Chapter 7: Guidelines on Mainstreaming ILMF/SLM in the CLUP Annex A: ENRA-ARA Method and Results of Malaybalay City Annex B: CCVA/HEA Method for Agriculture and Forestry</p> <p>In support to the LGUs' enhancement of the CLUPs, a training on Environment and Natural Resource and Agricultural Resource Accounting was conducted. This training was deemed necessary in the preparation of the ILMF/SLM plan wherein its results provide the baseline and current situations of the agricultural situation of a locality. This is also helpful in monitoring any changes in the productive uses of land and other resources. The methods and results of Malaybalay City as case study for ENRA-ARA were included in the Final Supplemental Guidelines on Mainstreaming SLM in the CLUP. ARA is a derivative of ENRA which covers all the natural resources and environmental media (air, water and land quality) in given areas such as a municipality or a city (Cabrido, 2019).</p> <p>Another training on Environment and Natural Resources Accounting and Cost-Benefit Analysis for the agricultural technicians of Malaybalay City was conducted in July 2018. The training aimed to enhance the</p>
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					<p>appreciation of the participating LGUs by providing them basic skills on the economics of natural resource systems as a tool for planning and implementing projects for upland and lowland agriculture in their respective areas.</p> <p>The Report on Mainstreaming SLM in the Selected Strategic Plans of DA and DENR-FMB was finalized for adoption of the agencies thru a Joint Memorandum Circular. This was submitted and routed to the members of the IATC.</p> <p>As discussed in the investments and incentives for local level implementation of the guidelines, there is a need for agriculture-based LGUs without agricultural development plans to prepare their SLM/ILM Plan with guide included in the Manual on Adopting the ILMF and Mainstreaming SLM in the CLUP.</p> <p>Budget allotment by BSWM, FMB and ATI for lowland and upland agriculture areas and provision of loan by DA through public banks in the adoption of SLM technologies.</p>
Relevant policy issuance for the mainstreaming of SLM in local land-use including forest land-use and development planning processes	Pledge of commitment signed by DA, DAR and DENR in support to the implementation of the National Action Plan to Combat Desertification, Land Degradation and Drought (NAP-DLDD 2010-2020)	<i>(not set or not applicable)</i>	Issuance of Joint Memorandum Circular or special order on SLM mainstreaming by DA, DENR and DAR. Issuance of	Off-track Drafting of memorandum circulars or special orders is scheduled to follow right after acceptance of the Report on Mainstreaming SLM in the Selected Strategic Development Plans of the Department of Agriculture and the Department of Environment and Natural Resources	Partially achieved The draft JMC for the adoption of the Integrated Land Management Framework was found to be legally in order by the legal teams of DA and DENR-FMB. This document is now in the process of review by the DA and DENR-FMB's planning divisions. This document was also routed to the

			memorandum order or administrative order on SLM mainstreaming by DILG to priority LGUs	by the relevant agencies.	Office of the Systems Wide Climate Change. For the policy issuance on the mainstreaming of SLM in the CLUP of LGUs, an HLURB Board Resolution for the adoption of the Supplemental Guidelines for Mainstreaming ILM/SLM in the CLUP of local government units will be prepared after the meeting of the HLURB Board of Commissioners on September, 2019. The BSWM Representative shall join the meeting to address any technical concerns that will be raised by the members of the Board. Afterwhich, laying out, publication and dissemination of the Supplemental Guidelines shall be spearheaded by the HLURB.
Data base and decision support information system operational and accessible to LGUs	Existing LADA web portal with maps at national and regional scales	<i>(not set or not applicable)</i>	Developed a GIS-based LADA maps incorporating SLM practices and technologies with information/maps accessible and relevant to CLUP preparation of LGUs	On-track The Geomatics and Soil Information Technology Division (GSITD) of the Bureau of Soils and Water Management (BSWM) is now in charge of the development of maps for the project. The following maps were developed and presented to the two (2) pilot local government units during the "Training-Workshop on the Preparation of the Integrated Land Management Framework Plan and Mainstreaming of Sustainable Land Management in the Comprehensive Land Use Plan": 1) Agricultural land use map 2) Land degradation Soil erosion Fertility	Achieved The GIS-based LADA maps incorporating SLM practices and technologies with information/maps accessible and relevant to CLUP preparation of LGUs have been prepared. Specifically, the Composite Land Degradation Index Maps containing the type, extent and degree of land degradation were prepared. These maps were made available to Abuyog Municipality and Malaybalay City LGUs. The Geomatics and Soil Information Technology Division (GSITD) of the Bureau of Soils and Water Management (BSWM) in coordination with the SLM PMO

				<p>Drought Flood Landslide</p> <p>3) Prime agricultural lands (in relation to the Network of Protected Areas for Agricultural and Agro-Industrial Areas for Development)</p> <p>4) Crop suitability</p> <p>5) Climate change vulnerability</p> <p>6) Spatial strategy for agriculture, agro-industry, infrastructure support</p> <p>The BSWM-GSITD facilitated informal workshops with the local government unit representatives in spot checking the maps per barangay. This was mainly done with the municipal/city planning mappers and municipal/city agricultural technicians. The main focus is the municipal/city land use map vis-à-vis the data from the Municipal/City Agriculture Office as presented during the April 16-20, 2018 training-workshop. The local government units need to update and tabulate its data (at least as of December 2017) that will also include newly introduced cash crops. For this exercise, there is a need to retain the delineation of the city or municipal's land use, and consider areas which are significant (or "mappable" in the scale: 25,000). The spot checking is inputting the tabulated data from Municipal/City Agriculture Office into the land use map. This is a continuing exercise until the third quarter of 2018.</p>	<p>conducted a training on Capability Enhancement on Managing Spatial Data for Sustainable Land Management held last November 19 to 23, 2018. The following topics were discussed during the training workshop: Introduction to GIS, Geographic phenomena and spatial data types, database management systems, spatial data inputs, spatial referencing and map projections, introduction to ArcGIS, using ArcMap, ArcToolbox and Geoprocessing, how to download GIS data from open sources in the internet, building the geodatabase, and labels, symbology in ArcMap.</p> <p>GSITD conducted focused group discussions with the data holders (MAO, MENRO, MPDO) from the two pilot sites – Abuyog, Leyte and Malaybalay City, Bukidnon. The FGD highlighted the gathering of the following data to produce the geodatabase documentation and the LGU Agro-Environmental dataset. The LGU Agro-Environmental dataset contains seven chapters focusing on administrative component (annotations, boundaries, institutional buildings, domains, and administrative features typology); hydrography (annotations, hydrography features, and domain); Hypsography (annotation, hypsography features, domains, contour typology, and rasters); infrastructure (annotations, transport facilities, and domain); environmental (land cover, land classification, protected areas, domains, climate classification, fault lines, and air and</p>
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Competency development programme for LGUs on SLM technology application and mainstreaming developed and implemented	New and young scientists from BSWM, DA Regional Offices, DENR and DAR lacked hands-on training on SLM.	<i>(not set or not applicable)</i>	<p>List of training modules on SLM technology application and mainstreaming for LGUs developed</p> <p>Potential trainers from DA-BSWM, DENR and HLURB are identified and trained on various SLM management</p>	<p>Off-track. The list of training modules has yet to be completed and conduct of trainers' training has yet to be done.</p> <p>The Competency Development Program Guide has been completed. Its rationale is that revisiting sustainable land management technology in degraded and drought vulnerable areas in the Philippines would lead to an updated revitalized SLM framework. Apart from conventional SLM science, the new</p>	<p>Achieved.</p> <p>The training module on SLM available at the Bureau of Soils and Water Management is the Philippine Case Studies on Sustainable Land Management Approaches and Technologies.</p> <p>After the completion of the Competency Development Program Guide, the SLM Training Manual and the Manual on Adopting the ILMF and Mainstreaming SLM in CLUP</p>

			<p>and physical technologies on SLM.</p>	<p>SLM framework would incorporate other considerations such as climate change adaptation; the economic realities faced by the farm family that determine its relationship with the land; and recognition of the farmer's traditional and local knowledge. These additional elements constitute what is tentatively being referred to as Adaptive Land Management or ALM. The new framework is an integration of ALM into conventional SLM. Along with the Integrated Land Management Framework or ILMF, they represent a more holistic and inclusive approach to land productivity that requires a new set of competencies that are presented in this document.</p>	<p>were developed.</p> <p>The SLM Training Manual has four (4) modules namely: Module 1: Soil Erosion and Degradation with seven lessons Module 2: Soil Carbon, Backbone of Soil Health and Fertility with two lessons Module 3: Land Degradation and Composite Land Degradation Index Monitoring System Guideline with 12 lessons Module 4: Photo-Visual Mapping, Recording and Assessment for the Establishment of Composite Land Degradation Index Monitoring System with three lessons The Manual on Adopting the ILMF and Mainstreaming SLM in CLUP contains four (4) modules as well namely: Module 1: Integrated Land Management Framework with four lessons Module 2: ILMF Plan Preparation with six lessons Module 3: Why Mainstreaming with two lessons Module 4: Components of SLM Mainstreaming with ten lessons</p> <p>Relatively, the Report on the Conduct of Training of Potential Trainers from DILG and HLURB on Various SLM Management and Physical Technologies for Mainstreaming SLM into the CLUP and Report on the Conduct of Training of Trainers (ToT) for LGUs, ATI, DA-BSWM and DENR were submitted. The Reports are documentation of the following trainings conducted:</p>
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					<p>Training-Workshop on the Preparation of the Integrated Land Management Framework Plan and Mainstreaming SLM in the CLUP, Planners' Forum Integrating SLM in the CLUP and Conduct of Training of Trainors on the two pilot sites.</p> <p>The Training of Trainors was conducted for the two pilot sites: Malaybalay City, Bukidnon on September 18-21, 2018 attended by 27 participants from BSWM Laboratory Services Division, GSITD, Dalwangan, Provincial Information and Communications Office, Bukidnon Environment and Natural Resources Office, Provincial Planning and Development Office, City Agriculture Office, City Environment and Natural Resources Office, DENR-PENRO, City Agriculture Office, Silae United Agrarian Reform Cooperative, DA, City Planning and Development Office, DA Regional Field Office 8 and City Agriculture Office; and Abuyog Municipality, Leyte on October 1 to 5, 2018 attended by 50 participants composed of representatives from the Provincial Agriculture Office, Provincial Planning and Development Office, BSWM Dalwangan, DA Regional Field Office 8, DA Agricultural Training Institute, Municipal Planning and Development Office, Municipal Agriculture Offices of Abuyog and Sta. Fe, Municipal Environment and Natural Resources Office, Farmers from Abuyog and Sta. Fe, Leyte.</p> <p>The training focused on the following:</p>
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					<p>participatory photo-visual farm degradation assessment and CLDI monitoring system and GIS-based mapping of land degradation. It was participated by agricultural technicians and extension workers from line agencies and local government units and farmers from different brangays from the pilot municipalities.</p> <p>The produced farmer-trainer for this training trained their fellow-farmers thru sharing of experiences. A formal training for 20 farmers in the province of Leyte was also conducted. The main trainer was the Regional Gawad Saka Awardee, an SLM adopter.</p>
<p>Increased scores of the indicators of the following capacity results in the Capacity Development Monitoring Scorecards of DA-BSWM, DENR-FMB and HLURB from the start-up of Project up to end of Project:</p> <p>a. Capacity for engagement (CR1);</p> <p>b. Capacity to generate access, and use information and knowledge (CR2);</p> <p>c. Capacity for strategy, policy, and legislation development (CR3);</p> <p>d. Capacity for management and implementation (CR4); and</p> <p>e. Capacity to monitor and evaluate (CR5)</p>	<p>Average capacity scores for (See Annex F for the Capacity Development Monitoring Scorecard)</p> <p>DA-BSWM</p> <p>CR1 – 2 (Inds. 1-3)</p> <p>CR2 – 2 (Inds. 4-8)</p> <p>CR3 – 2 (Inds. 9-11)</p> <p>CR4 – 2 (Inds. 12-13)</p> <p>CR5 – 2 (Inds. 14-15)</p> <p>DENR-FMB</p> <p>CR1 – 1.67 (Inds. 1-3)</p> <p>CR2 – 2 (Inds. 4-8)</p> <p>CR3 – 2 (Inds. 9-11)</p> <p>CR4 – 2.5 (Inds. 12-13)</p> <p>CR5 – 1 (Inds. 14-15)</p> <p>HLURB</p>	<p>(not set or not applicable)</p>	<p>At least an average increase in 5 capacity results (CR1 to CR5) by 0.33 to 1 for BSWM with a high score of 3 in the following indicators: Indicator 3, 4, 5, 7 and 13 (see Annex F for the Capacity Development Monitoring Scorecard)</p> <p>At least an average increase in 5 capacity results by 0.5 to 0.8 for DENR-FMB with a high score of 2 to 3 in the following indicators: Indicator</p>	<p>Off-track</p> <p>Consultation meetings with HLURB, DENR-FMB, and DA-BSWM to carry out their respective Capacity Development Monitoring Scorecards are set from July to August 2018.</p>	<p>Achieved.</p> <p>For BSWM, an increase in the scores of indicators 3, 4, 5, 7, and 13 from 2 to 3 with an average increase to 1 was achieved.</p> <p>This can be attributed to the establishment of the IATC for the implementation of the SLM project and their participation in consultation-workshops and review of the project outputs; establishment of the TDF at the project level and sustained existing soil conservation guided farm and SWIP; conduct of regular trainings and seminars as built-in component of SLM Package; Development of the municipal level geodatabase schema for the mapping of land degradation and composite land degradation index; setting up of the SLM Facebook page</p>

	<p>CR1 – 1 (Inds. 1-3) CR2 – 2 (Inds. 4-8) CR3 – 2 (Inds. 9-11) CR4 – 2.5 (Inds. 12-13) CR5 – 1 (Inds. 14-15)</p>		<p>3,4,5,8,10,and 12 (see Annex F for the Capacity Development Monitoring Scorecard)</p> <p>At least an average increase in 5 capacity results by 0.2 to 1.33 for HLURB with a high score of 2 to 3 in the following indicators: Indicator 1, 10, 11, 12 and 14 (see Annex F for the Capacity Development Monitoring Scorecard)</p>		<p>and Instagram accounts accessible to the public; maintenance of the PhilCAT SLM that showcases documented SLM practices for sharing to land users and planners, the website features were presented during the project workshops as “basket of SLM options”; Establishment of the TDF in the two pilot sites; and Conducted Training Policy issuance on the following research strategies and programs: Adaptive Balanced Fertilization Management, Composite Land Degradation Index Monitoring System, Integrated Land Management Framework, Supplemental Guidelines, Muyong Agro-forestry Ridge Stabilization System; Use of bio-indicators like presence of weeds, insects, and leaf color; Practice of Soil Carbon Trashline Technology by the farmer; and BSWM has strengthened the engagement of key stakeholders (i.e. farmer co-operators, LGUs etc.) in the areas of soil and water conservation thru the: regular conduct of SWISA Congress; techno Demo Establishment and hands-on Capacity Building on Soil Conservation; Turnover of Fertility and Fertilizer Guide Maps; Recognize as focal for coffee, cacao and other major commodities on land suitability and organic agriculture; Development of the SLM Training Manual and integration to FFS of module 4; Farmer-to-farmer training conducted</p> <p>For DENR-FMB an increase in the scores of indicators 3, 4, 5, 8, 10 and</p>
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					<p>12 with a high score of 2 or 3 with an average increase of 0.8 was achieved.</p> <p>This can be attributed to the following: FLUP of Malaybalay City is targeted for formulation this 2019; while the FLUP of Abuyog was formulated in 2016 but is not yet approved; Conducted awareness raising activity: Training on IEC materials preparation cum tree planting activity in Malaybalay City, Bukidnon; FLUP is integrated in the Comprehensive Land Use Plan and the Training-Workshop on the Preparation of the Integrated Land Management Framework Plan and Supplemental Guidelines on Mainstreaming SLM in the CLUP was participated in by Malaybalay City; Introduced the Muyong Agro-Forestry Ridge Stabilization System and the Use of Soil Carbon Trash-line Technology and bio-indicators in the pilot site in the Bgy Silae, Malaybalay, Bukidnon; Continuing support for Malaybalay City for their formulation of the FLUP thru provision of technical assistance and trainings</p> <p>There is an allocation of PhP450,000.00 budget for FLUP formulation and adoption (there is a reduction of budget from 550K to 450K); Only 118 municipalities have adopted FLUP (in our case, it is only Abuyog which have adopted FLUP); Formulation is not under DENR's control. It is the LGU who should initiate the process and send letter of intent for the formulation of the</p>
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					<p>FLUP.</p> <p>DILG Circular 1997 Requiring LGUs to formulate FLUP entitled:</p> <ol style="list-style-type: none"> 1. DENR-DILG Joint Memorandum Circular No. 1998-01 “Manual of Procedures for DENR-DILG-LGU Partnership on Devolved and Other Forest Management Functions” 2. DENR-DILG Joint Memorandum Circular No. 2003-01 “Strengthening and Institutionalizing the DENR-DILG-LGU Partnership on Devolved and other Forest Management Functions” <p>Given the new requirement of the HLURB to integrate FLUP in CLUP, the LGUs are now obliged to consider within their budget the preparation of FLUP worth 184.95 Million (53.1 Million for 2019, 112.5 Million for 2020 and 19.35 Million)</p> <p>FMB continuously allocate resources for the formulation of FLUP with the target of 411 Municipalities (118 Municipalities for 2019, 250 Municipalities for 2020 and 43 for 2021.)</p> <p>For HLURB, an increase in the scores of indicators 1, 10, 11, 12, and 14 from 2 to 3 with an average increase of 1 and a high score of 3 was achieved.</p> <p>This can be attributed to the following: In the conduct of the National Planners’ Forum the ILMF</p>
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					was clearly cascaded to all regional planners; field visits to the techno demo farm in Brgy. Silae, Malaybalay City, Bukidnon also helped in the appreciation of the planners in the formulated ILMF and Supplemental Guidelines on Mainstreaming SLM in the CLUP thru a hands-on experience; The creation of the monitoring and evaluation division within DHSUD will strengthen the monitoring of LGU compliance; Also, thru the Regional Offices via the system-based Land Use and Zoning Information System LUZIS (on-going development) which will be used; The data on forest cover was updated c/o of BSWM-GSITD, ILMF provided systematic means to utilize the data; Fund for the Supplemental Guidelines is already for approval; Development of the Supplemental Guidelines on Mainstreaming SLM in the CLUP; Conduct of the Planners Forum; Development of the Training Manual for the integration of SLM in CLUP
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The progress of the objective can be described as: **On track**

Outcome 2

Long term capacities and incentives in place for local communities and LGUs to uptake SLM practices in two (2) targeted municipalities in the Philippines

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2018	Cumulative progress since project start
Plant/soil cover in the agricultural land area covering 2,887 ha and forest cover in Barangay Silae	Plant/soil cover to be established during project implementation in the first year 721.65 ha of forest land area	<i>(not set or not applicable)</i>	Increase in plant/soil cover ratio No net loss of forest cover in Barangay Silae	Off-track No data yet on the plant/soil cover and current status of the forest cover. From April 2018, the TDF is continually being improved by members of the Silae United Agrarian Reform Cooperative (SUARC), city agricultural technicians, and technical staff of the	Achieved There is an increase in the plant/soil cover ratio from the baseline of 721.65 hectares to 1,056 hectares of forest cover in Brgy. Silae based on the Agri-mapping data in 2017 generated by the Office of the City Planning and Development of Malaybalay City, Bukidnon. Two

				<p>Soil Conservation Division and the Research Center of Dalwangan of the Bureau of Soils and Water Management, by conducting (1) fertilizer application (complete and vermi-compost); (2) replanting of fruit trees such as Lanzones, Rambutan, Coconut, Durian, Calamansi and Banana; hedgerow crops such as lemon grass, kakawate, and flamengia; (3) planting of forest trees like Narra and Mahogany; (4) establishment of tree guards and construction of bush dams; and (5) extension of the drainage canals at the footslopes of the farm. With an estimated 10% mortality in the total planting materials, the farmer-cooperator initiated to cover the plants with plastic or sacks to lessen exposure to direct heat. Continuous monitoring and replanting of trees were also conducted at the TDF. Improvements were also done in preparation for the site visit during the HLURB Planners' Forum from June 18-22, 2018.</p> <p>In coordination and collaboration with DENR-FMB and DENR-ERDB, the following agro-forest trees were recommended found to be suitable to the project pilot sites. The type of soil of Malaybalay City Bukidnon based on the NGP benchmarking study done by ERDB last 2016 is sandy clay loam. The following forest trees were also recommended because of their wealth creation potential. These are Albizia procera or Akleng Parang, Eucalyptus deglupta or Bagras, Mallotus philippinensis or Banato, Canagra odorata or Ilang-</p>	<p>batches of tree planting activities to increase the plant/soil cover in Malaybalay City were conducted on November 26 to 29, 2018 and January 14 to 17, 2019. These activities were in collaboration with the City Environment and Natural Resources Office. The tree planting activities were participated by 56 farmers in Brgy. Silae, Malaybalay City.</p> <p>One of the outcome indicators in the Philippine Development Plan is the increased in forest cover and the following are the sub outcome indicators: area of denuded and degraded forestland rehabilitated (in ha); area of forest land under effective management (in ha); and production and protection forests delineated. One of the programs of the Department of Environment and Natural Resources is the Expanded National Greening Program (ENGP). The ENGP covers all remaining unproductive, denuded, and degraded forestlands to be managed for production and protection purposes. This included establishment of new plantations and sustainable management of developed plantations as well as protection of existing forests. In addition, the Forest Management Bureau is in to process of enhancing the FMB Technical Bulletin No. 2: "Forest Land Use Planning" to mainstream the Sustainable Land Management Approach.</p> <p>The DA-BSWM in collaboration with DILG shall be preparing a costing for</p>
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				ilang, Cinnamomum mercadoi or Kalingag, Anacardium occidentale or Kasoy, Sesbania grandiflora or Katurai, Canarium ovatum or Pili and Artocarpus altilis or Rimas. These will be the subject of discussions with DENR-FMB, DENR-ERDB, and the local government units in the development of Information, Education and Communication (IEC) advocacy materials and tree-planting activities.	the establishment of the techno demo farm to be included in the plans and programs of LGUs.
Dry Matter (DM) and Organic Matter (OM) Content from 5 sample sites randomly selected from the agricultural land area (151 ha) and forest land area of Barangay Tadoc	Sample sites and baseline Dry Matter and Organic Matter to be determined during Year 1 of implementation 12.61 ha of forest land area	<i>(not set or not applicable)</i>	Average increase in DM and OM Content of Soils in 5 sample sites representing the soil fertility of the 151 agricultural land area No net loss of forest cover in the Barangay Tadoc	Off-track Results of the laboratory soil analysis were obtained for Leyte province. However, the project was not able to obtain new information on the dry matter and organic matter of the sample sites.	Achieved. Results of laboratory soil analysis showed that all pilot farms (Melchor Quemado's Farm, Lorenzo Caca's Farm and Antonietta Arandia's Farm) in Sta. Fe and Abuyog, Leyte have values of soil pH that are within the range of adequate value of 5.5-8.5 using Potentiometric Method at 25C. The data on the organic matter (OM) content of the soils in the pilot sites were tested using the Walkley and Black/Colorimetric Method, UV-Vis (OC x 1.72). In 2017, the OM content of the soil at topsoil at 0-20 cm soil depth showed that there is a higher OM content therefore higher Organic Carbon Content than that of the subsoil at 20-40 cm soil depth with values lower than the adequate value of 1-8%. These data clearly showed that there is a decline in soil fertility as you go deeper down into the soil layers. While data in 2019 showed that the OM content of the soil at different soil depths are in the range of 1-8% OM

					<p>content, thus it can be concluded that improvements in farm management practices were made by farmers from the pilot sites.</p> <p>As for the Dry Matter Content of the soil which can be determined by an increase in yield, data showed that there is an increase in yield from the first harvest season in 2018 to the 3rd harvest season in 2019. During the first harvest, there is a yield of 3,175.2kg/ha for Arandia's Farm, 3,529.41 kg/ha for Quemado's Farm and 4,000.00 kg/ha for Caca's Farm. While for the third harvest, Arandia's farm yielded 5,865.6 kg/ha, Quemado's Farm yielded 6,088.23 kg/ha and Caca's Farm yielded 8,608.9 kg/ha of palay.</p>
Composite Land Degradation Index (LDI)1 monitoring system for monitoring LD is developed and in place for City of Malaybalay and Abuyog Municipality	No LDI monitoring system in use	<i>(not set or not applicable)</i>	<p>Stable or improved composite LDI monitoring system across 20,000 ha in two municipalities</p> <p>Agriculture: 3,038 ha Forestry: 734.26 ha Mixed System – 16,227.74 ha</p>	<p>Off-track</p> <p>The development of the composite land degradation index monitoring system is based on the photo-visual and GIS mapping and assessment using the participatory approach.</p> <p>In the development, it is important to the gain the farmers' perspectives in land degradation which is of paramount importance in the assessment of land degradation. This will ensure the effective participation and empowerment of small holders for the identification and monitoring of visible and non-visible land degradation, as they formulate for themselves location-fitted SLM.</p> <p>In the assessment of land</p>	<p>Partially achieved</p> <p>The Composite Land Degradation Index Monitoring System (CLDIMS) tool has been applied in the two pilot LGUs – Malaybalay City, Bukidnon and Abuyog and Sta. Fe, Leyte. This tool shall be enhanced for transfer to DA-ATI for development of modules for FFS and shall then be a basis for the expansion of the CLDIMS including the CLDI mapping at the LGU level and eventually national level.</p> <p>There were two SLM Packaged Technologies for the Project such as the Muyong Agro-forestry Ridge Stabilization System for the pilot site in Malaybalay City, Bukidnon and the Adaptive Balanced Fertilization Management for the pilot sites in Sta.</p>

				<p>degradation, photo-visual and GIS-based mapping and assessment was used. The initial set of land degradation is derived from the slope map and elevation map which produces the land use or land cover map that determines the land use degradation. After determining the land use degradation, we can now use the soil mapping unit to determine the type and degree of degradation. The SMU is derived using the photo-based visual soil assessment approach via identifying the reference plant and deviant plants in the soil site. After determining the SMU, we can now determine the extent of degradation which represents the area affected and adding it up to the types and degree of farm degradation which is referred as the LDI by land management unit. It measures the land use systems both for exposed soil surface and covered soil surfaces. After getting the type, degree and extent of degradation we can now consolidate the LDIs into CLDI in the pedo-ecozones which represents the landscapes. The different layers from the SMUs, LMUs to the pedo-ecozones represent the watershed of transferable physiographic units for visible/non-visible LD and CLDI Mapping Assessments. Overlaying the CLDI map to the Land Suitability Map would produce the Barangay Land Suitability – CLDI Map for field validation which will in turn be used to produce the Agriculture Investment/Development Program and CLUP.</p>	<p>Fe and Abuyog, Leyte.</p> <p>The Muyong Agro-Forestry Ride Stabilization System (MARSS) is a Policy-based transitional land management strategy for the reversion of corn cultivation to agro-forestry system in water and forest resources protection areas. As the Project, have identified the pilot farm to be in a designated Forest and Water Resources Protection Zone where subsistence corn cultivation has taken over sloping forest lands which resulted into varying forms and degrees of soil erosion and its impact on soil fertility depletion. In the formulation of this technology, two cores issues were identified in the pilot site. First, is the misuse of classified public or protected forest land. These lands were planted with round-up ready (RR) corn, a primary ingredient for livestock feed formulation. However, the approved CLUP of Malaybalay City showed that these lands are classified under Cluster 3 and are in violation of both the LGU and the DENR policies on Forest Hydrology and Watershed Management and Conservation. Second, farmers who have occupied the Protection Zone are burning their farm wastes and is in direct violation of the City Ordinance which prohibits burning of solid wastes. Having identified these issues, the Project saw this as an opportunity. What the farmer-cooperator do is that every harvest, corn stovers are cut and piled up along the contours and are burned in place. This practice facilitated corn waste disposal, pest</p>
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				<p>In the mapping of visible and invisible degradation events, soil degradation became the proxy indicator of land degradation and is the basis of farmer adaptation to changing habitat and farm productivity. Degradation is a continuous process of spatial and temporal change of habitat and soil health. The type, extent and degree of land degradation in the same landscape change in the dry and wet seasons. During the wet season, there would be extreme events and uncertainty in rainfall which brings flooding for the lowland and soil erosion/landslide/soil nutrient loss for the upland. During the dry season, there would be high/increasing temperature which brings soil fertility depletion for the lowland and moisture depletion and soil carbon losses for the upland/highland. This basically composes the framework for seasonal land degradation, climate change and landscape assessment. It is important to note in the land degradation wall by M. Stocking and Niamh Murhnaghan, 2000 that for soil degradation, the soil erosion and nutrient depletion.</p>	<p>and disease control and management and as a cheap source of organic carbon materials for the improvement of soil fertility. The integration of this practice to the adaptive MARSS is a special community-based action for integrating local knowledge for soil health restoration with the science of integrated landscape management. Its achievement will be a clear step for the interest of the crop-farming community to transforming environmental risks in this case burning, into opportunities of transforming all occupied Protected Watershed Areas into major carbon sink in the Highland Ecosystems of Mindanao. In addition, the establishment of the soil carbon trashline technology is a potential interceptor of nutrient rich run off thereby increasing the overall resilience and sustainability of MARS and ecosystem services in the general ridge to reef approach. MARSS as described is landscape-based with three distinct agro-forest farming systems: 1) the ridge slope devoted to a mixture of forest trees or woodlot (Muyong) representing the environmental function, the mid-slope for mixed fruit trees identified and selected by the farmer representing the economic function and the foot slope for corn-intercropped with various fruit trees representing the transitional function. This is a strong integration of climate change adaptation with sustained co-benefits to mitigation of climate change. This technology has two phases such as:</p>
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					<p>Phase 1: Transitional Adoption of landscape-based corn production technologies and practices for soil health restoration/improvement to sustain transitional corn production until the land is finally used for sustainable long-term Muyong Agro-forestry establishment and renewed ecosystem services.</p> <p>Phase 2: Policy-based reversion of corn cultivation in support of the implementation of CLUP zoning plan for Water and Forest Resources Protection Watershed.</p> <p>The second technology developed was the Adaptive Balance Fertilization Management (ABFM). ABFM is the Building of SLM knowledge and capacity thru farmer-to-farmer, Big to Small Brother co-learning of ABFM practices against soil nutrient mining for sustaining soil health and food security. The identified pilot site is a community of small farm holders who are primarily dependent on rice production with limited knowledge and financial resources for adopting rice production technologies from DA. The local farming communities have a Gawad Saka Awardee and former local chief executive who have been taking the social role and responsibilities as the Big Brother to Small Brothers in farming for undertaking the “Bayanihan Way” or coaching, mentoring and sharing their “modern” farming facilities for adaptive and cooperative way of farming to reduce soil fertility depletion and climate change-</p>
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					<p>induced land degradation. In general, ABFM is a climate-smart agriculture for restoring degraded lands that are suffering from nutrient depletion. It showcases the integrated, balanced organic-based and inorganic fertilization to harmonizing building soil health and sequestering carbon for the gradual reversal of the effects of climate change for restoring and building resilience and improving the overall adaptive capacity of small farm holders for sustainable intensive farming. This technology focuses on the on-farm incorporation of rice straw and their conversion into compost as base organic ameliorants that improve the use and uptake of inorganic fertilizers, minimize the problem of soil nutrient mining and contribute to the attainment of balanced fertilization and management. It also considered the use of combined mechanical harvester which facilitates automatic distribution, chopping and incorporation of rice straw for more efficient decomposition into compost, thereby improving soil carb sequestration and minimal greenhouse gas emission into the atmosphere. It also reduces the exposure of harvested rice crops to potential losses and brought about by variability in climate. The ABFM is best implemented with Farmer Scientists and Gawad Saka Awardees as the best on-site local experts who can act as one of the Farmer Mentors or Big Brothers to Small Farmers.</p> <p>The Project have developed the</p>
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					<p>Ladderized Approach on ABFM wherein the exchange and promotion of practical information on ABFM to improve the judicious and balanced use of organic farm wastes and chemical fertilizers is on a farmer-to-farmer level. The farming communities in each of the selected pilot sites have their respective farmer leaders who have assumed the role of Big Brothers. Two SLM Partner-Farmers were identified:</p> <p>SLM Partner 1, Pilot Site 1, Cabangalan, Sta Fe, Leyte</p> <p>Farmer 1, Best Farmer, Mentor, Gawd Saka Awardee for Irrigated Rice Production Category of the Gawad Saka Program of DA who applied Balanced Fertilization Strategy of DA-BSWM and acquired a Combined Mechanical Harvester</p> <p>Farmer 2, Good adaptor, Mentee, former Mayor who has several farmers who considered him as their political leader</p> <p>SLM Partner 2, Pilot Site 2, Can Marating, Abuyog, Leyte</p> <p>Farmer 3, Fair Adaptor, Mentor, a self-help farmer who invested on rice dryer as his adaptation to rainfall uncertainty who consults with Farmers 1 & 2</p> <p>Farmer 4, Poor, Non-adaptor, Mentee, Cash-poor farmer, relatively in the category of "old rice farmer".</p> <p>As part of the sustainability plan of the BSWM, adoption and</p>
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					<p>spearheading the implementation of the CLDI indicators by the Soil Degradation unit of the Soil Survey Division of BSWM. In addition, the BSWM are to research on the following R&D areas:</p> <p>For the Soil Conservation and Management Division (SCMD), study on the paradigm shift from adoption to adaptation of SLM adaptive technologies</p> <p>For the Soil Survey Division (SSD), research on the soil health assessment and mapping of the BSWM that may integrate photo-visual mapping and the use of biological indicators; and to correlate land degradation indicators with soil taxonomy</p> <p>For the Agricultural Land Management and Evaluation Division (ALMED), to integrate in the updating of NPAAD and integration of the SAFDZ in the CLUP</p> <p>For the Soil Water Resources and Research Division (SWRRD), to further conduct validation research on nutrient management making use of the baseline and tools established from the project; in the upland, to validate cropping management systems such as low intensity controlled burning for soil health restoration, mix of crops in the hedgerows both as soil conservation measure and enhancing biodiversity; and the use of biological indicators such as weed species, root measurement, leaf and soil color,</p>
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					<p>insects etc. to evaluate crop performance versus nutrient required</p> <p>For the Laboratory Service Division (LSD), to update fertilizer/nutrient recommendation in the lowlands and uplands with reference to site specific land degradation hotspots e.g. fertility decline; the use of quick test such as enhanced soil test kits for monitoring soil organic carbon; and the use of combustion method for measuring carbon and nitrogen in the laboratory for monitoring purposes on the build-up of organic carbon in the soil due to the applied adaptive technologies.</p>
Increased in % of SLM guidance delivered by extension services	Lack of SLM modules on the existing Farmers Field School (FFS)	<i>(not set or not applicable)</i>	100% SLM guidance delivered by extension services through integration of complete SLM modules in the season-long FFS	<p>Off-track</p> <p>While the Competency Development Program Guide (Part One) and Adopting the ILMF and Mainstreaming SLM in the CLUP (Part Three) have been completed, the SLM Training Manual (Part Two) is still in the draft form, with on-going revisions based on the contents authored by the SLM Specialist and data coming in from the two pilot areas.</p> <p>Consultation meetings continue among the Capacity Development and Training Specialist, Sustainable Land Management Specialist, and BSWM-GSITD. On June 25, 2018, the Capacity Development and Training Specialist presented the draft SLM Training Modules and will submit revisions after considering inputs from the SLM Specialist and BSWM-GSITD. Based on these discussions, the Project</p>	<p>Partially achieved</p> <p>50% of SLM guidance delivered by extension services through the integration of complete SLM modules in the season-long FFS</p> <p>Through the implementation of the project in the pilot sites, the agricultural extension workers and technicians were capacitated in the SLM technologies applicable in addressing soil erosion and soil fertility decline in the areas.</p> <p>Specifically, the Project implemented the SLM Module on Photo-Visual Recording, Assessment and Monitoring of Farm Degradation. The approach for the two pilot sites with different crops and different land degradation challenge being monitored utilized the same strategy – use of photos taken by mobile phones with built in camera to take picture of healthy (reference) and</p>

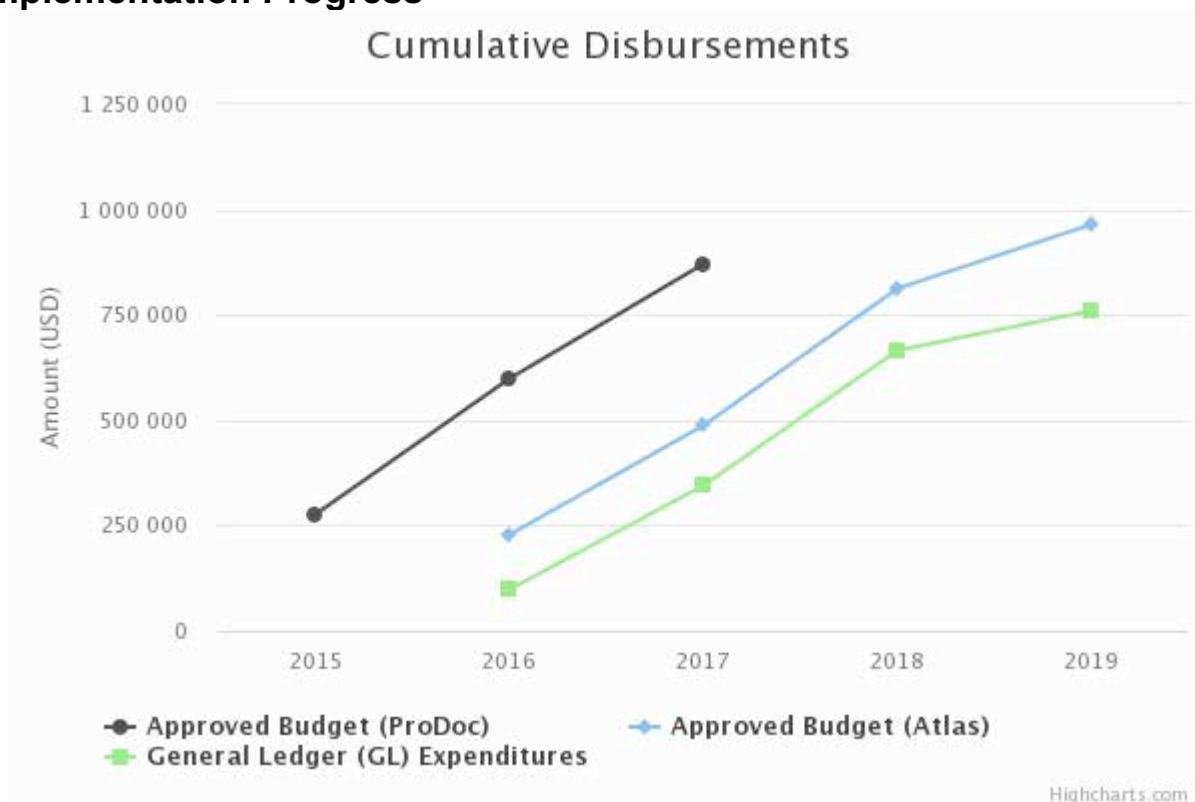
				<p>Management Office firmed up the following trainings in the 3rd quarter: Fertility Management for Leyte, Farm-level and National-level GIS training, and Environment and Natural Resources Accounting for the local government units.</p>	<p>stressed (deviant) plants as well as soil profile. These photos were used to record and quantify important phenological stages in agricultural crops that are critical and increase chances of getting attacked by pests and diseases.</p> <p>This methodology was found to be a very simple method for integrating local farm knowledge and observation with the basic science of soil erosion and related land degradation since color of plants and exposed soil surfaces can be easily understood and remembered by the farmer. One of the key takeaway is the observation of the green color in the plant for it represents the state of the health of the plant. Too green or light green may reflect the unhealthy/stressed state of the plants.</p> <p>Farmers were trained and coached on the field identification and monitoring of land degradation, with focus on soil fertility reduction, soil erosion and flooding using the photo-visual approach.</p> <p>This methodology as well as the two SLM packaged technologies were presented to rice and corn farmers in an orientation-briefing held on May 20, 2019 for Leyte Farmers and May 22-24, 2019 for North, Central and South Bukidnon. The orientation-briefing also served as a venue for the farmer-cooperators from both pilot sites to share their experiences, learnings as well as best practices from rice and corn farming.</p>
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					The incorporation of the SLM modules to the FFS is part of the sustainability plan of the DA-Agricultural Training Institute, as this would involve a rigorous amount of time and effort that would outlive the project.
Farming households adopt sustainable agricultural practices and integrated SFM/SLM practices.	There are total 2,924 farming households in the 2 target sites (3 Brgys. out of 46 Brgys. in Malaybalay City and 13 Brgys. out of 63 Brgys. in Abuyog)	<i>(not set or not applicable)</i>	At least 585 of the farming households in 2 targeted municipalities (3 Brgys. out of 46 Brgys. in Malaybalay City and 13 Brgys. out of 63 Brgys. in Abuyog) adopt sustainable agriculture practices and integrated SFM/SLM practices	Off-track The development of the techno-demonstration farm is supported by farming households including the family of the TDF farmer cooperator Rosita Andalin. Activities consist of transect walk survey, topographic mapping, contouring, land preparation and planting. Specific activities include application of 14-14-14 (complete) and vermi-compost fertilizers, planting of fruit trees such as Lanzones, Rambutan, Coconut, Durian, Citrus and Banana. Hedgerow crops such as lemon grass, Madre de Cacao and Flamengia were also planted. In addition, forest trees like Narra and Mahogany were also planted in the 18-30% slope. Tree guards per tree were also placed, brush dams were established and canals were constructed. Wherever necessary, the cooperator applied individual plant covers and vermi-compost. To ensure the adoption of SLM in Barangay Silae, Malaybalay City, Bukidnon, an initial fourteen (14) farmers were trained on farm planning for interested and qualified applicants to the Production Loan Easy Access (PLEA) Program. The	Partially achieved 381 farming households from the Malaybalay City and Abuyog Municipality expressed their willingness to adopt sustainable agricultural practices and integrated SFM/SLM practices. The Project in collaboration with the Agricultural Land Management and Evaluation Division (ALMED) of DA-BSWM formulated a structured questionnaire: Survey on Farmer's Willingness to Adopt the SLM Packaged Technologies and Best Practices for both pilot sites. During the conduct of the orientation-briefing of rice and corn farmers in Leyte and Bukidnon, last part of the program was the rendering of the survey questionnaire. The questionnaire gathered data on the following: farmer's willingness to adopt SLM packaged technologies (Muyong Agro-forestry Ridge Stabilization system and Adaptive Balanced Fertilization Management), profile of farmer (name of the respondent, residence address, status of tenure, educational attainment, years in farming, and source of farming information), profile

				<p>participants of the 3-day activity are members of the Silae United Agrarian Reform Cooperative (SUARC) and Silae Lumad Cooperative (SLC). The training was supported by the City and the Provincial Agriculture Offices composed of Agricultural Extension Workers and Technical Staff. Resource speakers and trainers to the workshop were from BSWM Soil Survey Division, Water Resource Management Division, Soil Conservation Management Division, Dalwangan Research Center, Malaybalay City Agriculture Office and Bukidnon Provincial Agriculture Office. The training program used the farmers training approach on SLM practices. The 3-day workshop covered both theoretical and practical aspects of SLM Practices and Farm Planning. There were a number of practical sessions held that enabled the participants in having a hands-on demonstration on some technologies and use of equipment. Participants took keen interest in practical work to acquire hands-on experience on making and using an A-Frame, propagating forage seeds, composting, and collecting and preparing soil samples for analysis. The farm planning training served as a venue for the Project to promote SLM practices and technologies among the qualified borrowers. This will also enable the farmers to be included in the Department of Agriculture's Juan Magsasaka at Mangingisda National Database System.</p>	<p>of the farm (farm size, farm location, dominant vegetation in the surrounding area, crops planted, farm management practices), observed changes in the farm and household (HH size, no. of farm laborers, house type, crop type, variety, crop diversification, cropping pattern, incidence of pests and diseases, weed problems, occurrence of soil erosion, landslide incidence, difficulty in tillage, occurrence of flooding, soil surface dryness, soil fertility decline, and observance of weed or vegetation not native to the area), us of Monsanto, changes in amount of rainfall, other soil management practices such as use of fertilizers, minimum tillage residue incorporation, trash line, and terracing.</p> <p>Findings of the Project showed that it is important to have Local Champions (like the Gawad Saka Awardees – who are farmer scientists) that could coach and mentor their fellow-farmers. These local champions will ensure the dissemination and replication of their learnings from the project.</p> <p>Ensuring the adoption of the farming households of the SLM practices and technologies in neighboring cities/municipalities and provinces would entail institutionalization thru a policy issuance of the SLM, CLDI Mapping, Assessment and Monitoring thru Photo-Visual pieces of evidence and capacity building of national and local stakeholders.</p>
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The progress of the objective can be described as:	On track
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D. Implementation Progress



Cumulative GL delivery against total approved amount (in prodoc):	87.25%
Cumulative GL delivery against expected delivery as of this year:	87.25%
Cumulative disbursement as of 30 June (note: amount to be updated in late August):	759,877

Key Financing Amounts	
PPG Amount	30,000
GEF Grant Amount	870,900
Co-financing	4,159,240

Key Project Dates	
PIF Approval Date	May 9, 2014
CEO Endorsement Date	Jun 18, 2015
Project Document Signature Date (project start date):	Jul 14, 2015
Date of Inception Workshop	Dec 9, 2015
Expected Date of Mid-term Review	<i>(not set or not applicable)</i>
Actual Date of Mid-term Review	<i>(not set or not applicable)</i>
Expected Date of Terminal Evaluation	Mar 30, 2019
Original Planned Closing Date	Oct 14, 2018
Revised Planned Closing Date	Jun 30, 2019

Dates of Project Steering Committee/Board Meetings during reporting period (30 June 2018 to 1 July 2019)	
2019-01-15	

E. Critical Risk Management

Current Types of Critical Risks	Critical risk management measures undertaken this reporting period
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F. Adjustments

Comments on delays in key project milestones

Project Manager: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.

The planned closure of the Project by June 30, 2019 was moved due to the completion of activities pertaining to the establishment of a database and decision support information system operational and accessible to LGUs. This has required for a series of activities to complete such as an initial workshop with the highland and lowland pedo-ecological zones, consultation workshops with the Project SLM and CLUP Specialist, validation of the results of the initial workshop and consultation, as well as the testing and finalization of the database and support information system. A user-guide documentation will also be prepared. These activities needed for an additional amount of time to be finished, thus delaying the conduct of the Final Project Board Meeting and finally operationally closing the Project. It also required for an additional amount of time to complete the terminal evaluation of the project as there are a lot of interviews that were and still need to be conducted. Availability of stakeholders (interviewees) was one of the major factors that contributed to the delay in the completion of the terminal evaluation.

Country Office: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.

Project closing date had to be extended due to the above reasons, and to allow completion of the Terminal Evaluation. The Final Project Board meeting is scheduled during the last week of August 2019.

UNDP-GEF Technical Adviser: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.

The requested extension was well justified and deemed necessary to complete the activities and outputs described above and to carry out the Terminal Evaluation of the project. Also, the extension allowed for an orderly transition towards project closure and to ensure the sustainability of project results.

G. Ratings and Overall Assessments

Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Project Manager/Coordinator	Satisfactory	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<p>Since the start of project implementation, a Project Management Office (PMO) has been established on January 2016 at BSWM composed of individuals with strong backgrounds and experiences in project management, project coordination, planning, and administrative and finance. Specialists on Land Use Planning, Database Management and Geographic Information Systems, Sustainable Land Management and Water Biodiversity, and Capacity Development and Training were also engaged under the Project, with equal opportunities given to men and women in the hiring of consultants and staff of the PMO.</p> <p>The involvement of the Local Consultants in the different components provided a clear path for the implementation of the project. Recognizing the importance of mainstreaming and institutionalizing the outputs of the project, DA-BSWM as part of UNCCD-LDN took the initiative to prepare the CLDI Maps and User Guide Documentation for CLDI Mapping and Geodatabase.</p> <p>On the effective cross-sectoral national and local enabling environment to promote integrated landscape management, the Project has been able to establish a multi-sectoral stakeholders committee strengthened at the national level to oversee and give technical advice on the integration of SLM into LGU's development plan. This is coined as the Inter-Agency Technical Committee which consists of senior technical staff from National Government Agencies, namely: DA, DA- BSWM (chair), DENR- FMB and HLURB (co-chairs), DA-SPCMAD, DA RFO 8 & 10, DA-ATI, DAR, DILG, NEDA-ANRES, NCIP, UNDP, IIRR, CMU, VSU, UPLB, PAO Regions 8 & 10. The IATC has on-call members for each of the component – Sustainable Land Management, Comprehensive Land Use Planning, Capacity Development and Training and GIS/Database. There were two IATC meetings – Peer Reviews that were conducted for this reporting period and all outputs of the Consultants were routed to the members thru email for their comments as part of IATC's TOR.</p> <p>The Project has finalized the Integrated Land Management Framework Planning Tool with entry points for mainstreaming SLM in the development plans of NEDA and DILG. This will be institutionalized thru an issuance of a Joint Memorandum Circular between DA and DENR-FMB for the Adoption of the ILMFP for Sustainable Agriculture and Agroforestry Development. The ILMFP elements were mainstreamed into the Agriculture and Fisheries Modernization Plan (AFMP for 2011-2017) of the Department of Agriculture and the Philippine Master Plan for Climate Resilient Forestry Development (PMPCRF, 2016) of the Forest Management Bureau to integrate an investment plan for SLM in these two strategic development plans. This joint circular defines how the mainstreamed ILM/SLM shall be implemented.</p> <p>Another tool finalized is the Guidelines for Mainstreaming SLM in the CLUP. The guidelines underwent an intensive review during the Internal Review Workshop conducted by HLURB Policy Development Group together with the regional HLURB representatives. This will be institutionalized thru an issuance of an HLURB Board Resolution by the Board of Commissioners (BOC). A meeting of the BOC is targeted to be conducted by the third quarter of 2019. On Capacity Development, the Project has completed the conduct of the Training of Trainers for agency stakeholders and community stakeholders. The two batches of trainings produced trainers that could effectively disseminate and replicate the SLM technologies and best practices taught in the training especially the module on Photo-Visual Assessment, Recording and Monitoring of Land Degradation. Graduates of the ToT trained their fellow-farmers on the application of the photo-visual methodology. To capacitate the LGUs in CLDI Mapping a comprehensive Capacity enhancement activity was conducted for the mappers from both pilot sites.</p>	

	In ensuring the sustainability of the Project, the members of the Project Board vouched of sustaining the project by presenting the sustainability plan prepared by their agency. The Office of the Provincial Agriculturist of Leyte also presented their sustainability plan.	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
UNDP Country Office Programme Officer	Moderately Satisfactory	Moderately Satisfactory
Overall Assessment	<p>While the Objective indicators were only partially achieved, it is expected that in due time, these will be eventually achieved. The Guidelines for SLM mainstreaming in CLUPs have been developed, discussed widely with the HLURB who were trained in its application; and presented to the Commissioners. It is only a matter of time before the guidelines will be formally adopted and hence implemented more broadly in all LGUs where relevant. Similarly, the CLUPs of the participating LGUs have been updated following the guidelines, but the same has to be formally adopted by the respective LGUs. LGU wide implementation is also expected to take place after project completion based on the results of the pilot. While these and other policy instruments were originally aimed to be in place by the end of the Project, the Terminal Evaluation acknowledged that it really takes several years (beyond the project period) for policy to be promulgated, such as the DA AFMA and the DENR-DA Joint policies. However, there have been substantive dialogue within the DA and agencies, that was attained at the end of the project. The project also had documented evidences of improved SLM practices in the pilot sites, which could serve as best practice examples for roll out.</p> <p>Implementation Progress substantially improved since the last reporting period. Except for one indicator, achievements during the last reporting period were off track; which are now either partially achieved or achieved. Most of the foundations for eventual adoption and replication of the tools and systems developed under the Project have been established – for example: incorporation of training modules in the Farmers Field School and training of Trainers; identification of community champions who can advocate and disseminate best practices on SLM; and the work on CLDI.</p>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
GEF Operational Focal point	Satisfactory	<i>- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -</i>
Overall Assessment	<p>GEF OPERATIONAL FOCAL POINT Based on the cumulative accomplishments of the project majority of the outputs were achieved, such as: Integrated Land Management Framework (ILMF) mainstreaming Sustainable Land Management (SLM) practices and technologies has been developed and shall be adopted by DA, DENR, DAR, NEDA and DILG; Guidelines on Mainstreaming SLM in the CLUP has been piloted-tested in the 2 pilot sites (Malaybalay City, Bukidnon and Abuyog Municipality, Leyte); Development of GIS-based Land Degradation Assessment (LADA) maps with information/maps accessible and relevant to CLUP preparation for LGUs; and etc.</p> <p>Recognizing the importance of mainstreaming and institutionalizing the outputs of the project, DA-BSWM as part of UNCCD-Land Degradation Neutrality (LDN) took the initiative to prepare the CLDI (Composite Land Degradation Index) Maps and User Guide Documentation for CLDI Mapping and Geo-database.</p> <p>The cumulative delivery rate of the project as of June 2019 is 85.91% with a total expenditures of \$748,179.00 out of US\$870,900.00 total GEF grant.</p> <p>The planned closure of the project by 30 June 2019 was moved to 31 December 2019 due to the completion of some project activities pertaining to the establishment of a database and decision support information system operational and accessible to LGUs. These activities needed for an additional</p>	

	<p>time to be finished, thus delaying the conduct of the Final Project Board Meeting, completion of the Terminal Evaluation of the project, and finally operationally closing the Project. It also required for an additional time to complete the Terminal Evaluation of the project as there are a lot of interviews that were and still need to be conducted. Availability of stakeholders (interviewees) was one of the major factors that contributed to the delay in the completion of the terminal evaluation. The project will be operationally closed during the last Project Board Meeting on 29 August 2019.</p> <p>This Office overall project implementation rating is Satisfactory, since majority of the project outputs are already achieved. With the delayed closing of the project from June 2019 to December 2019 we are confident that the project will complete some of its ongoing/partially achieved activities.</p>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Project Implementing Partner	Satisfactory	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	<p>Generally, the project is rated to be Satisfactory.</p> <p>This can be supported by the following: the completion of the staffing of the Project Management Office paved the way for the smooth implementation of the project activities. It was also assured that the activities conducted were aligned to the indicators and targets set in the project documents. The approved no cost extension contributed to the assurance of meeting the minimum targets, there are still activities that spilled over the approved original no cost extension. This was due to the delay in the on-boarding of BSWM GSITD to the project implementation clearing their role in the delivery of outputs. It was helpful that the programming of the annual work plan for 2019 was until December 2019 giving the Project an ample time to finish the activities before the official Project Closure that will be held in the last project Board Meeting. Agency-initiated sustainability plan were developed by various responsible partners including the LGUs. Each of the sustainability plans are planned to be incorporated in their 2021 budget to ensure support for implementation of clear programs by the agencies 2021. The BSWM however sees that some of these activities are already linked with the regular activities of BSWM at no cost such as the new paradigm in soil survey and mapping to consider relevance in soil taxonomy with land degradation, CLDI monitoring and mapping that can be introduced over at a farmer's scale and the use of photo-visual assessment for soil survey application of land degradation indicators in relation to determination of the location of farm land degradation. Further, the change in leadership is seen to positively impact on the delivery part of the unmet target on the issuance of the Joint Memorandum Circular on the Adoption of the Integrated Land Management Framework Planning for Sustainable Agriculture and Agroforestry Development in support to the newly assigned Department of Agriculture's Secretary's new thinking on the aspect of legislation.</p>	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
Other Partners	(not set or not applicable)	- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -
Overall Assessment	(not set or not applicable)	
Role	2019 Development Objective Progress Rating	2019 Implementation Progress Rating
UNDP-GEF Technical Adviser	Moderately Satisfactory	Moderately Satisfactory
Overall Assessment	<p>This is the third and final PIR for the MS project 'Implementation of Sustainable Land Management (SLM) Practices to Address Land Degradation and Mitigate the Effects of Drought'. The project aims to strengthen the SLM framework to address land degradation process and mitigate the effects of drought in the Philippines. Seven Outputs were planned to achieve two outcomes namely: a)</p>	

Effective national enabling environment to promote integrated landscape management; and b) Long-term capacities and incentives in place for local communities and Local Government Units (LGU) to uptake of SLM practices in two targeted municipalities in the Philippines. The Project focuses principally at the systemic and institutional levels, and hence strengthens the enabling regulatory and institutional framework that would govern efforts to address land degradation in the Philippines. Project investment include the promotion of SLM measures and technologies for adoption by vulnerable farming communities. LGUs are the key platform for planning and extension, guided by an SLM-friendly land use plan and program as well as policy-based technical guidance from national agencies.

Over the past three years the project has made progress towards the achievement of the project objective despite several delays at project start-up (i.e. difficulties in hiring of qualified PM and consultants and staffing turnovers, longer time than expected to complete baseline data, etc.). For this last PIR the Implementation Progress (IP) rating is Moderately Satisfactory (MS). The project reached an overall financial delivery rate of 87.3% which is a considerable improvement compared to the previous reporting period.

As this report is being prepared, the project is conducting a Terminal Evaluation (TE). The preliminary findings of the TE in general commend on the good progress towards relevance, effectiveness and impact, while highlighting areas in which more efficiency could have been achieved. These findings also recognize the limitations in project timeframe, particularly for policy promulgation and adoption of operating systems for SLM technical support nationwide. In terms of sustainability, the TE recommends that the project stakeholders consider consolidating the piloting work in the two LGUs at least in the next two years as a key investment to promote a paradigm shift, along with the promulgation of enabling policies. At the same time, there is a need to complete the establishment of operating systems for technical support, particularly at the BSWM to help LGUs nationwide with SLM mainstreaming. As mentioned by the PM, the Project Board member institutions have formally committed to sustain the processes and results of the project.

In terms of progress towards development objectives, the project has partially achieved both outcomes. As noted by the TE, Outcome 1 has achieved the following milestones: a) Articulation and stakeholder awareness of the true nature of LD in the humid tropics as foundational principle for SLM planning; b) Development of vetted guidelines for mainstreaming SLM in the CLUP through the Integrated Land Management Framework (ILMF) process, and endorsement by the HLURB technical leadership for official HLURBP adoption; c) Development of two models of local work in progress for mainstreaming SLM in CLUP and local investment programs; d) The conduct of ILMF is piloted in two LGUs. In the process this generated updated SLM information sets and national and local skills to support the analytical process; e) One LGU (Abuyog) incorporated SLM elements in the CDP. Another (Malaybalay) is mainstreaming SLM into their local AFMP as well as launched a follow on SLM upscaling program. the following are the gaps constraining the complete attainment of outcome 1: a) The planned supportive sectoral policy framework (AFMA, PMPCRFD) necessary to guide local mainstreaming and justify incremental national financing for SLM did not materialize; b) An information management system to support more effective localized SLM decisions through improved access to combined information on updated LD information and matching best practice options) is not yet in place; c) The competency development program addressed immediate needs for piloting SLM in in two LGUs. However, the utilization of trained staff particularly at BSWM will be limited unless project innovations begin to be incorporated in the regular internal protocols for assistance program to LGU. Key discussions have yet to start on this. While Outcome 2 has achieved the following results: a) The two LGUs are ready to incorporate the ILMF into the CLUP when the latter will be officially updated in 2020 /2021; b) Farmer-based monitoring of LD demonstrated in selected farms in pilot barangays. This serves as backbone for an LGU-wide, CLDI- assisted monitoring system; c) Additional financing has

been secured of SLM investment in Malaybalay through the launching of the LGU-initiated and managed SLM upscaling program as well as mainstreaming SLM in the local AFMP. Abuyog has incorporated SLM in the CDP. On the other hand, there are certain gaps relevant to Outcome 2 including: a) A sustainable LGU monitoring system for LD trends using the CLDI is only partially completed; b) An FFS-assisted SLM extension system in the pilot LGUs for Project-assisted technology improvements is not yet in place. C) household level adoption of sustainable agricultural practices and integrated SFM/SLM practices is very low partly due to absence of extension systems and limited success in facilitating appropriate policy-based incentive systems.

Considering the progress made towards the development objectives of the project, and the commitment of the Project Board member institutions to ensure the sustainability of project results, the project is granted a DO rating of (MS) Moderately Satisfactory.

Final recommendations

- a) TE report to be finalized and shared with key stakeholders and BRH by Oct 2019;
- b) Management responses to the TE recommendations to be prepared with the focus on sustaining project's results [through government and partners]. Ideally TE MRs should be prepared while the PMU is still on-board;
- c) Project sustainability/exit strategy to be updated to incorporate any recommendations from the TE that have not been considered before;
- d) CO and PMU to ensure that project achievements, good practices and lessons learned are systematized for future programming.

H. Gender

Progress in Advancing Gender Equality and Women's Empowerment

This information is used in the UNDP-GEF Annual Performance Report, UNDP-GEF Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning. The Project Manager and/or Project Gender Officer should complete this section with support from the UNDP Country Office.

Gender Analysis and Action Plan: <i>not available</i>
Please review the project's Gender Analysis and Action Plan. If the document is not attached or an updated Gender Analysis and/or Gender Action Plan is available please upload the document below or send to the Regional Programme Associate to upload in PIMS+. Please note that all projects approved since 1 July 2014 are required to carry out a gender analysis and all projects approved since 1 July 2018 are required to have a gender analysis and action plan.
<i>(not set or not applicable)</i>
Please indicate in which results areas the project is contributing to gender equality (you may select more than one results area, or select not applicable):
Contributing to closing gender gaps in access to and control over resources: Yes
Improving the participation and decision-making of women in natural resource governance: Yes
Targeting socio-economic benefits and services for women: Yes
Not applicable: No
Atlas Gender Marker Rating
GEN1: some contribution to gender equality
Please describe any experiences or linkages (direct or indirect) between project activities and gender-based violence (GBV). This information is for UNDP use only and will not be shared with GEF Secretariat.
None
Please specify results achieved this reporting period that focus on increasing gender equality and the empowerment of women.
Please explain how the results reported addressed the different needs of men or women, changed norms, values, and power structures, and/or contributed to transforming or challenging gender inequalities and discrimination.
The Project produced local champions from both project sites who are also able to serve as trainers to fellow farmers. The following are the champions and trainers identified by the end of the Project:
<ol style="list-style-type: none"> 1. Ms. Rosita Adalim – owner of the techno demo site at Brgy. Silae, Malaybalay City 2. Ms. Lucell Carpentero – Agricultural Technician and Extension Worker of the City Agriculture Office, Malaybalay City, 3. Ms. Antonietta Arandia – Agricultural Technician of the Municipal Agriculture Office, Abuyog 4. Ms. Evangeline Garing – Agricultural Technician of the Office of the Provincial Agriculturist (OPA) Leyte 5. Ms. Dina Pitao – Agriculturist II of OPA, Leyte
Please describe how work to advance gender equality and women's empowerment enhanced the project's environmental and/or resilience outcomes.
The project recognized the importance of gender equality. Women are given importance in terms of decision making and participation to project activities. The composition of the Project Board, Inter-Agency Technical Committee, Project Management Office is equally represented by both men and women. The project stakeholders and direct beneficiaries of the project include women. The beneficiaries were given equal opportunities to participate in orientations, meetings and coaching and mentoring sessions. Involvement of both men and women ensured for the sustainability of the project's outputs.

I. Social and Environmental Standards

Social and Environmental Standards (Safeguards)

The Project Manager and/or the project's Safeguards Officer should complete this section of the PIR with support from the UNDP Country Office. The UNDP-GEF RTA should review to ensure it is complete and accurate.

1) Have any new social and/or environmental risks been identified during project implementation?
No
If any new social and/or environmental risks have been identified during project implementation please describe the new risk(s) and the response to it.
<i>(not set or not applicable)</i>
2) Have any existing social and/or environmental risks been escalated during the reporting period? For example, when a low risk increased to moderate, or a moderate risk increased to high.
No
If any existing social and/or environmental risks have been escalated during implementation please describe the change(s) and the response to it.
<i>(not set or not applicable)</i>
SESP: SESP_PIMS5365.pdf
Environmental and Social Management Plan/Framework: <i>not available</i>
For reference, please find below the project's safeguards screening (Social and Environmental Screening Procedure (SESP) or the old ESSP tool); management plans (if any); and its SESP categorization above. Please note that the SESP categorization might have been corrected during a centralized review.
<i>(not set or not applicable)</i>
3) Have any required social and environmental assessments and/or management plans been prepared in the reporting period? For example, an updated Stakeholder Engagement Plan, Environmental and Social Impact Assessment (ESIA) or Indigenous Peoples Plan.
No
If yes, please upload the document(s) above. If no, please explain when the required documents will be prepared.
<i>(not set or not applicable)</i>
4) Has the project received complaints related to social and/or environmental impacts (actual or potential)?
No
If yes, please describe the complaint(s) or grievance(s) in detail including the status, significance, who was involved and what action was taken.
<i>(not set or not applicable)</i>

J. Communicating Impact

Tell us the story of the project focusing on how the project has helped to improve people's lives.

(This text will be used for UNDP corporate communications, the UNDP-GEF website, and/or other internal and external knowledge and learning efforts.)

Science of Adaptive Land Management

The inception phase of the project revealed that revisiting Sustainable Land Management (SLM) technology in degraded and drought vulnerable areas in the Philippines would lead to an updated revitalized SLM framework (SLM2). The SLM2 framework would incorporate the following considerations on top of the conventional SLM science: climate change adaptation; the economic realities faced by the farm family that determine its relationship with the land; and recognition of the farmer's traditional and local knowledge. These additional elements constitute what is being referred to as Adaptive Land Management or ALM or Responsible Farming.

SLM Project has identified and characterized ALM as an approach to managing agricultural land resources that enhances the farmer's ability to maintain land productivity by adapting to his environmental, economic and social circumstances with the welfare of his family foremost in mind. In ALM, sustainability is measured by the farm family's ability to adapt. Thus, SLM2 is the integration of ALM into conventional SLM. Both SLM2 and ALM are concrete and original contributions of the project to SLM science. Along with the project's other significant innovation (e.g. Integrated Land Management Framework Planning Tool or ILMFP), SLM2 represents a more holistic and inclusive approach to land productivity. The SLM2 framework was actualized and operationalized in practice, documented and disseminated through conduct of trainings.

Capacity Development

SLM Project is supporting institutional BSWM strategy and implementation of on-going activities in land degradation index mapping and monitoring system for adaptive resource management. SLM Project also supports knowledge sharing among farmers by providing them simple procedures for identifying farm level land degradation thru the implementation of the Photo-Visual Assessment, Recording and Monitoring of Land Degradation, such as the use of hand held camera in taking photos of healthy (reference) and stressed plants (deviant), identification of flooding or soil nutrient status thru the use of biological indicators which ensures field participation of local people and technicians that became part of the adaptive process in sustainable land management. The participation of local SLM practitioners during field review and actual mapping of land degradation for the pilot sites in Bukidnon and Leyte provinces helped facilitate in communicating results of establishing SLM2 and contribute to sustainability since the farmer cooperators are fully aware of constituency for faster and wider transfer of SLM2. In addition, the identification and utilization of farmer-scientists from the area helped in the proper dissemination and replication of the learnings, experiences and best practices of the farmers from both pilot sites. Moreover, SLM Project is including competencies on indigenous, traditional and local knowledge in the training curricula. Project trainees included farmers and community leaders as well as technicians from stakeholder agencies.

Environment

SLM Project has completed the establishment of techno-demonstration farm, obtaining valuable baseline information on phenological characteristics of the plant, socio-economics, soils, topography, and farm contours in the pilot sites. A total 430 planting materials were planted at the techno-demonstration farm in Barangay Silae. Tree Planting activities spearheaded by the local champions (City Environment and Natural Resource Office) were conducted in Brgy. Silae.

Institutional Networking

Collaboration and partnerships with all levels of government, the academe, technical experts, and farmers' organizations were pursued under SLM Project. Key to the successful implementation of initiatives and their sustainability is strong local involvement. Partnership with local government units from the very beginning ensures long-term viability of the project. Their involvement ensures

ownership and active involvement in project activities and results in wider reach especially up to the levels of the community (inclusive of farmer leaders, farmers and farm family members). As project implementation proceeds, commitments from the government and farmer-beneficiaries will deepen the project's impacts in the focal areas and help make it more sustainable.

Addressing Climate Change

The Project has developed two (2) SLM Packaged Technologies namely the Muyong Agro-forestry Ridge Stabilization System and the Adaptive Balanced Fertilization Management. Both technologies have its own strategy in climate change adaptation with co-benefits to mitigating the impacts of climate change. The Muyong Agro-forestry Ridge Stabilization System showcased the transitional and transformational approach in reverting Forest Protection Micro Watershed Areas in Bukidnon that are planted with round-up ready corn which contributes to the worsening case of soil erosion into Forest and Agro-forest trees intercropped with annual and perennial crops of the farmers' choice. While the Adaptive Balanced Fertilization Management showcased the combination of the application of the Balanced Fertilization Strategy which involves chopping and distribution of rice straws and incorporating it to the land after harvesting until it decomposes. This strategy was partnered with the use of a Combined Mechanical Harvester which automatically distributes rice straws and incorporate them after harvesting.

Knowledge Management, Project Links and Social Media

Please describe knowledge activities / products as outlined in knowledge management approved at CEO Endorsement /Approval.

Please also include: project's website, project page on the UNDP website, blogs, photos stories (e.g. Exposure), Facebook, Twitter, Flickr, YouTube, as well as hyperlinks to any media coverage of the project, for example, stories written by an outside source. Please upload any supporting files, including photos, videos, stories, and other documents using the 'file library' button in the top right of the PIR.

The Project is already starting to utilize social media through Facebook and Instagram. These can be accessed through the links below:

FB page

https://www.facebook.com/Sustainable-Land-Management-Project-2125930420998042/?modal=admin_todo_tour

IG account

<https://www.instagram.com>

Account name: Sustainable Land Mgt Project

Username: slmproject

Exposure story

<https://undp-biodiversity.exposure.co/philippines-slm-project>

K. Partnerships

Partnerships & Stakeholder Engagement

Please select yes or no whether the project is working with any of the following partners. Please also provide an update on stakeholder engagement. This information is used by the GEF and UNDP for reporting and is therefore very important! All sections must be completed by the Project Manager and reviewed by the CO and RTA.

Does the project work with any Civil Society Organisations and/or NGOs?
Yes
Does the project work with any Indigenous Peoples?
Yes
Does the project work with the Private Sector?
Yes
Does the project work with the GEF Small Grants Programme?
No
Does the project work with UN Volunteers?
No
Did the project support South-South Cooperation and/or Triangular Cooperation efforts in the reporting year?
No
Request for MSP Approval: PIMS 5365 Philippines SLM CEO Endorsement Request 5 May 2015.docx
Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description of the Stakeholder Engagement Plan as documented at CEO endorsement/approval (see document below). If any surveys have been conducted please upload all survey documents to the PIR file library.
<p>The implementation of the Sustainable Land Management (SLM) project is a collaborative endeavour among many of national and sub-national agencies, local government units, academe, and civil society organizations. The Department of Agriculture – Bureau of Soils and Water Management (DA-BSWM) as the executing agency has the overall responsibility for the timely and cost-effective implementation of project activities.</p> <p>To serve as the oversight of the project implementation, a Project Board was created. The Project Board provided the policies and directions in the implementation of the Project. It is chaired by DA Undersecretary for Field Operations and co-chaired by National Economic and Development Authority and United Nations Development Programme – Philippines. Members of the Project Board are DA-BSWM, Department of Environment and Natural Resources – Forest Management Bureau (DENR-FMB), Department of Interior and Local Government (DILG), Department of Agrarian Reform (DAR), Housing and Land Use Regulatory Board (HLURB), International Institute for Rural Reconstruction (IIRR), League of the Municipalities of the Philippines (LMP), National Commission on Indigenous Peoples (NCIP), University of the Philippines Los Baños (UPLB). Throughout the project life, the Project Board met for six times with the following general agenda: approval of the Annual Work Plan, reporting of updates, status, accomplishments, and issues and challenges of the project.</p> <p>While an Inter-Agency Technical Committee (IATC) was created to ensure the technical aptness of the implementation of the project in the pilot sites, formulation of guidelines and policies, and in the formulation of technology modules for use in training and dissemination. The Committee also serves to assess and evaluate the outputs of the consultants, determine its acceptability and viability, and recommend for its approval and acceptance by the Project Board. Lastly, they ensured that the work and financial plan of the project is geared towards the achievement of the project outcomes hence, recommend for its approval by the Project Board.</p> <p>It is chaired by the National Project Director and OIC-Director of DA-BSWM, co-chaired by DENR-FMB and HLURB. The regular members are DA-Special Projects Coordination, Monitoring and</p>

Assistance Division (SPCMAD), DA-Regional Field Offices VIII and X, DA-Agricultural Training Institute (ATI), DAR, DILG, NEDA, NCIP, UNDP, IIRR, UPLB, Central Mindanao University, Visayas State University, Provincial Agriculture Office Bukidnon and Office of the Provincial Agriculturist Leyte. On-call experts per discipline were also identified, for Discipline 1 – Sustainable Land Management are BSWM Laboratory Services Division (LSD), Soil Survey Division (SSD), Soil Conservation and Management Division (SCMD), Dalwangan Research Station, DA-Agricultural Credit and Policy Council (ACPC) and Philippine Crop Insurance Corporation (PCIC); for Discipline 2 – Comprehensive Land Use Planning are BSWM Agricultural Land Management and Evaluation Division (ALMED), Geoinformatics Soil Information and Technology Division (GSITD), Provincial Planning and Development Offices (PPDOs) of Bukidnon and Leyte provinces; for Discipline 3 – Capacity Development and Training includes BSWM Dalwangan Research Station; and for Discipline 4 – Geographic Information Systems/Database are BSWM-GSITD, PPDOs. The members of the IATC were nominated by their respective representatives to the Project Board.

The Project also collaborated with DA Agricultural Credit and Policy Council to facilitate the integration of SLM to the conditions for the availment of the Production Loan Easy Access Program for farmers.

L. Annex - Ratings Definitions

Development Objective Progress Ratings Definitions

(HS) Highly Satisfactory: Project is on track to exceed its end-of-project targets, and is likely to achieve transformational change by project closure. The project can be presented as 'outstanding practice'.

(S) Satisfactory: Project is on track to fully achieve its end-of-project targets by project closure. The project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Project is on track to achieve its end-of-project targets by project closure with minor shortcomings only.

(MU) Moderately Unsatisfactory: Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. Project results might be fully achieved by project closure if adaptive management is undertaken immediately.

(U) Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets by project closure. Project results might be partially achieved by project closure if major adaptive management is undertaken immediately.

(HU) Highly Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets without major restructuring.

Implementation Progress Ratings Definitions

(HS) Highly Satisfactory: Implementation is exceeding expectations. Cumulative financial delivery, timing of key implementation milestones, and risk management are fully on track. The project is managed extremely efficiently and effectively. The implementation of the project can be presented as 'outstanding practice'.

(S) Satisfactory: Implementation is proceeding as planned. Cumulative financial delivery, timing of key implementation milestones, and risk management are on track. The project is managed efficiently and effectively. The implementation of the project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Implementation is proceeding as planned with minor deviations. Cumulative financial delivery and management of risks are mostly on track, with minor delays. The project is managed well.

(MU) Moderately Unsatisfactory: Implementation is not proceeding as planned and faces significant implementation issues. Implementation progress could be improved if adaptive management is undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track. The project is not fully or well supported.

(U) Unsatisfactory: Implementation is not proceeding as planned and faces major implementation issues and restructuring may be necessary. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are off track with major issues and/or concerns. The project is not fully or well supported.

(HU) Highly Unsatisfactory: Implementation is seriously under performing and major restructuring is required. Cumulative financial delivery, timing of key implementation milestones (e.g. start of activities), and management of critical risks are severely off track with severe issues and/or concerns. The project is not effectively or efficiently supported.