

Capacity Building on Land Capability Zoning

Activity Report

1. Title:

Land Capability Zoning Workshop

2. Duration and Date

The workshop was conducted for three (3) days, starting from August 27, 2024 until August 29, 2024. Activities and lectures were held from 8 AM to 5 PM.

3. Venue

The activity was held at the International Convention Center (ICC), Hall B, located at Don Mariano Marcos Memorial State University North La Union Campus (DMMMSU-NLUC) in Bacnotan, La Union. This venue provided a conducive environment for learning and collaboration among participants.

4. Content and Methodology

The workshop aimed to equip Local Government Units (LGUs) with the skills to implement Ridge to Reef (R2R) Land Use Planning through Land Capability Zoning. The workshop combined theoretical lectures and practical GIS training. Day 1 focused on the theoretical foundations of Watershed Ecosystem Management or R2R principles, while Day 2 introduced GIS as the technology for R2R implementation.

On Day 2, participants created RKLS maps as a precursor to land capability mapping. A resource person provided an overview of concepts, processes, and calculations for Soil Erosion Potential (SEP), Soil Loss Tolerance (SLT), and Soil Erosion Index (SEI). These outputs were used on Day 3 for Land Capability Zoning.

Land Capability Zoning assesses and maps land suitability based on physical characteristics. The workshop determined the following land capability classes for La Union province: agroforestry production, limited production, production buffer, protection buffer, strict protection, and unlimited production. Figure 1 demonstrates how the outputs from Day 2 were integrated into determining land capability. LGUs then submitted map layouts focusing on their respective municipalities.

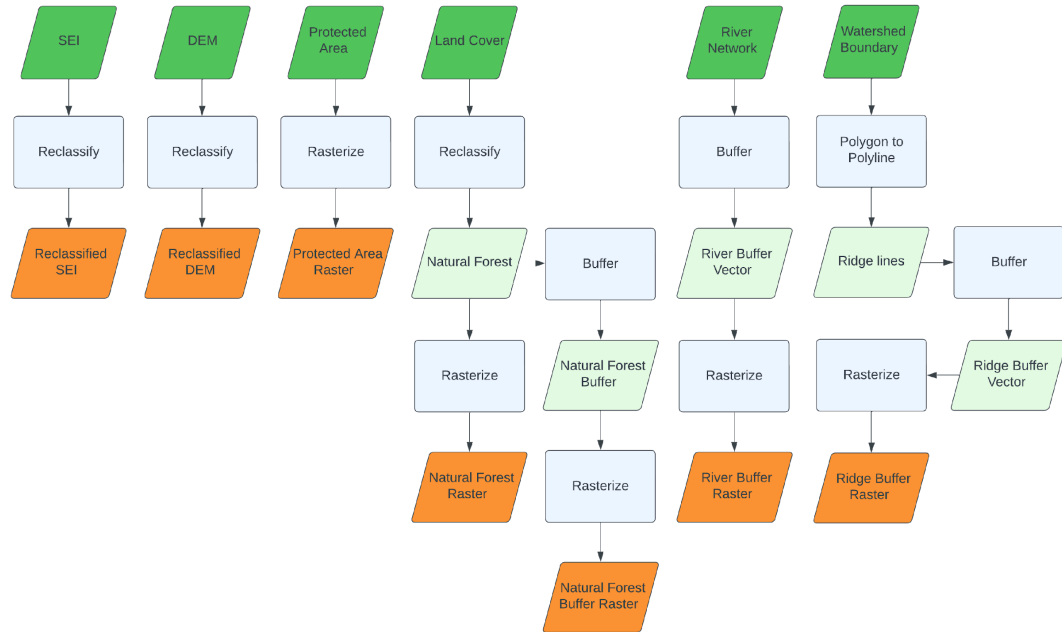


Figure 1. Land Capability Auxiliary Data Workflow

Table 1. Capacity Building in Land Capability Zoning Program of Activities

Day 1: 27 August 2024 (Tuesday)		
Time	Agenda	In- Charge
7:00 AM	Registration	<i>Project Staff, APN</i>
8:00 AM	Preliminaries	PGLU
8:10 AM	Introduction of Resource Persons	<i>Project Staff, APN</i>
8:15 AM	Opening Remarks	Dr. Rex Victor Cruz <i>Project Leader, APN</i>
8:20 AM	Lecture: What is Land Capability and its importance in Watershed Management	Dr. Rex Victor Cruz <i>Project Leader, APN</i>
10:00 AM	Coffee Break	
10:15 AM	Lecture: What is Land Capability and its importance in Watershed Management	Dr. Rex Victor Cruz <i>Project Leader, APN</i>
12:00 NN	Lunch Break	
1:00 PM	Workshop: Overlay Analysis and Surface	Jayson L. Arizapa <i>GIS Expert, UPLB</i>
3:00 PM	Health Break	

3:15 PM	Workshop (Cont): Overlay Analysis and Surface	Jayson L. Arizapa <i>GIS Expert, UPLB</i>
5:00 PM	Open Forum	
-End of Day 1-		
Day 2: 28 August 2024 (Wednesday)		
Time	Agenda	In- Charge
7:00 AM	Registration	UPLB
8:00 AM	Workshop: Creation of RKLS Map	Leonardo D. Barua <i>GIS Expert, UPLB</i>
10:00 AM	Coffee Break	
10:15 AM	Workshop (Cont): Creation of RKLS Map	Leonardo D. Barua <i>GIS Expert, UPLB</i>
12:00 NN	Lunch Break	
1:00 PM	Workshop: Computing for Soil Erosion Potential (SEP), Soil Loss Tolerance (SLT), and Soil Erosion Index	Leonardo D. Barua <i>GIS Expert, UPLB</i>
3:00 PM	Health Break	
3:15 PM	Workshop (Cont): Computing for Soil Erosion Potential (SEP), Soil Loss Tolerance (SLT), and Soil Erosion Index	Leonardo D. Barua <i>GIS Expert, UPLB</i>
5:00 PM	Open Forum	
-End of Day 2-		
Day 3: 29 August 2024 (Thursday)		
Time	Agenda	In- Charge
7:00 AM	Registration	UPLB

8:00 AM	Workshop: Land Capability Zoning	Angela A. Limpiada <i>GIS Expert, UPLB</i>
10:00 AM	Coffee Break	
10:15 AM	Workshop: Land Capability Zoning	Angela A. Limpiada <i>GIS Expert, UPLB</i>
12:00 NN	Lunch Break	
1:00 PM	Workshop: Map Layouting	Angela A. Limpiada <i>GIS Expert, UPLB</i>
3:00 PM	Health Break	
3:15 PM	Presentation of Outputs	Participants
3:45 PM	Synthesis	Angela A. Limpiada <i>GIS Expert, UPLB</i>
4:00 PM	Awarding of Certificates	
4:30 PM	Moving Forward and Closing Remarks	Ms. Michaela Louise Delfinado, EnP <i>PPDO, Province of La Union</i>
-End of Day 3-		

5. Participants and Facilitators

The three-day training program was attended by a total of forty participants. These individuals represented various entities, including the Provincial Government of La Union (PGLU), component municipalities of La Union, and State Universities and Colleges (SUCs) offering forestry and environmental science degree programs. Additionally, representatives from the Provincial Government of Ilocos Sur, Ilocos Sur Polytechnic State College, and Pangasinan State University were invited to participate. These SUCs and provincial governments were included as portions of Pangasinan and Ilocos Sur share some of the watersheds that encompass La Union.

The PGLU delegation comprised representatives from the Sangguniang Panlalawigan, Office of the Provincial Planning and Development Coordinator, Office of the Provincial Agriculturist, and the Provincial Government of the Environment and Natural Resource Office.

The project team dispatched five members to facilitate the training workshop. In addition to the facilitators, four project staff, led by Dr. Rex Victor O. Cruz, the project leader, were also

present. Three resource persons from the University of the Philippines Los Baños were invited to discuss the topics and conduct hands-on training sessions for land capability zoning workshops.

6. Participants' Concerns and Key Takeaways

Regarding zoning and land-use planning, a participant from LGU Burgos inquired as to how Indigenous Peoples (IPs) and their ancestral lands might be included, especially in La Union, Philippines, where certain regions are part of ancestral domains. Zoning plans that aim to preserve areas such as forests and rivers often conflict with the customary land use of Indigenous peoples (IPs), who have been residing, cultivating, and establishing facilities identified as non-conforming uses in these regions for an extended period. Dr. Rex emphasizes that indigenous peoples (IPs) possess customary rights to their lands, which are frequently recognized in agreements such as the Ancestral Domains Sustainable Development and Protection Plan (ADSDPP). In order to guarantee that IP communities understand the relevance of zoning and prevent misconceptions, he highlights the importance of incorporating them in the process from the very beginning. Consequently, he proposes developing ways to manage garbage, wastewater, or other pollution, while preserving the IPs in the ecosystem. Zoning should be adaptable enough to lessen negative consequences without entirely ignoring the rights and existence of the rights of the IPs. The same strategy should be used for private sectors, such as resorts located inside protected areas, where environmental impact should be minimal.

Susan Natividad from LGU Sudipen noted the necessity of coordinated zoning efforts and seek awareness to a frequent problem: Indigenous Peoples (IPs) must apply for certifications from the NCIP. Dr. Rex Victor O. Cruz acknowledged and reiterated the need to foster confidence between IP communities and the government, since many IPs retain mistrust as a result of outside influences. He related stories from Mindanao about how some third party foster disbelief among IPs, making them suspicious of government initiatives. Dr. Rex asserted the importance of open communication and making sure that zoning policies are explained in a way that demonstrates how they help the IPs and the larger community rather than threatening them.

At the end of the open forum, it's important that whether involving IPs or private entities, zoning should be a collaborative effort that balances the preservation of important areas with the practical realities of existing land use. The goal is to minimize negative impacts while acknowledging local residents' and businesses' rights and presence.

Participants from different areas shared their key takeaways from the workshop. Mariel Mina (La Union PPDO) learned how to use GIS and Land Capability Zoning to update their Provincial Development and Physical Framework Plan (PDPFP) for 2025. Ms. Jessica from Aringay emphasized what she had learned about the zoning classifications and watershed management in La Union, including protection zones, limited production zones, and agroforestry. Isiah Diza

(UNP) stated how crucial it is to get reliable information on elevation, land cover, and soil properties in order to assess a watershed's land capability. Jeffrey Hidalgo (Ilocos Sur) expressed gratitude for discovering more efficient tools for land classification and reclassification, which he had previously done manually,

As the Land Capability Zoning Workshop concluded, Ms. Roshelle delivered a closing remark, extending her sincere gratitude to all participants. She reflected on the focus of the workshop, which centered on Land Capability Zoning within the Ridge-to-Reef/Watershed Ecosystem Management Approach, and how it provided critical insights and practical tools to enhance land-use efforts. She expressed her gratitude to the Asia Pacific Network project and the University of the Philippines Los Baños (UPLB), under the leadership of Dr. Rex Victor O. Cruz, for their collaboration and expertise. Ms. Roshelle emphasised that the partnership between UPLB and the La Union provincial government demonstrated the effectiveness of academic and governmental cooperation in addressing complex environmental issues.

Ms. Roshelle highlighted that the knowledge and strategies given were not merely theoretical but rather practical steps toward significant change, and she urged participants to implement what they had learned in their local government units (LGUs). She expressed gratitude for the participants' active participation and dedication to responsible and forward-thinking land-use planning on behalf of Ms. Michaela Delfinado and the entire PLGU group.

She was looking forward to seeing how the suggested concepts and techniques will be used locally, paving the way for a more sustainable future. In closing, she wished everyone a safe trip home and urged more cooperation in pursuing their common goals of protecting the environment and sustainable land use.

7. Activity Materials

Prior to the forum's commencement, participants received a program outlining the presentation schedule. This document detailed each resource person's name, topic, and allocated time. Attendees brought notebooks and pens for note-taking, while the project team provided writing utensils during registration.

Microphones were available for speakers and stakeholders to ask questions, offer comments, and express concerns.

Resource persons from UPLB and Dr. Rex Victor O. Cruz delivered lectures through in-person discussions and PowerPoint presentations. The link to the Google Drive containing the lecture materials is provided below:

Google Drive Link: <https://bit.ly/LandCap>

Participants who completed the post-assessment forms received the PowerPoint lecture presentations. Uploading the materials aims to reinforce learning by giving attendees access to the materials used during the sessions.

For the hands-on training, participants needed laptops compatible with QGIS 2.28. They were also required to upload their final land capability model map layouts.

8. Appendices

ATTENDEES Day 1: August 27, 2024

No.	Full name	Address/Agency
1	Cherish M. Rillera-Carasi	LGU - Agoo
2	John Carl Lodevico	LGU - Agoo
3	Jessica A. Tucay	LGU - Aringay
4	Rinalyn Parrocha	LGU - Aringay
5	Ericson B. Corpuz	LGU - Bacnotan
6	Philmar O. Guerrero	LGU - Balaoan
7	Cristino Valdez, Jr.	LGU - Balaoan
8	Charlie F.O Balanon	LGU - Balaoan
9	Roberto M. Valencia	LGU - Bangar
10	Ferdinand G. Ramos	LGU - Burgos
11	Marvin P. Pagaduan	LGU - Caba
12	Christian Joy Picar	LGU - Caba
13	Rosalia D. Morla	LGU - Caba
14	Wilfredo T. Dizon Jr	LGU - Luna
15	Celine Kylie G. Ramos	LGU - Naguilian
16	Vondeimarr P. Perez	LGU - Naguilian
17	Rolando Cabutotan Jr	LGU - Rosario
18	Adrian E. Dulay	LGU - Sto.Tomas
19	Michael David R. Salazar	LGU - Sto.Tomas

20	Susan O. Natividad	LGU - Sudipen
21	Jethe Rafael	LGU - Sudipen
22	Jeffrey V. Hidalgo	PG Ilocos Sur
23	Vanessa C. Badua	PGLU - OPAg
24	Christopher T. De Vera	PGLU - OPAg
25	Roshelle A.Mamaril	PGLU - OPPDC
26	Roland F. Faminialagao	PGLU - OPPDC
27	Michaela Louise T. Delfinado	PGLU - OPPDC
28	Mariel Faye M. Mina	PGLU - OPPDC
29	Marinette V. Aquino	PGLU - OPPDC
30	Merven Medrano	PGLU - OPPDC
31	David M. Rabelas	PGLU - OPPDC
32	Mayer Abaya	PGLU - OPPDC
33	Melda L. Pocsidio	PGLU - OPPDC
34	Jay-ar Raquedan	PGLU - PGENRO
35	Reymark P. Rivera	SUC - DMMMSU
36	Eunice Dea Villapando	SUC - DMMMSU
37	Angelo L. Lozano	SUC - DMMMSU
38	Ruby Anne Olbinado	SUC - DMMMSU
39	Rhea N. Cawis	SUC - ISPSC
40	Isaiah M. Diza	SUC - PSU

Day 2: August 28, 2024

No.	Full name	Address/Agency
1	Cherish M. Rillera-Carasi	LGU - Agoo
2	John Carl Lodevico	LGU - Agoo
3	Jessica A. Tucay	LGU - Aringay
4	Ericson B. Corpuz	LGU - Bacnotan
5	Jenny J. Fernandez	LGU - Bagulin

6	Philmar O. Guerrero	LGU - Balaoan
7	Darlen Rose R. Orpia	LGU - Balaoan
8	Roberto M. Valencia	LGU - Bangar
9	Ferdinand G. Ramos	LGU - Burgos
10	Marvin P. Pagaduan	LGU - Caba
11	Christian Joy Picar	LGU - Caba
12	Rosalia D. Morla	LGU - Caba
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12	Christian Joy Picar	LGU - Caba
13	Alejandro Nelmidia	LGU - Luna
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PHOTO DOCUMENTATION

