

Republic of the Philippines  
Department of the Interior and Local Government  
LOCAL GOVERNMENT ACADEMY

In partnership with  
Agencia Española de Cooperación Internacional para el Desarrollo  
and Senator Loren Legarda



# Agusan River Basin COLLABORATION WORKSHOP

23 August 2012 Almont Inland Resort, Butuan City

*"Building Climate Adaptive and Disaster Resilient Communities"*

# AVLDA EXPERIENCE

A PRESENTATION TO THE  
COLLABORATION WORKSHOP FOR THE  
AGUSAN RIVER BASIN



# The Allah Valley Landscape Development Alliance

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*Towards a Sustainable Management of  
the Allah Valley Landscape*

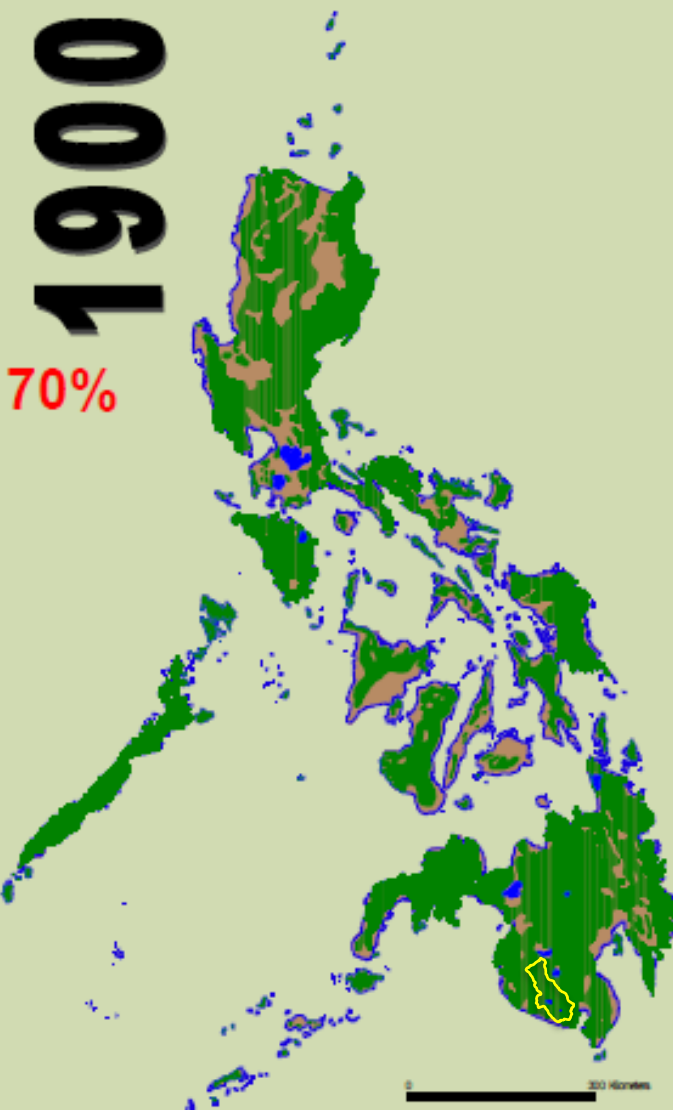
SILVERIO L. TANDOG

Program Manager - AVLDA



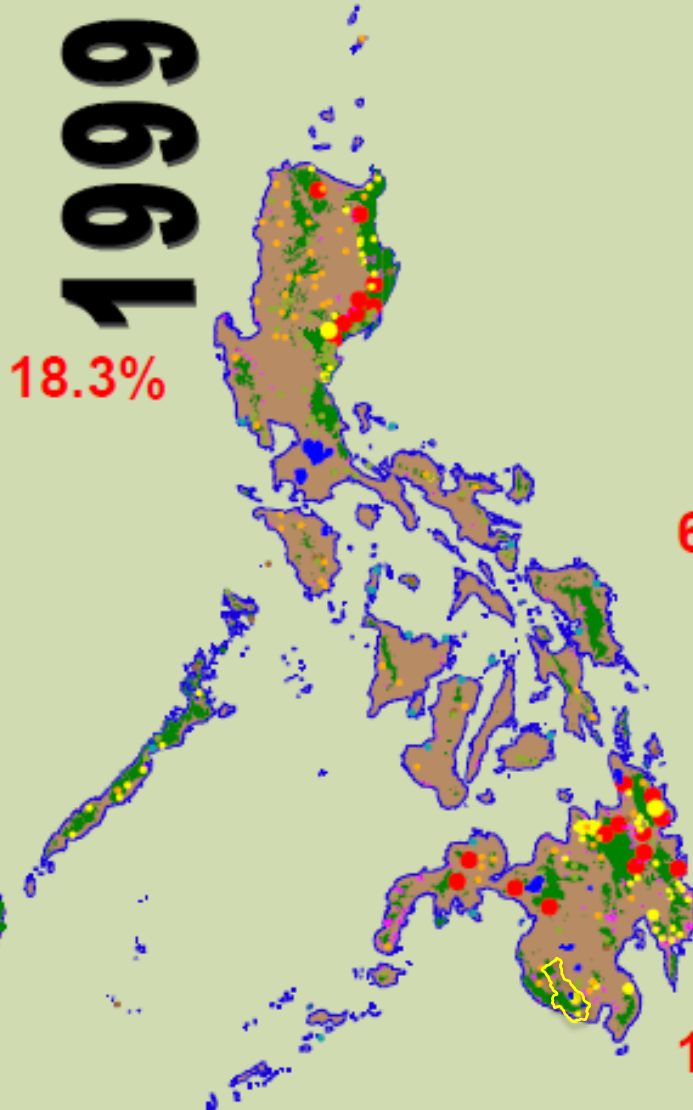
# 1900

70%



# 1999

18.3%



# 2010

6.6%



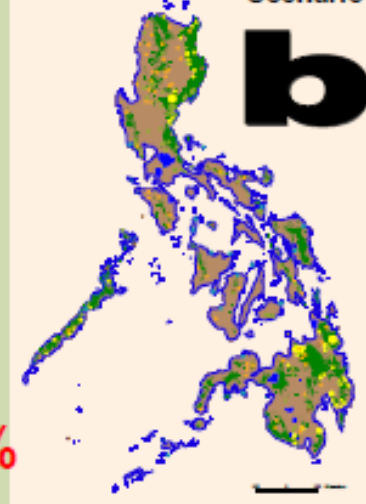
Scenario

# a

Scenario

# b

19%



## Decline of the **PHILIPPINE FOREST**

- Legend
- Forest
  - Lake
  - Waterfall Project
  - Protected Area
  - NOYALDIP
  - Mangrove Rehabilitation
  - CRP
  - Community-based Forestry
  - IPANG
  - TIA
  - Post-TIA

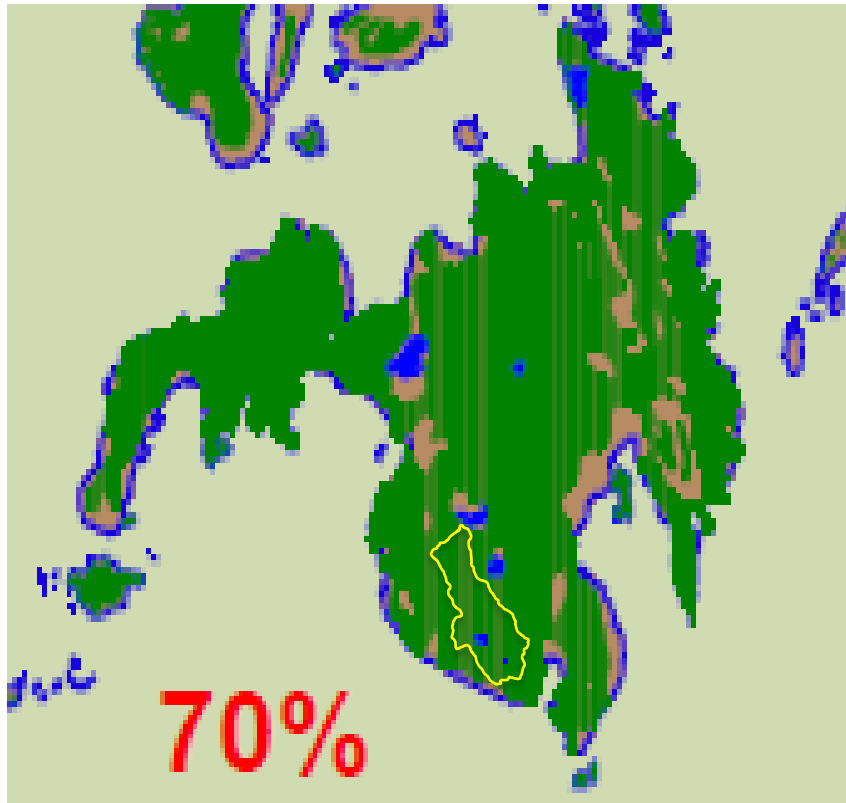


ENVIRONMENTAL SCIENCE FOR SOCIAL CHANGE 1999

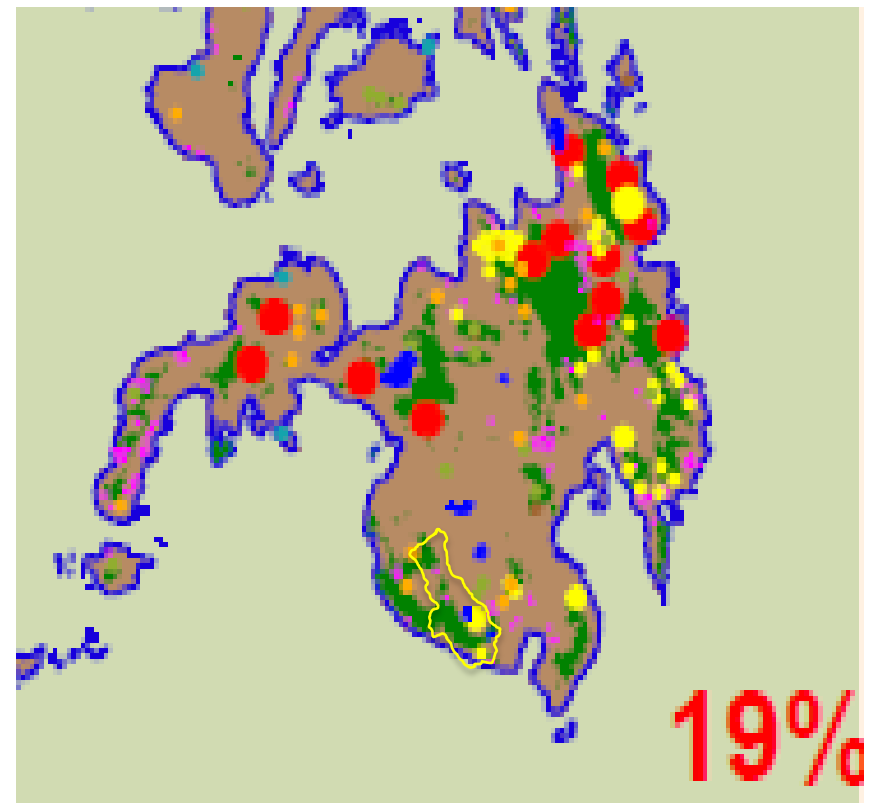
The information and viewpoints contained in this report are preliminary. They are not an ENVIRONMENTAL SCIENCE FOR SOCIAL CHANGE (ESGC) publication. For more information, please contact: Environmental Science for Social Change (ESGC), 1000 University Ave., Suite 1000, Los Angeles, CA 90024, USA. Tel: +1 213 681 1111. Fax: +1 213 681 1112. Email: [info@esgc.org](mailto:info@esgc.org)

# Forest cover in Mindanao

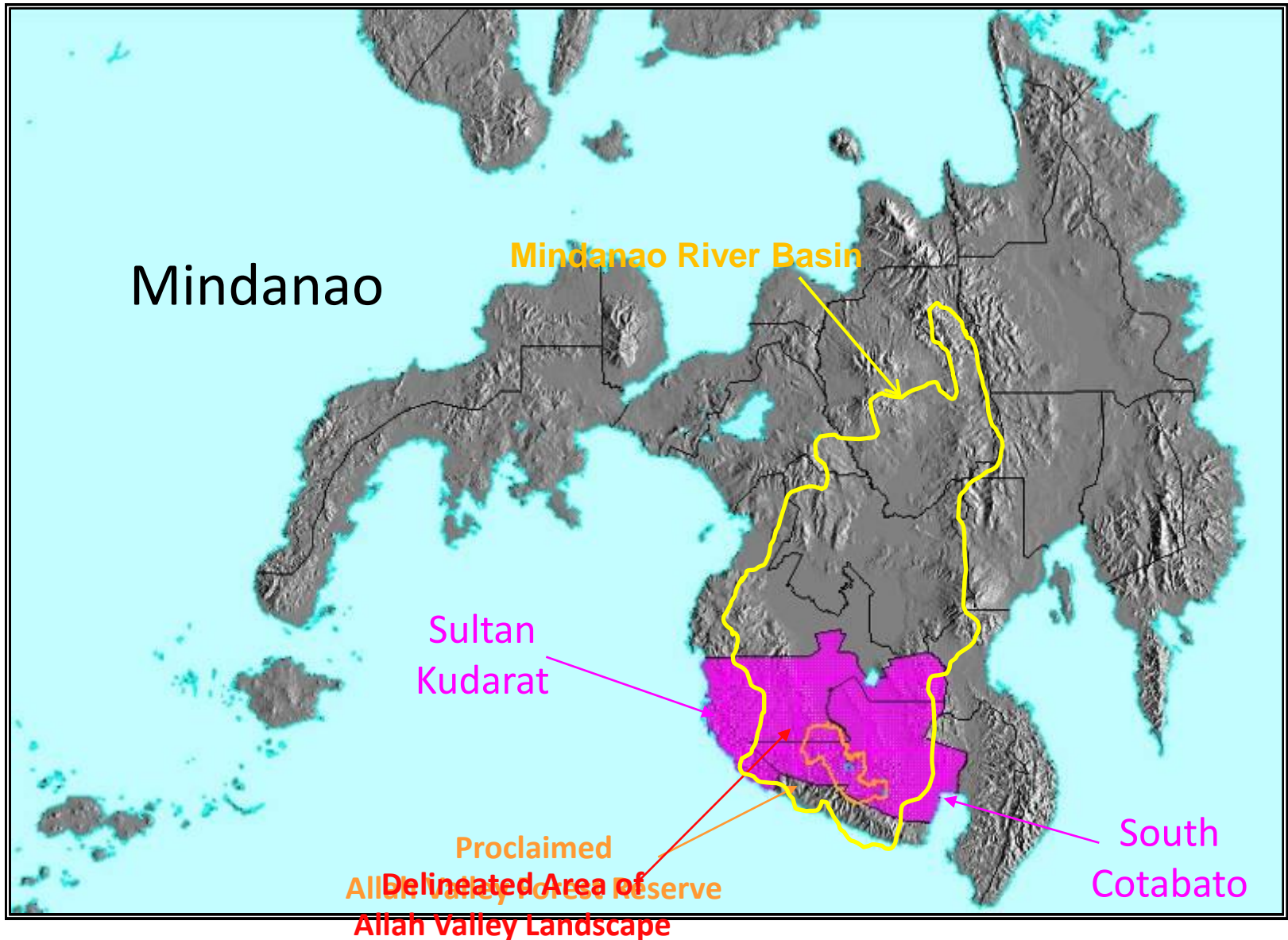
**Forest cover: 1900**



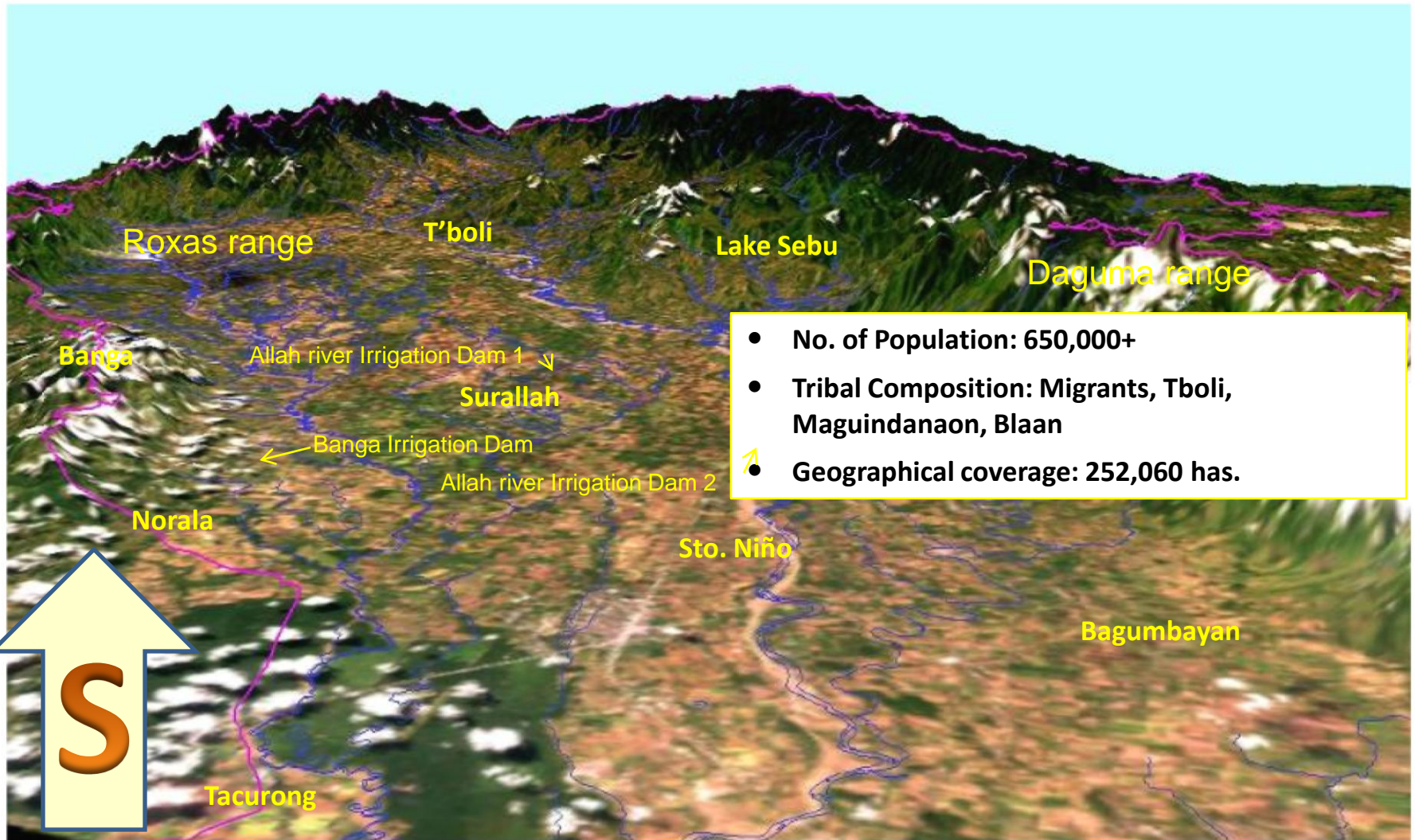
**Forest Cover: 1999**



# Location of Allah Valley landscape



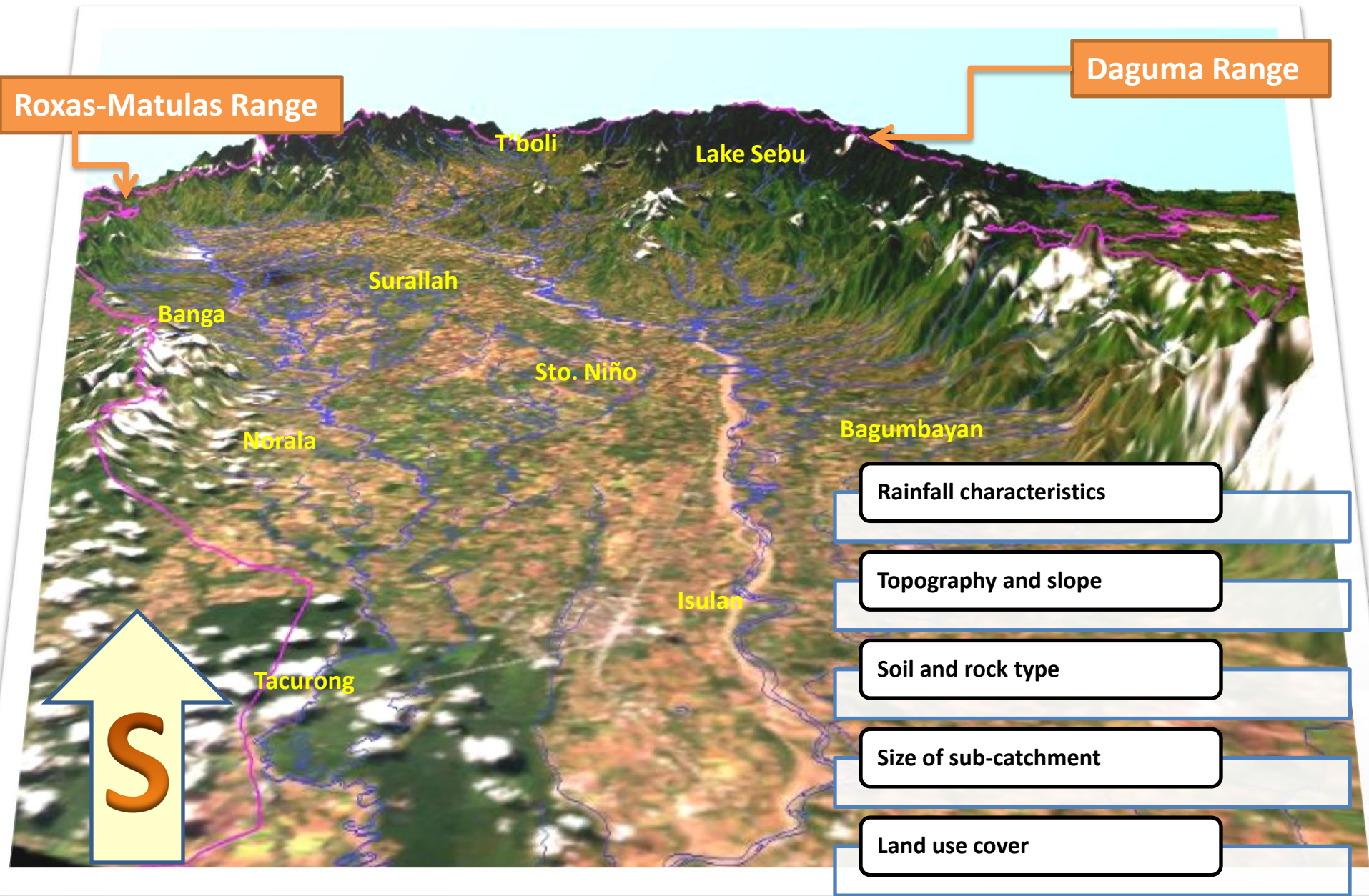
# Brief Profile of AVLDA area



- No. of Population: 650,000+
- Tribal Composition: Migrants, Tboli, Maguindanaon, Blaan
- Geographical coverage: 252,060 has.

Isulan

# Landform of AVLDA area





# Demographic Profile

- Population (2007 census) – 628,832  
(Male 322,186; Female 306,646)
- Composition: Migrants, T'bolis, Maguindanaons, Manobos, B'laans & Tedurays





# Economic Development Features

- Agriculture- production of crops (rice, corn, banana, pineapple, oil palm, asparagus)



# Recent Urgent Concern



**Adverse effects of upland degradation on the lowland areas**

Flooding, siltation, and riverbank migration

Unstable agriculture production

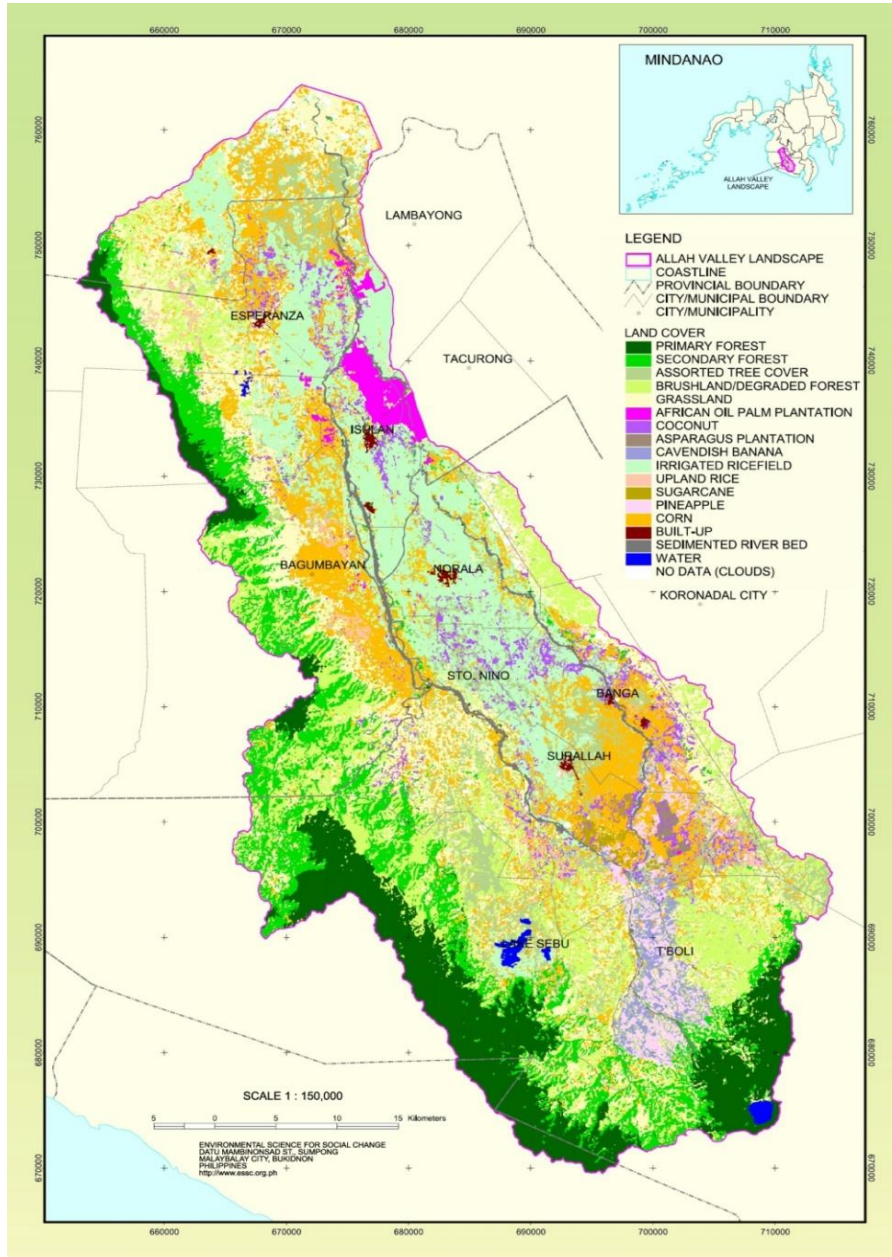
Devastation of infrastructure facilities

Instability of social condition



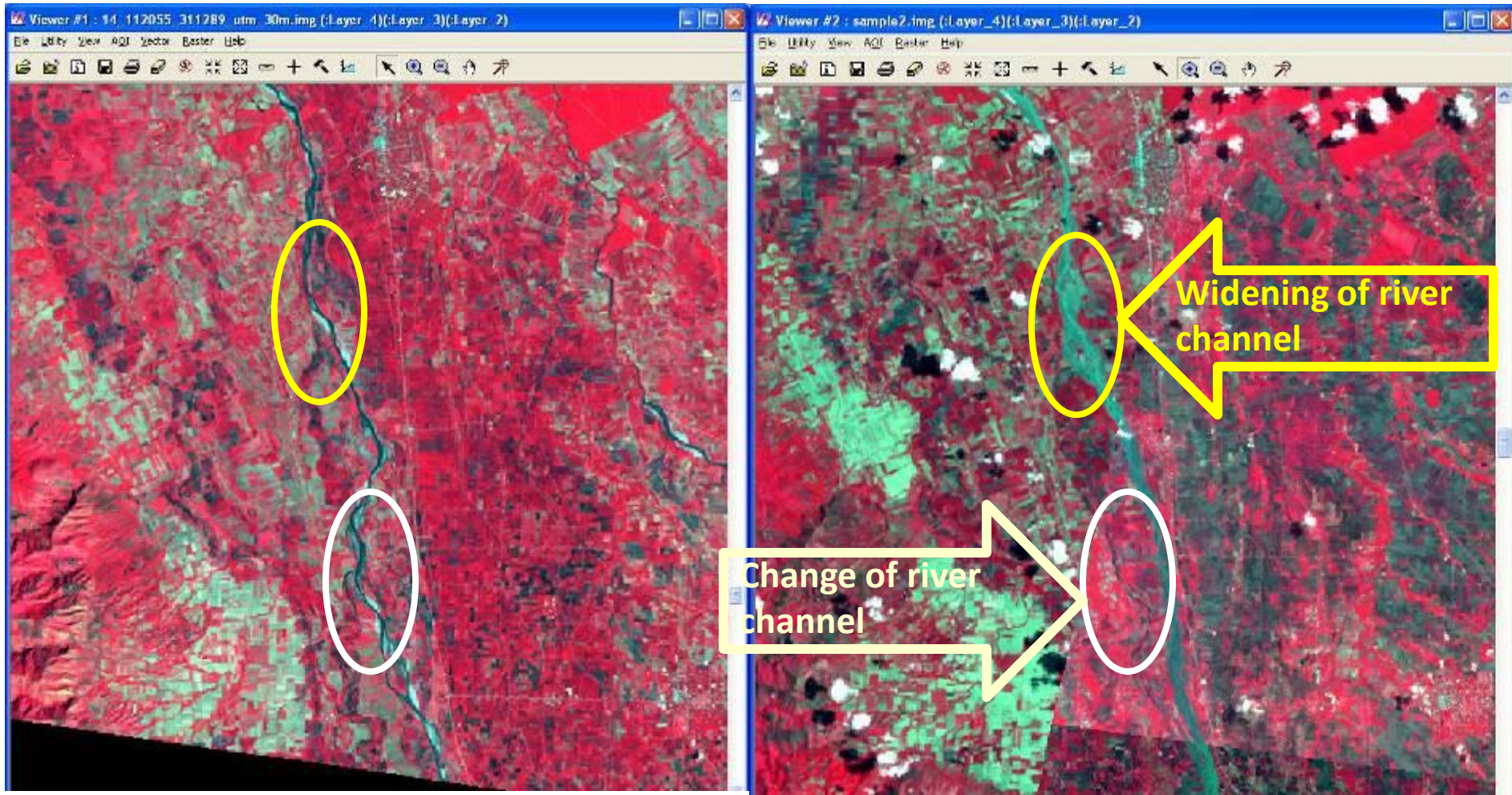
Plus: eventual destruction of the Ligawasan marsh, Pulangi river and Illana Bay

# AVL Land Use Cover Map



LAND USE COVER	LAND AREA, HA	%
<b>WOODED AREAS</b>		
Primary Forest	28,104	11.15
Secondary Forest	24,767	9.83
Assorted Tree Cover	26,718	10.60
<b>Total, %</b>	<b>79,589</b>	<b>31.58</b>
<b>DEGRADED AREAS</b>		
Brushland	38,984	15.47
Grassland	35,680	14.16
Sedimented River Bed	3,235	1.28
<b>Total, %</b>	<b>77,899</b>	<b>30.90</b>
<b>AGRICULTURAL AREAS</b>		
Irrigated rice land	32,078	12.73
Upland Rice land	2,180	0.86
Corn	37,975	15.07
Coconut	8,469	3.36
Palm Oil Plantation	3,341	1.33
Cavensish Banana	2,431	0.96
Pineapple	3,578	1.42
Sugar cane Plantion	777	0.31
Asparagus	520	0.21
<b>Total, %</b>	<b>91,349</b>	<b>36.24</b>
Others		
Built Up Areas	771	0.31
Water	865	0.34
Cloudy	1,587	0.63
<b>Total, %</b>	<b>3,223</b>	<b>1.28</b>
<b>Total</b>	<b>252,060</b>	<b>100.00</b>

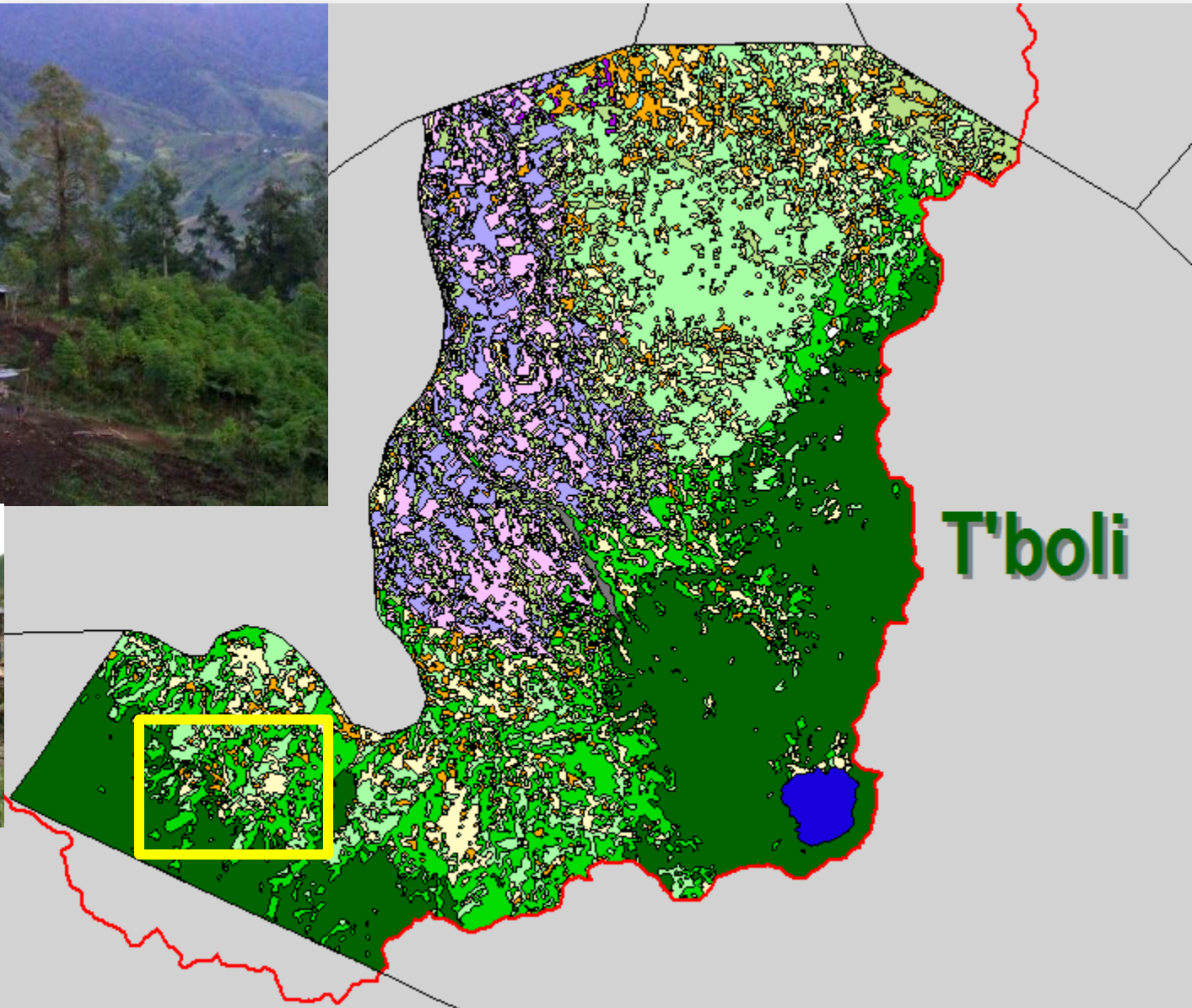
# River and Land Use Change



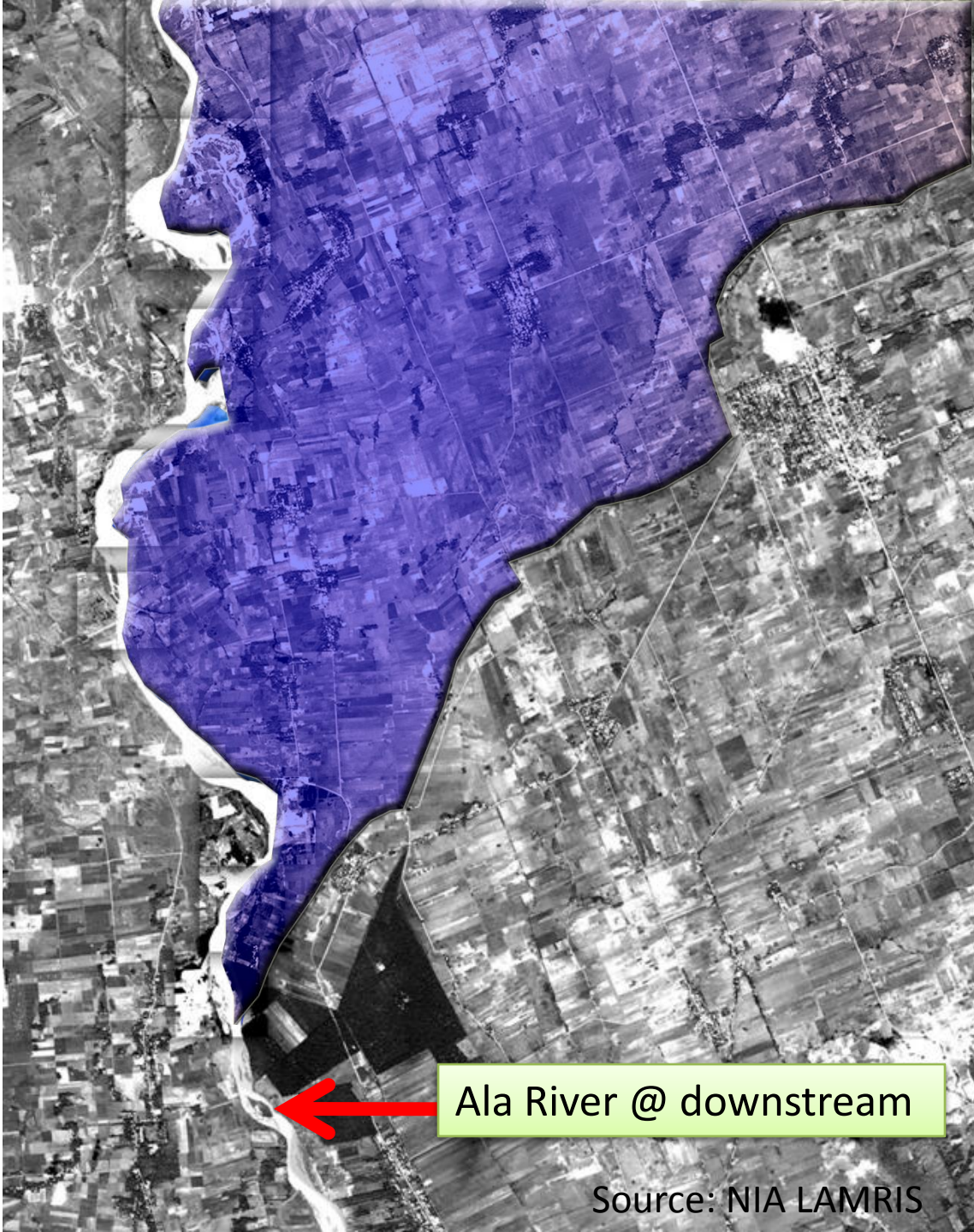
**1989:** 6 years before the Maughan flooding

**2002:** 6 years after the Maughan flooding

# Upland Degradation



# Flash flooding aggravated by Typhoons



Ala River @ downstream

Source: NIA LAMRIS





# Status of river courses





**Banga River**



**Allah River**

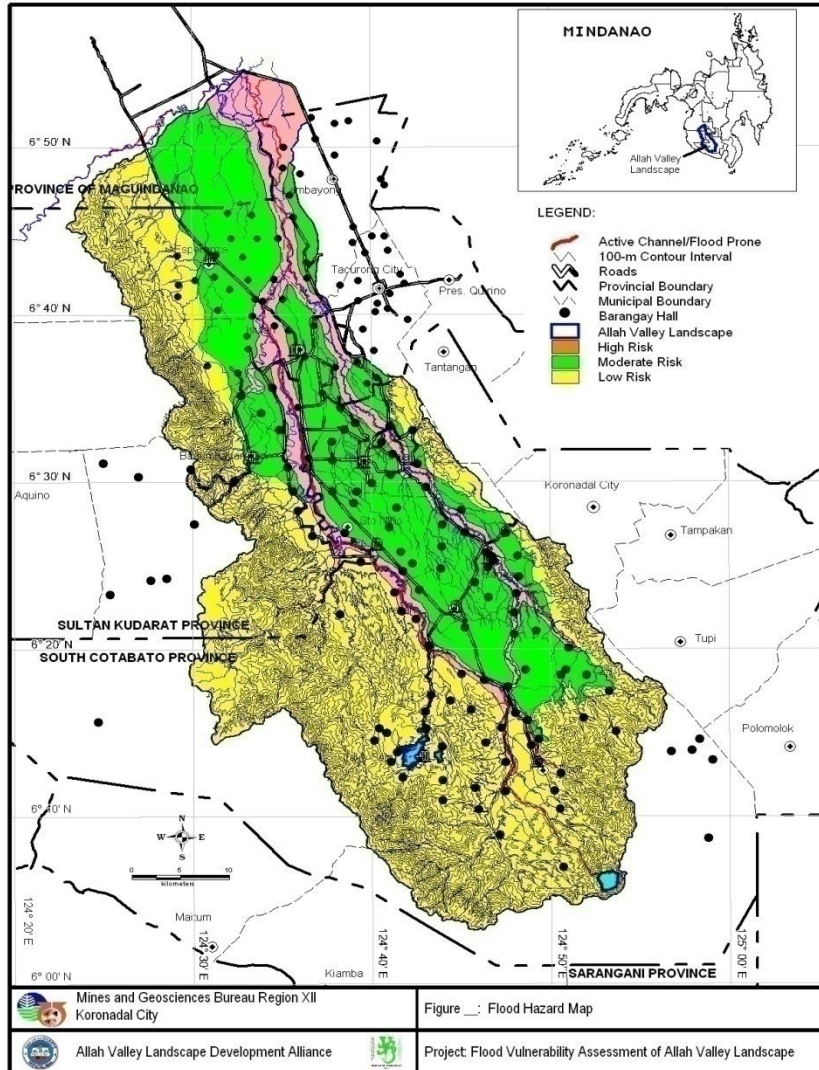
**Legend:**

-  Flood Way – High Risk Zone interpreted from 2002 Landsat Imagery
-  Abandoned Channel Way based on 1:50,000 scale NAMRIA Topographic Map

# Downstream impact: Braided river



# Community exposure to Flood



- At least 67 Barangays traversed by the Allah and Banga Rivers in the area are exposed to high risk due to flooding
- This translates to approximately 6,700 households or over 40,000 people composed of at least 60 percent women and children.

# Utilizing RS-GIS Technology



## Remote Sensing- Geographic Information System

- A tool that provides the alliance an **updated land resource and distribution data** as basis for **sustainable management of AVL**

## Reasons of LGU cooperation

Common problems and challenges

Weak implementation of national laws

High cost of LGU development action and services

Difficulty to address external problems

Political will and stakeholders' readiness

### 1991 Local Government Code

***“Local government units may, through appropriate ordinances, group themselves, consolidate, or coordinate their efforts, services, and resources for purposes commonly beneficial to them” (Section 33)***

# AVLDA Creation and Operation

- Legal instrument of creation: Memorandum of Agreement signed in March 2003
- Instrument of operation: Manual of Operation
- Basis of program implementation: Environmental Management Plan

# Members of the AVLDA

• Province of South Cotabato



• Province of Sultan Kudarat



• City of Tacurong



• Municipality of Lake Sebu



• Municipality of T'boli



• Municipality of Surallah



• Municipality of Banga



• Municipality of Norala



• Municipality of Sto. Niño



• Municipality of Bagumbayan



• Municipality of Isulan



• Municipality of Esperanza



• Municipality of Lambayong



• Coalition of Social Devt Organization



• DENR-Region 12



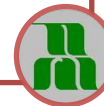
• DILG Region 12



• DPWH Region 12



• NIA Region 12



• NCIP Region 12



# Funding Support for Operation and Projects

1. Member-LGUs provide annual contribution with the following distribution:

- ▷ Province - P500,000.00
- ▷ Municipality/City - P200,000.00

2. Other sources: NGOs, Barangays, civic groups, private sector, donor agencies



# Features of the Alliance

Diverse members and partners

LGU-based operation

Not a layer of bureaucracy

Political commitment of local leadership

Discussion, consultation and integration venue

Water as a program integration factor

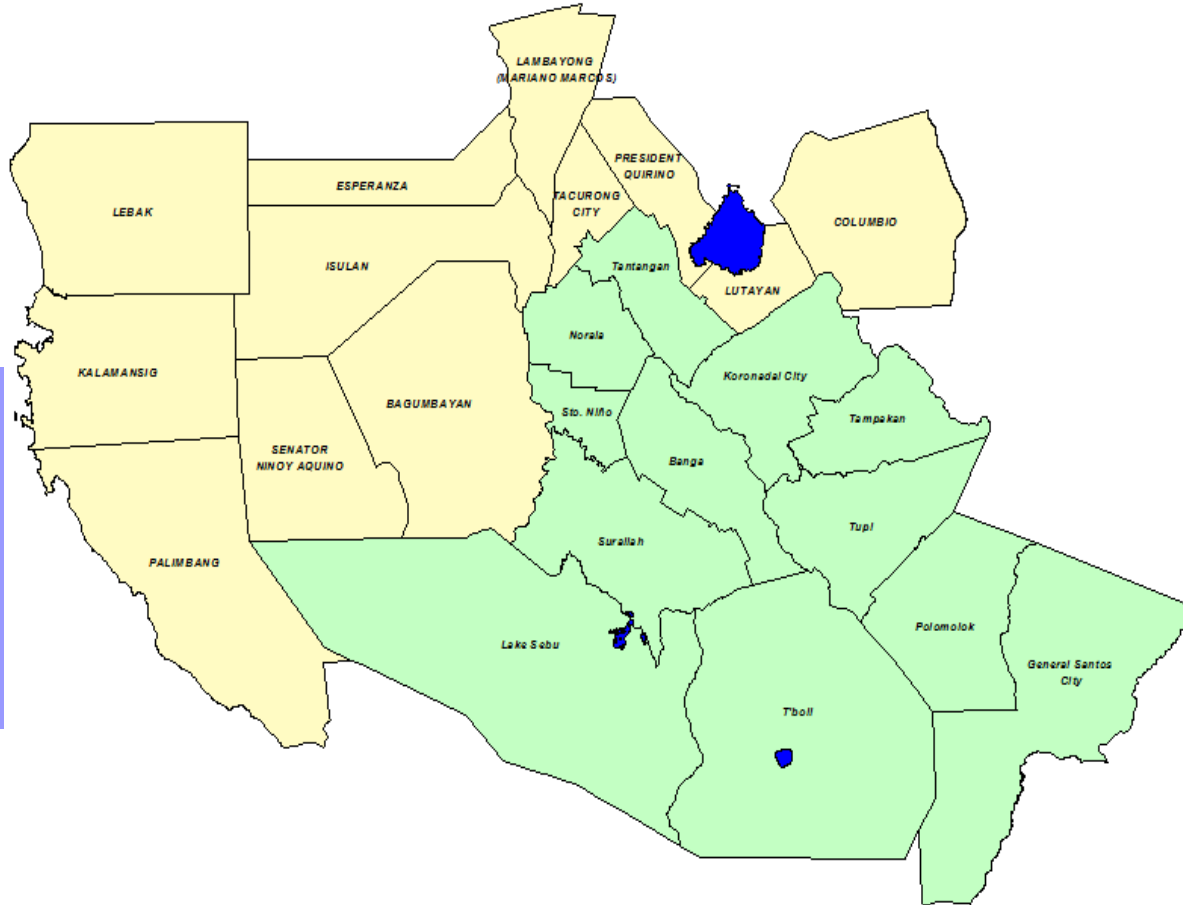


# AVLDA Members within the Provinces of South Cotabato and Sultan Kudarat



## Sultan Kudarat

1. Bagumbayan
2. Isulan
3. Esperanza
4. Lambayong
5. Tacurong City



## South Cotabato

1. Lake Sebu
2. T'boli
3. Surallah
4. Banga
5. Norala
6. Sto. Niño

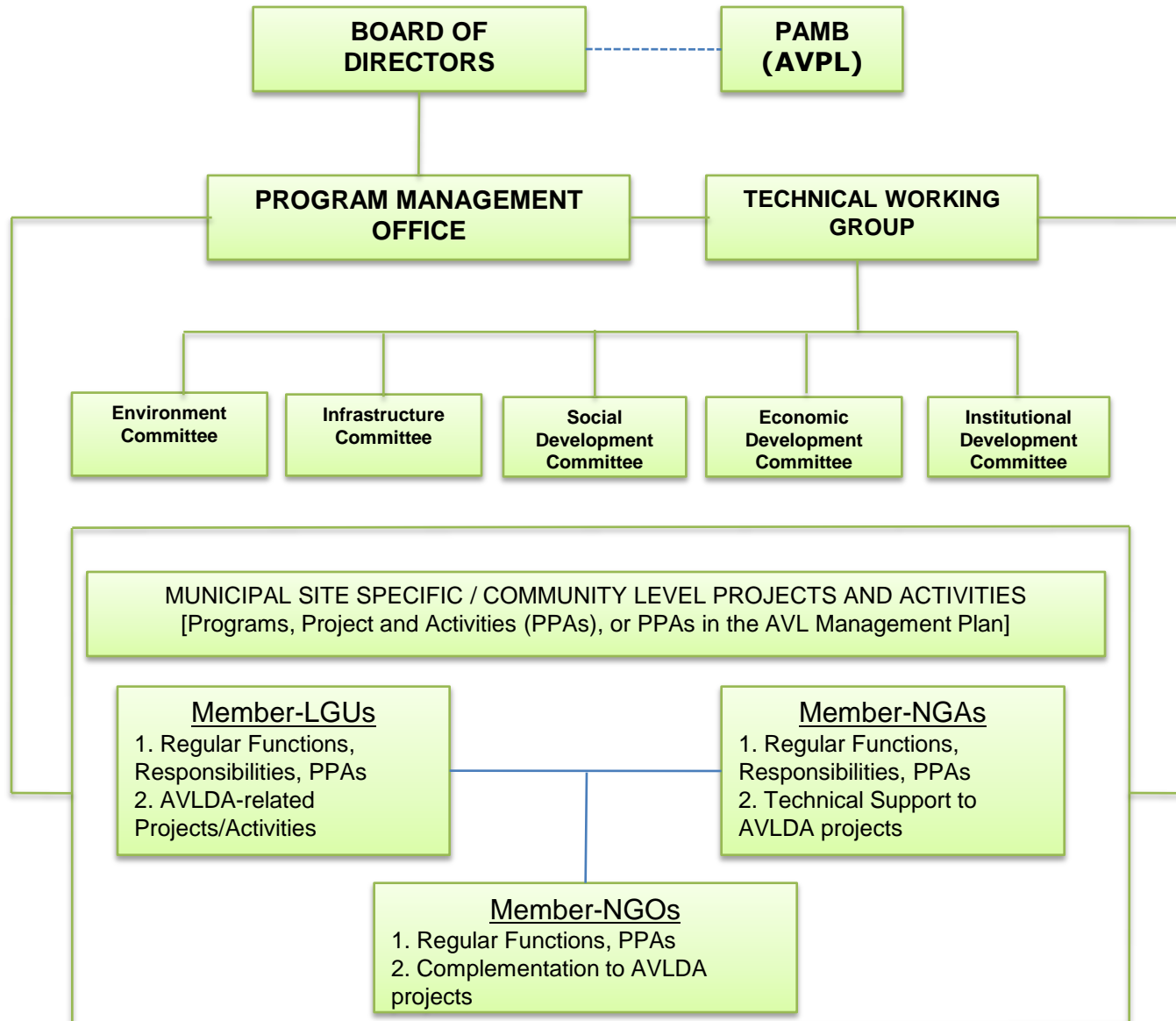
# Function of the Alliance

- The Alliance is a **coordinating, policy making, and integrated planning body** to respond and address environment problems by undertaking **trans-political boundary coherent actions**

- **Respective members develop and implement** their own programs/projects/activities thru partnership arrangement **in line with the objectives and goals of the alliance to ensure efficiency and impact**

- The Program Management Office (PMO) plays a secretarial role of the alliance and Board, and it implements policies and plans approved by the Board

# Management Structure and Process



# Composition of the AVLDA Board

Governors of the Provinces of Sultan Kudarat and South Cotabato,

Mayors of the eleven participating municipalities and one city,

Two (2) members of the Sangguniang Panlalawigan who are the respective Chairpersons of each province's SP Committee on Environment,

Regional Directors of National Line Agencies – DENR, DILG, NCIP, DPWH, and NIA – and

Chairperson of Coalition of Social Development Organization-South Cotabato (CSDO-SC)



# Cooperation Programs and Strategies



Capability and institution building

Information and education campaign

Remote sensing - GIS mapping

Community mapping for Barangay development

Riparian zone revegetation

Rainforestation and upstream resource management

Sub-watershed adoption and forestland co-management

Complemented with LGU functions, responsibilities, powers on socio-econ development and environmental protection and management in cooperation with concerned NGAs, private sector and NGOs

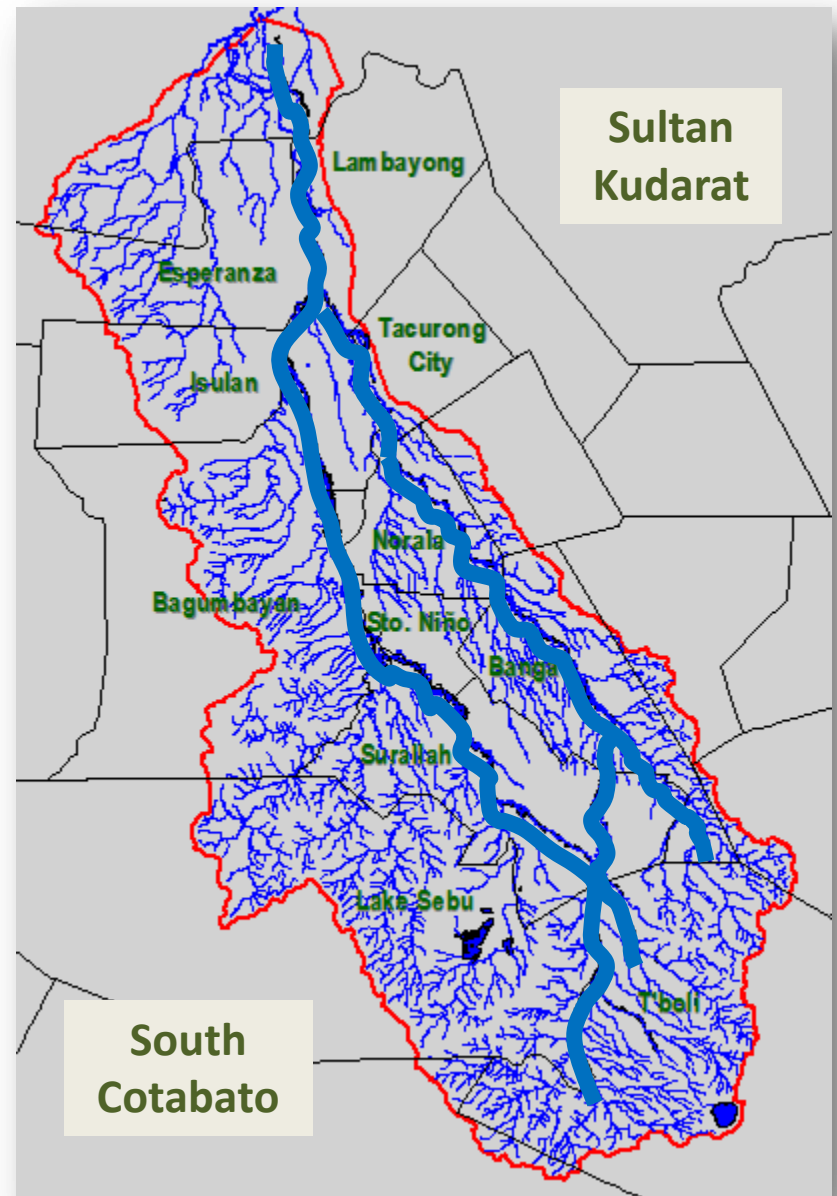
- Law enforcement support
- River improvement works
- ENR institutional building
- Forest and water resources mgt.
- Disaster risk reduction
- Eco-tourism development
- Solid waste management

# Management unit: Watershed

- Watershed is a land area drained by **water** towards a **common outlet**
- It **integrates upland and lowland processes** and provides a means of **connecting** both worlds
- Ideal approach for **strategic, problem-based** development planning and action

## Planning and Implementation:

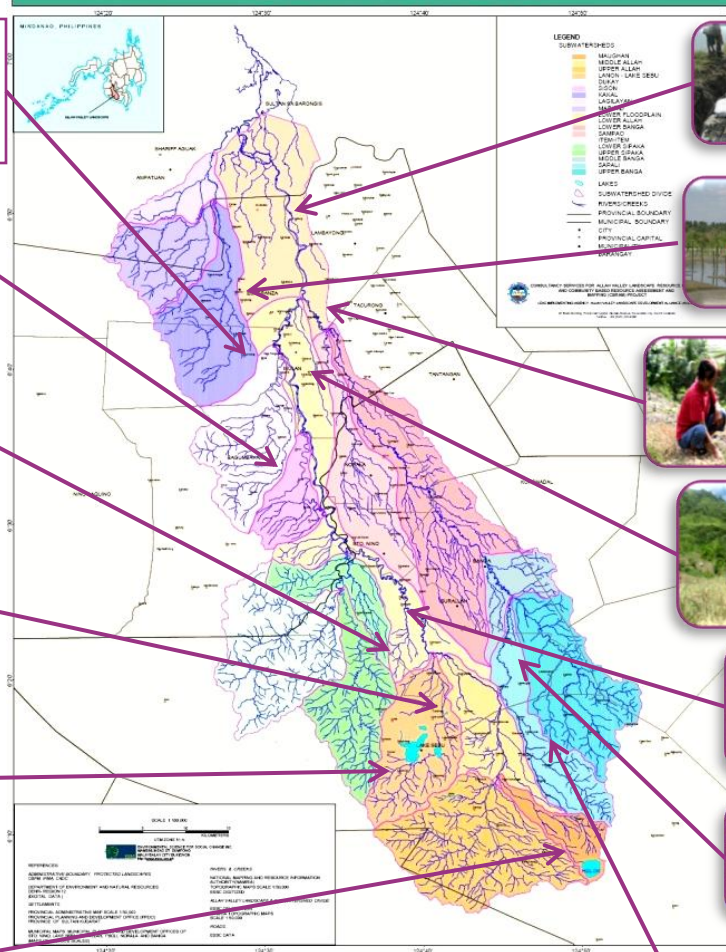
1. Environmental Management Plan
2. Protected Area Management Plan
3. NGO network management Plan
4. LGU Comprehensive Land Use Plans
5. LGU Forest Land Use Plan





# LGU members' Programs and Projects

## ALLAH VALLEY ADMINISTRATIVE MAP AND SUBWATERSHEDS SOUTH COTABATO AND SULTAN KUDARAT PROVINCES



**Mun. of Isulan**  
Solid waste mgt,  
riparian revegetation,  
disaster risk reduction



**Mun. of Lambayong**  
Flood hazard mgt.  
riparian revegetation  
riverbank protection



**Mun. of Bagumbayan**  
Forest land planning,  
agro-forestry farming,  
riverbank dikes



**Mun. of Esperanza**  
Flood hazard mgt.  
riparian revegetation



**Prov. of South Cotabato**  
Forest mgt., law  
enforcement, riparian  
lakes, rivers mgt, mining



**City of Tacurong**  
Solid waste mgt,  
riparian revegetation,



**Mun. of Surallah**  
Co-mgt of forest, solid  
waste mgt, organic  
farming



**Prov. of Sultan Kudarat**  
Forest mgt., law  
enforcement, riparian  
lakes, rivers mgt, mining



**Mun. of Lake Sebu**  
Eco-tourism, lakes,  
mgt, ancestral  
lands, rivers



**Mun. of Sto. Nino**  
Flood hazard mgt.  
riparian revegetation



**Mun. of Tboli**  
Forest and ancestral  
domain, riparian, solid  
waste, mining

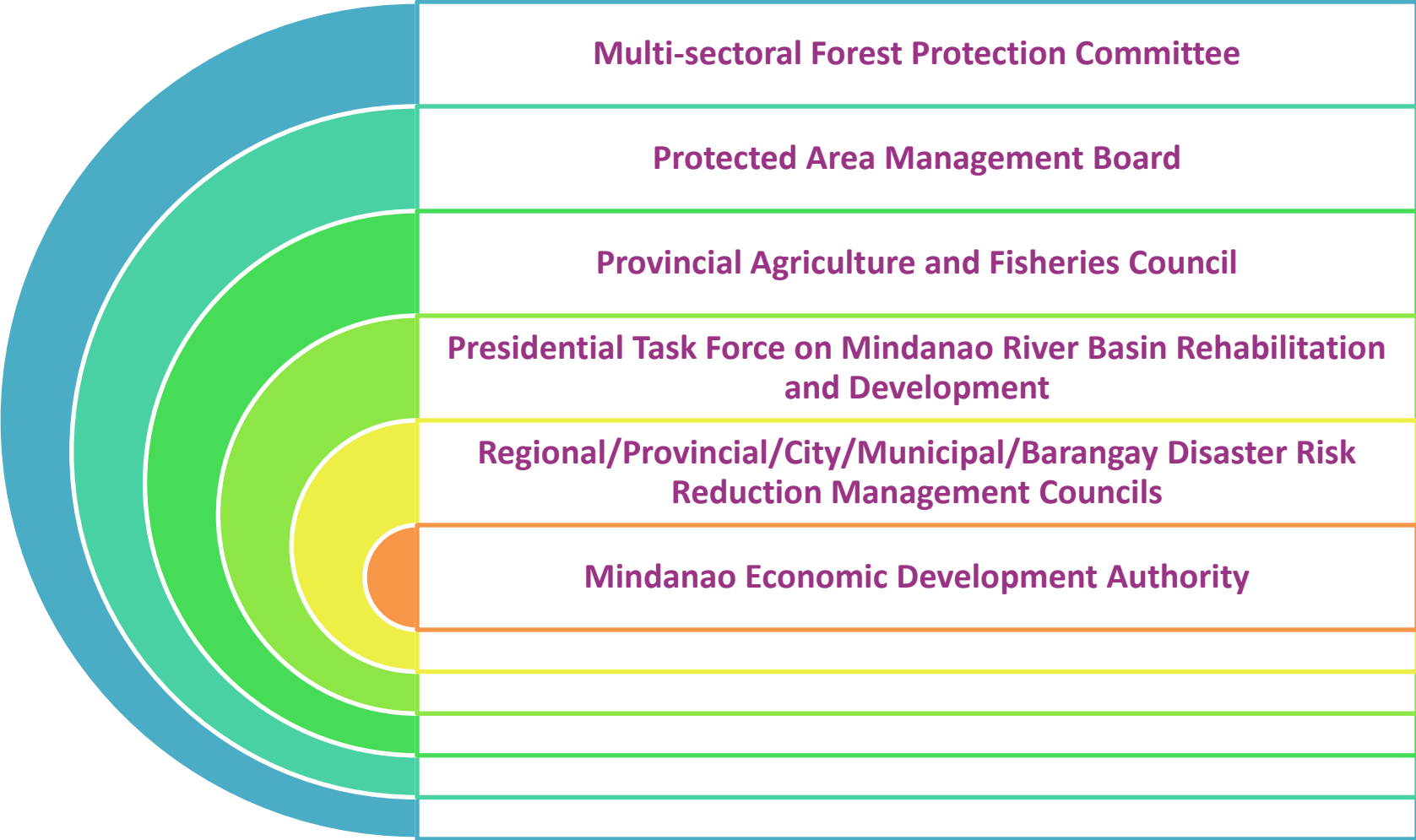


**Mun. of Norala**  
Riparian  
revegetation



**Mun. of Banga**  
Solid waste, co-mngt of  
forestland

# Existing Mechanisms supporting the AVLDA Operation



# Challenges: Program Implementation

Lack of data and information on the physical characteristics of the Allah Valley Landscape

Huge and complicated problems, but LGUs have insufficient alliance funds and weak env't programs

Very few sectors have linkage and support to LGU programs and projects

Problem of finding funds to implement expensive flood control projects

# Challenges: Program Implementation

Communities have little awareness on environmental conservation and development

Local executives have differing priorities and support vis-à-vis AVLDA mandate implementation

Pressures from many local officials for the AVLDA to show concrete accomplishments in a short time period

Difficulty to sustain close and effective coordination lines among LGUs, NGOs, and NGAs

# Overcoming the Challenges

Conducted Remote Sensing and Geographic Information System (RS-GIS) mapping

Constant information exchange, dialogue and planning actions among alliance members and communities

Intensified information and education among government, non-government and communities

Tapped funding support of the national government

# Overcoming the Challenges

Identified viable, low-cost, replicable and community-based projects and activities; yet effective, relevant, responsive such as CB upland development and riparian revegetation

Established functional and permanent agreements and partnership scheme with various sectors and groups

LGUs have created and strengthened their environment and natural resources programs

Conducted regular meetings, planning, monitoring and group activities

# Lessons Learned

Unity among many local leaders in watershed areas is possible

Multi-sectoral approach in environmental management led by the LGUs can be institutionalized

Local leaders must have serious commitment to undertake environmental programs

Involvement of private sector, civic groups, communities and other stakeholders is necessary

# Lessons Learned

Addressing watershed disaster problems require long term engagement of stakeholders

Alliance building enhances and strengthens LGU coordination, cooperation and resource complementation

Watershed governance creates community empowerment and enhances private sector social responsibility

Technical and management office is needed to run the daily operation of alliance



# Lessons Learned

Need to conduct technical and scientific studies to support programs, plans and policies

Need to generate updated land cover and other thematic maps as planning and policy decision tools

LGUs should have good Environment and Natural Resources (ENR) programs/offices, to rely less from national government

# Program Sustainability

AVLDA MOA is represented by organization (LGU, NGA and NGO), not by a person signing it.

Support of TWG members, e.g. planning and environment officers, of LGUs for program continuity is very strong.

Program models and plans have been included in the environment and land use plans of the LGUs

Institutionalization of AVLDA program thru inclusion in the environment code of South Cotabato

**AVLDA Board of Director's  
OFFICER**

**chairperson**

**GOV. ARTHUR "DODO" Y. PINGOY JR.,MD**  
Governor – South Cotabato

**Vice-chairperson**

**GOV. SUHARTO "TENG" T. MANGUDADATU AL HADJ**  
Governor – Sultan Kudarat

**Secretary**

**HON. ERNESTO I. CATEDRAL**  
SP Member, Committee Chair on Environment, South Cotabato

**Treasurer**

**HON. ROLANDO D. FORRO**  
SP Member – Committee Chair on Environment, Sultan Kudarat

**Auditor**

**HON. FLORANTE L. AGDUMA**  
Mayor – Lambayong, Sultan Kudarat

# Avlda bod members

## Province of South Cotabato

Hon. Henry l. ladot – mayor, municipality of banga

Hon. Romulo o. solivio – mayor, municipality of surallah

Hon. Ernesto b. manuel – mayor, municipality of t'boli

Hon. Antonio b. fungan – mayor, municipality of lake sebu

Hon. Victor y. balayon – mayor, municipality of norala

Hon. Antonio f. damandaman – mayor, municipality of sto. nino

## Province of Sultan kudarot

Hon. Lina o. montilla – mayor city of tacurong

Hon. Diosdado g. pallasigue – mayor, municipality of isulan

Hon. Helen t. latog – mayor, municipality of esperanza

Hon. Rombernardita r. bito-onon – mayor, municipality of bagumbayan

# BONG S'LAMAT!!!

# THANK YOU!!

Lake Holon, T'boli, South Cotabato



For more information, please visit our website:

[www.avlda.org.ph](http://www.avlda.org.ph)

or at our **FACEBOOK** page