



PROJECT PROFILE

I. TITLE: UNIFIED MAPPING PROGRAM

II. BACKGROUND/RATIONALE

The National Mapping and Resource Information Authority (NAMRIA), an attached agency of the Department of Environment and Natural Resources (DENR), is mandated by Executive Order 192 with its implementing Rules and regulation (IRR) DENR Administrative Order No. 31 series of 1987, as the central mapping agency of the government. The authority shall serve the needs of the line services of the DENR and other government offices with regards to information and researches, and shall expand its capability on the production and maintenance of maps, charts and similar photogrammetry and cartographic data. It is tasked to formulate and implement nationwide development program on Remote Sensing, Geographic Information System and Topographic Mapping activities.

At present, several government agencies other than NAMRIA have allocated in their various projects funds for the acquisition of aerial photographs and satellite images for their own thematic mapping activities. This results in duplication of expenses and efforts, data incompatibility and underutilization of map products and other derived geographic information. A key characteristic of geospatial data is its potential for multiple applications. Government uses the data for legislation and policy development for the allocation and management of resources, including conservation of natural resources, protection of environment, land use management, agricultural production, urban planning, zoning and development, disaster risk reduction and management, climate change mitigation, communications and transport, and defense and public safety, among others.

Pooling and sharing of resources, through the unification of image acquisition programs of different government agencies in relation to the mapping requirements of their various projects, will eliminate duplication of work thereby leading to the optimum utilization of government funds. This shall also allow consideration of a nationwide large - and medium - scale topographic base mapping program in the medium-term to provide the fundamental and detailed geospatial reference information for multiple applications.

The implementation of the Philippine Geoportal: One-Nation, One-Map project by NAMRIA will ensure data sharing and access of geospatial information. The project shall ensure the establishment of a spatial data infrastructure that shall integrate geospatially referenced data generated

by various government agencies, the academe and other stakeholders using one standard base map that shall be produced by the NAMRIA.

III. OBJECTIVES

Major Objective

The project aims to provide detailed geospatial information to serve the requirements of various government agencies, through a nationwide image acquisition, and large to medium-scale topographic base mapping program that shall fit and provide the requirements of the government's mapping activities.

Specific Objectives

Increasingly, large and medium-scale topographic maps use the latest digital photogrammetry and cartography technology. Simultaneously, with improvements in access technology, the Project will deliver improved functionality and usability of large 1:10,000 and medium-scale 1:50,000 topographic base maps in situations of growing needs for integrated fundamental data: for instance, disaster risk reduction management (flooding, rain induced landslide, earthquake, and fire), coastal resources management, tree cover, land degradation, improved land use planning, heritage sites protection, ancestral (indigenous people) land title management and cadastres.

The production of large and medium-scale topographic base maps from the Unified Mapping Program for the country is a political, cultural, and institutional challenge. Therefore, these Project will develop a policy in the production of new maps for a nationwide coverage, whether base or thematic, and strategize subsequent revision and updating to facilitate the NAMRIA to better tackle this challenges and be more proactive in developing relationships and provide updated geospatial information, at all levels of government. It shall also include a critical examination of structures and processes and is significant to both private industry and government alike.

IV. COVERAGE AND TARGET* (Area coverage for 2013)

18 Major River Basins

AREAS	Area (sq km)	2013	2014
Cagayan (North)	27,280		13,280
Cagayan (South)		14,000	
Pampanga	9,759	9,759	
Agno	5,952	5,952	
Abra/Magasawang Tubig	5,125	5,125	
Marikina	4,411	4,411	
Bicol	3,771		3,771
Abulog	3,362	3,362	
Panay	1,843	1,843	
Jalaur	1,503	1,503	
Ilog-Hilabangan	1,945	1,945	
Agusan	10,921		10,921
Agus	1,645		1,645
Cagayan de Oro	1,521	1,521	
Davao	1,625	1,625	
Mindanao	23,169		23,169
Tagum-Libuganon	3,064		3,064
Tagoloan	1,704	1,704	
Buayan-Malungun	1,434	1,434	
TOTAL	110,032	54,184	55,850

* One-time IFSAR and VHRSI acquisition of the entire country for 2013.

V. BENEFICIARIES

Prime Beneficiaries for the Project are National Government agencies with activities requiring geospatial information for their decision making and

planning activities, investors, entrepreneur undertaking land related planning and development activities in their respective areas. Local Government Units (LGUs) and other stakeholders shall be able to make use of newly compiled topographic base maps and geodatabases in Philippine Reference System of 1992 (PRS92).

VI. KEY RESULT AREA/S

A computer-based geospatial information in the form of topographic base maps, orthoimage maps, and geodatabase covering eighteen (18) major river basins of the country shall be produced using the PRS92 as the standard coordinate system for all surveys and mapping activities in producing the above mentioned products.



The Philippine Geoportal:
One Nation One Map

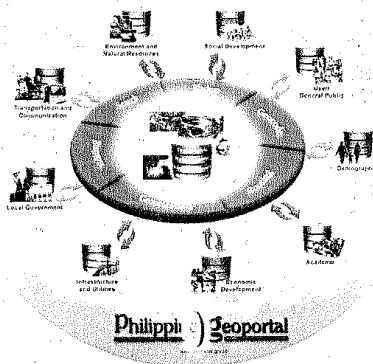
<http://www.geoportal.gov.ph>

The PGP envisions "a spatially enabled nation with comprehensive and consistent geospatial datasets widely available and shared for sustainable economic, environment and social development and management".

The PGP is an e-government funded project that aims to establish a web portal that provides a system for sharing of and access to geospatial information using one common multiscale basemaps. The system will provide a mechanism for a clearinghouse network, data management and exchange standards and protocols, and institutional interface that will facilitate the flow of information across all levels of government, the private and non-profit sectors, the academia, and other stakeholders, with safeguards to protect misuse and potential risks to individuals, community and country.

The PGP intends to hold and serve to the participating stakeholders the basemaps and framework maps that NAMRIA produces and eventually all the fundamental and thematic datasets of the other agencies. It will promote participation of various data producers and other stakeholders in terms of providing location and attribute information. The build-up of data content and development of other GIS based applications, including agency/sectoral node development, will also be done in the succeeding phases of the Project.

The PGP intends to provide an ICT platform for collaboration, data and resource sharing, integration, transparency and resource optimization.



PROJECT COMPONENTS:

1. Data. This Component will be responsible for the preparation of the fundamental datasets that will be uploaded to the portal. It is also in charge of the coordination with the Stakeholder Agencies in building the thematic map layers for sharing to the Portal.

2. ICT Infrastructure, Applications Development, Technical Support and Integration. This component takes care of the development of a web-based and device-agnostic application for the publishing and sharing of geospatial information. This component is also responsible for the acquisition and maintenance of the hardware, software, and network requirements of the project.

3. Training and Capability Building. This component is in charge of the GIS and system training for the Stakeholder Agencies. The conduct of information campaigns and preparation of IEC materials for the project is also being handled by this component.

4. Policy Formulation/ Change Management Planning and Monitoring/ Institutionalization and Succeeding Phases Planning. The activities under this component include the formulation of the Spatial Data Infrastructure (SDI) Implementation Plan; formulation of the Philippine Geoportal policies, standards and protocols; Change Management Plan implementation and monitoring; development and planning of Agency Nodes; and detailed planning for the succeeding phases of the Project.

5. Project Management. This component provides overall supervision to the project components. It ensures that the components of the project are in place and the whole system is operational. It manages project resources and is responsible for reportorial requirements.

BENEFITS AND IMPACT:

- Provides authoritative, consistent, relevant, and updated maps
- Facilitates thematic mapping
- Facilitates mash-ups and integration of information
- Facilitates collaboration and cooperation among agencies
- Provides platform for crowd sourcing

ULTIMATE OUTCOMES:

- One multiscale framework map served and used for government planning, decision making, monitoring of projects, and for the simple requirements of the general public for their personal and ordinary needs and activities
- Built-up, updated, maintained databases guided by standards and established data policies
- Highly accessible and available map service
- Policies and procedures on data access, standards, sharing, security, and pricing
- Broader private-sector participation in ICT development