



Better Governance:

Inclusive Approach  
through good practices  
on water governance and IWRM

# *FORMULATION OF DEVELOPMENT MANAGEMENT PLANS (DMPs) FOR SEVEN CRATER LAKES*



*Ms. Beniaflor G. Ada*

*Planning Officer II*

*Laguna Lake Development Authority (LLDA), Philippines*



# TABLE OF CONTENTS

**I. Table of Contents**

**II. Background**

**III. Methodology**

**IV. Achievements**

**V. Key to Success**

**VI. Lessons Learned**







## BACKGROUND:

- The Seven Crater Lakes in the Philippines are experiencing deterioration at varying degrees depending on the stresses caused by increasing human needs for food and sustained livelihood.
- pollution caused by aquaculture, agricultural runoff and waste disposal, loss of biodiversity and invasive species and easement encroachment etc.
- LLDA being the lead agency that has the mandate to conserve, protect and restore the Seven Lakes had initiated the formulation of Development and Management Plans (DMPs) for each lake.





# Better Governance:

Inclusive Approach through good practices

on water governance and IWRM

Yambo Lake (2015)

Mohicap Lake (2016)

Pandin Lake (2014)

Palakpakin Lake (2016)

Calibato Lake (2017)

## *The Seven Crater Lakes*

Bunot Lake (2018)

Sampaloc Lake (2015)

Image © 2015 DigitalGlobe

Lake	Surface Area (ha)	Deepest Point (m)	Average Depth (m)
Pandin	24.15	62.8	33.39
Yambo	35.16	39.1	17.38
Mohicap	18.10	39.2	21.55
Palakpakin	50.75	8.7	5.04
Calibato	43.31	135.0	68.01
Bunot	35.60	22.5	9.21
Sampaloc	97.62	23.5	8.67

2010

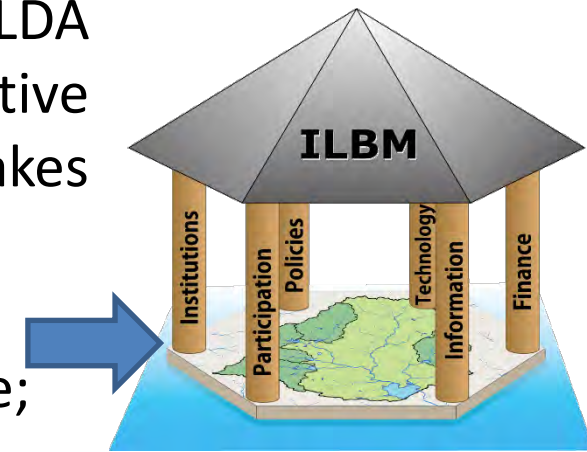
Imagery Date: 3/8/2015 14°05'43.87" N 121°21'20.90" E elev 547 ft eye alt 32239 ft





# METHODOLOGY

- ❖ Approval of the Framework for Development Management Framework (DMP) through LLDA Board Resolution No. 464, S. 2014, with an objective of formulating a DMP for each of the Seven Lakes thru stakeholders participation and involvement;
- ❖ Adoption of the Six (6) Pillars of Lake Governance;
- ❖ Strategic Basin Planning = VISION to ACTION
- ❖ Rapid Appraisal/Baseline Assessment (Lake Basin Profiling)
- ❖ Identification of Lake Basin Issues and Problems
- ❖ Participatory Planning and Stakeholders' Analysis
- ❖ Project Design Matrix and Plan of Operations
- ❖ Monitoring and Evaluation
- ❖ Operations and Management Plan for Sustainability

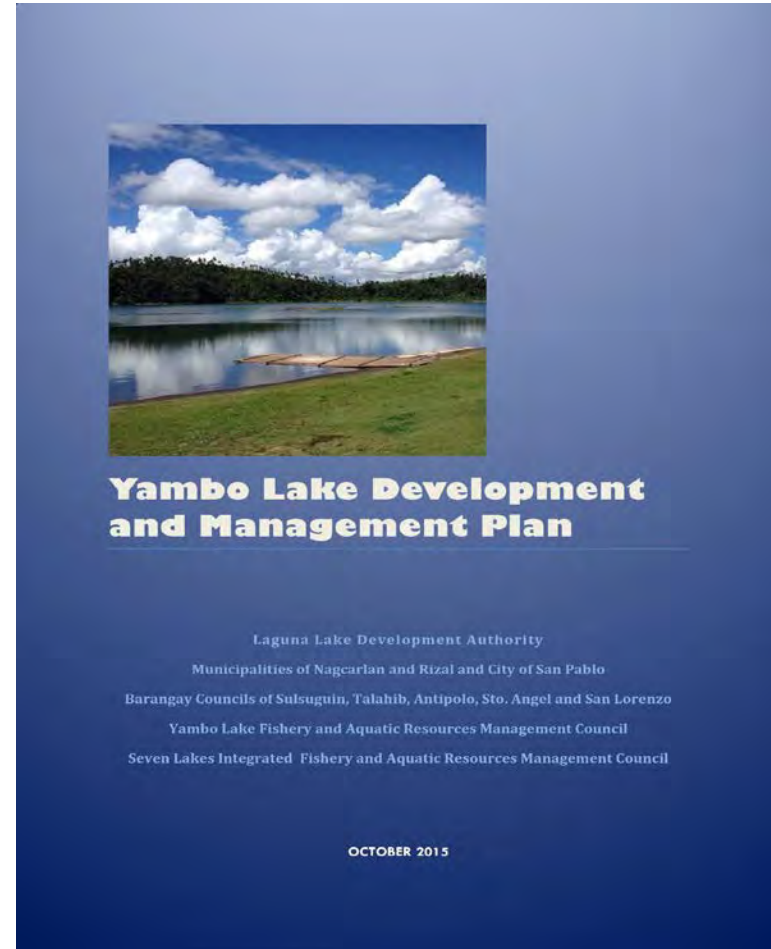


Source: ILEC and RCSE-Shiga University. 2012. "Primer: Development of ILBM Platform Process, Evolving Guidelines Thru Participatory Improvement", 26 pp.



# ACHIEVEMENTS

- ✓ Formulation and Implementation of DMPs of Pandin and Yambo (2014 and 2015) and Mohicap and Palakpakin (2016)
- ✓ Integration of Ecosystem Services Shared-Value Assessment (ESSVA)
- ✓ Identification of Bio-Physical and Socio-Economic Characteristics of each lake
- ✓ Involvement of stakeholders from Planning, Implementation and Monitoring and Evaluation of DMPs



# KEY FOR SUCCESS

## ❖ **Political will and commitment**

*Involvement of implementing institutions, decision makers, funding institutions, community and community leaders and other support groups*

## ❖ **Basin management plan and clear vision**

*Strategic planning putting the vision into plans and actions*

## ❖ **Participation and coordination mechanisms, fostering information-sharing and exchange and capacity development**

*Capacitate stakeholders in the process of DMP formulation, implementation and sustainability*

## ❖ **Water allocation plans**

*Limiting the aquaculture structures within its 10% carrying capacity; compromise among competing uses agreed upon by stakeholders (ecotourism, livelihood, etc.)*

## ❖ **Good knowledge of the natural resources present in the basin**

*Assessment and profiling of the basin's resources using scientific tools like ESSVA*

## ❖ **Comprehensive monitoring and evaluation**

*Identification of impacts, outcomes, outputs and activities, method and frequency of collection of data including accountable unit/person*



# LESSONS LEARNED

- ❑ Monitoring and evaluation of the DMPs should be done regularly and feedback mechanism should be well in place.
- ❑ Local community should be organized, strengthened and capacitated as the main implementer and recipient of benefits of lake basin management and development projects.
- ❑ Lack or limited funds should not be seen as hindrance.
- ❑ Each lake is different from the others. Strategies that work in one lake may not be applicable to the other lakes. However, stakeholders can learn from the experiences of those that were ahead in implementing their respective DMPs.







# Maraming Salamat Po!

## Laguna Lake Development Authority

LLDA Green Building, National Ecology Center,  
East Avenue, Diliman, Quezon City

Website: [www.llda.gov.ph](http://www.llda.gov.ph)

Facebook Page: Laguna Lake Development Authority (Official)

Text Hotline: (0917)898553 (TXT-LLDA)

Email: [ppdd@llda.gov.ph](mailto:ppdd@llda.gov.ph)



### Sources/References:

Project Development, Management and Evaluation Division (PDMED), LLDA  
Ms. Soledad Reyes, Project Evaluation Officer III, PDMED-LLDA