

The UDP Mapping System

This is a customized GIS application designed for automatic plotting, generating maps and displaying spatial information. The system is equipped with user-friendly database maintenance for updating and editing data. It also extends its functionality with a third-party software



(GPSU) that can download field survey points gathered with the use of a Global Positioning System (GPS) survey equipment.

This is the primary device used in surveying.



Features of the system :

(1) Automatic generation and retrieval of pre-laid layout. The layout template was designed based on UDPs specification format.

(2) Automatic plotting of points to polygons or lines.

(3) Display and updating of Profiles and Project site information in all levels.

(4) Organize and handles different thematic maps such as Base maps, Perimeter survey maps, Land Use Maps, Land Tenure Maps like CBFMA and other type of maps.

(5) Retrieves data from the central database (MIS) and uses a dedicated database for storing and updating GIS information.



How are stored data maintained in the UDP-GIS Mapping system?



In UDP's GIS, there are two types of data maintained, the spatial data and textual data. (1) Spatial Data contains geographical coordinates, that pertains to a specific location gathered on land surveys

(2) Textual data are profiles and information stored in a database. This can be updated and modified through the use of the customized system.



Continuing support of UDP to LGUs

As a continuing support to the LGUs, UDP will train them in various applications on GIS such as : Tax Mapping, Real Property Tax Assessment, Watershed Project Monitoring System and other relevant usage according to priorities of the LGU.



Geographic Information System



Knowing about the UDP - GIS

Let us help you implement your GIS
to improve your land use planning

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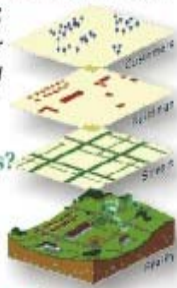
UDP is a special project of the Government of the Philippines
executed by the Department of Agriculture
and supported by a grant from the European Union.



Knowing about the UDP-GIS...

What is GIS (Geographic Information System)?

A Geographic Information System or GIS is a computer program designed for storing, retrieving, analyzing and displaying cartographic data.



The UDP-GIS System. What are its objectives?

This computer-based state-of-the-art technology was acquired by UDP for the following purposes:

- (1) In General, the GIS is utilized as a tool on planning, monitoring and evaluation and to aid management on policy formulation and decision-making.
- (2) As a support to LGUs and communities on Land use planning and mapping.



UDPs approach on watershed management involves the communities in gathering data, planning, management and monitoring and evaluation of projects. On Land Use Planning, the communities are taught to prepare their own maps manually. The map outputs are brought to the municipalities and provinces for further processing into the UDP-GIS system. The result is a GIS generated Land Use Map and other thematic maps. These are included as integral part of the 5 years



Community Watershed Plans (CWP) of the communities in their barangay.

- (3) As a link between GIS and MIS Database of the six (6) major components of UDP



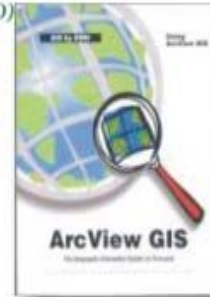
- (4) As an exchange of UDP-GIS data information with the LGUs, Government agencies and Private sectors.
- (5) To train and build capabilities on Provincial/Municipal LGUs and other participating agencies on the use of the UDP-GIS System.

What are the GIS facilities and equipments provided by UDP?

There are eight (8) complete GIS sets that were purchased by UDP. These were distributed as follows:

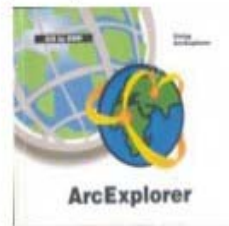
At the Project Management Office (PMO)

- One (1) complete set with two ArcView Software



At the Provincial Project Offices (PPO)

- One (1) complete set each at the 5 Provincial Project Offices (PPOs)



With Participating Agencies

- Two (2) complete sets were donated to DENR Regional offices in R-XI and R-XII.

With the Municipal Covered LGUs of UDP

While the 30 covered municipalities were provided with computers installed with ArcExplorer Software and GPS Utility Software (Freeware). The Programme has also distributed thirty (30) Global Positioning System (GPS) 315 survey units to the Municipal LGUs and 1 unit each to the PPOs for land surveys.



GPS 315 unit, manual and cable

- The UDP-GIS has four (4) components:

- a) GIS Users / Operators
- b) Spatial and Textual Data
- c) GIS Hardware
- d) GIS Software



Computer with Arc View and GIS Operators



GIS Software installation CDs



Plotter for printing standard and oversized maps



Digitizer for converting map elements (rivers, roads, contours, etc.) to digital files with coordinates.

What is the training support being extended on UDP-GIS?

Over the past 3 years, about 129 staff were trained on various levels of GIS and GPS trainings to develop skills and capacities among its users. Participants trained were from the: (1) Provincial LGUs, (2) Municipal Staff, (3) Participating Agencies (DA, DENR, NCIP) and some UDP staff. These trained staff composes the pool of GIS operators developed by the Programme.



How are the GIS data processed?



Level 1, at the municipal LGUs, all data gathered in the field are processed initially using the GPS Utility and ArcExplorer Software. These are then submitted to the Provincial Project Office (PPO) for processing and final integration using Arcview Software.

Level 2 at the PPOs, the initially processed data from the Municipal LGUs will be reviewed and corrected with ArcView Software to produce Provincial maps and database.



Level 3 at the PMO, the GIS data generated in the 5 Provinces are consolidated and integrated to develop Regional maps and database.

