

## Who We Are?

Yayasan pelaGIS is a foundation which officially established in April 2008 in Banda Aceh, Indonesia, with a mission to raise the awareness of the use geo-information in supporting government, professional, academic and public community in general. Historically this foundation started from a voluntary based networking which was called GIS Consortium. This consortium consist of GIS professionals from different agencies who were working for Aceh–Nias rehabilitation and reconstruction after the huge tsunami December 2004.

## What We Do?

### Capacity Building

The use of spatial information in government to support their task in managing and planning is relatively new and not well implemented, due to insufficient knowledge about geo- information application. In general it happens because ones does not understand how geo- information can be processed and analyzed to produce an information which can be used to assist a decision maker to solve a problem. Based on this fact, pelaGIS has a main focus in capacity building program to introduce and train the people in handling spatial information. This program is implemented in several related trainings such as Basic GIS training, Advance GIS training, Remote sensing, WebGIS training and Mobile mapping training. Additionally pelaGIS also hosts workshops to enhance skill and knowledge to a specific subject related to spatial information technology.

### Consultation and Technical Support

Spatial information knowledge and technology in particular Geographic Information System (GIS), remote sensing and Global Positioning System (GPS) survey cover a broad aspect. It is not possible to be trained and studied in a training program. For this reason pelaGIS provides a comprehensive consultation and technical support especially for an institution to set up a spatial information center or GIS center.

### Survey and Mapping

Geo-information is information which contains location on the earth and its explanatory data which is called attribute data. In a spatial application, this is an input data which is really important to produce a good result. Survey and mapping are activities to measure and record the spatial data in the field. pelaGIS gives a service in survey and mapping, and assure the quality of the data by conducted survey planning and standard measurement procedure.



Figure 1. Assisting the participant in field survey

### Self Funding Project

Besides the project which is carried out with a partner institution. pelaGIS also initiated its own funding project. For example in 2011

pelaGIS is carrying out Banda Aceh City Mapping project in more detail scale which contains road's name information and Point of Interest location. This project is planned to be finished at the end of 2011.

## What We Have Done? And Ongoing Activity

### GIS And Remote Sensing Training

Until now pelaGIS has been conducted more than ten GIS trainings and one remote sensing training. Those trainings were held with support from Government institution and NGOs like Marine and Fisheries agency (DKP), Aceh Spatial Data Center (PDGA), Aceh Development and Planning board (Bappeda), Deutsche Gesellschaft für Internationale Zusammenarbeit (GTZ), Flora and Fauna International (FFI), Yayasan Leuser Indonesia (YLI), Germany Federal Institute for Geosciences and Natural Resources (BGR) through its Management Georisks of Nanggroe Aceh Darussalam (ManGeoNAD) project, etc. The training was conducted both for basic and advance level. Mostly the participants of the training are local government staffs at provincial and district administrative level.



Figure 2. GIS training in Aceh Besar district

### Tutorial Module

PelaGIS has produced some tutorial modules in GIS, Remote Sensing, and mobile mapping.

Most of the modules are designed for self study. The GIS module comprises of basic and advance level. The remote sensing tutorial is based on ILWIS open source software from Faculty of Geo-Information Science and Earth Observation ITC-Netherland. Some of the modules are shared free to the public through pelaGIS' website.

### Mobile Mapping

Mobile mapping training is a training to perform rapid mapping. The goal of this training is participant can do quick mapping measurement using GPS which installed with field mapping software in order to record landuse change, property development, parcel inventory, etc. This training was held in April 2008 with cooperation between BGR, GTZ and Deutscher Entwicklungsdienst (DED).



Figure 3. Mobile mapping training

### WebGIS Training

WebGIS is a web which contains geographic data and the user can view and interact with it. The goal of this training is to develop the kind of web using open source software such as geoserver, postgis and open layer. This training took place in pelaGIS' office in Mei 2009. The participants were coming from several institutions such as Aceh Mining and Energy Agency (Distamben), Agency of Environment Monitoring and Protection (Bapedalda), GIS Center of Aceh Besar and Banda Aceh.

## Supporting for GIS Center

During rehabilitation and reconstruction phase, with coordination between a number of agencies and local government, 3 district GIS centres (Aceh Besar, Banda Aceh and Pidie) were established. PelaGIS supported the establishment of these centres by assisting in the training of the local government staff. The training was provided only once to the district legislation. The trained staff must be employed in GIS Center to ensure continuity of GIS Center and has responsibility to maintain GIS capacity including hardware and software.



Figure 4. GIS training to support GIS Center in Pidie

## Assisting Village Planning

In 2007 Fauna and Flora International (FFI) had a recovery program in Aceh Jaya for village planning and education. FFI also had a strong coordination with Aceh Jaya district Government and the local Non Governmental Organization (NGO) community. At their request a training course was provided to district and subdistrict Government officers and also some staffs of FFI who based in Calang to collect spatial information with GPS device and processed the data into GIS.

## Supervised Survey and Mapping of Asset Inventory Project

In supporting Rehabilitation and Reconstruction Task Force (BRR) Aceh-Nias housing asset mapping project, pelaGIS

supervised the field surveyor using GPS to collect housing project location in Aceh and Nias. This resurvey program was intended to clarify BRR housing data in village level.

## Analyzing Spatial Related Information to be Accessed to Public

There are a number of organizations and institutions who creating maps and storing geographic information. PelaGIS engaged the institution to cooperate together in organizing and sharing data to the public. One of outputs is Map Catalog\* which contains hundreds of maps from various organizations. The other product is disaster information based on ManGeoNAD disaster database. Both information can be accessed at pelaGIS website.

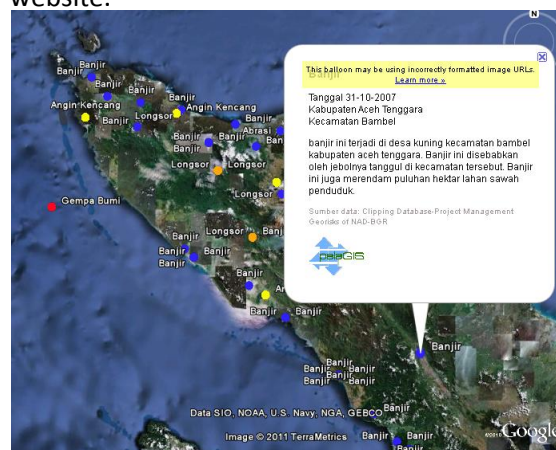


Figure 5. Aceh disaster information viewed in google earth

\* Map catalog is hosted at pelaGIS' partner server. Unfortunately the server currently is broken down and can not be accessed. But the complete list of available maps can be seen in the website.

## Aceh Marine Conservation Area Initiation

In 2011 PelaGIS foundation is involved in the project with Marine and Fisheries Agency. This project covers 8 districts from Sabang, Aceh Besar, Aceh Jaya, Aceh Barat, Aceh Barat Daya, Aceh Selatan, Aceh Singkil and Simeulue. PelaGIS assists the community in participatory mapping activity in defining conservation area in the respected region.



Figure 6. Presenting the conservation participatory mapping project in Iboih, Sabang

The result from this project are data and marine conservation maps which already agreed by the community. Furthermore this output will be an input from Marine and Fisheries agency in Provincial Spatial Planning.

### Who Are Our Partners?

The projects which were implemented by pelaGIS were based on request from an institution or an offer proposal from pelaGIS itself. In conclusion the project was carried out with support and cooperation from the third partner. The partners are coming from several institutions category as below

#### Government Institution

Aceh Province, Aceh Besar district, and Banda Aceh Planning and Development Board (Bappeda). Marine and Fisheries Agency



Figure 7. GIS training for provincial government staff which supported by several institutions

(DKP), Provincial Data and Communication bureau (BPDE).

#### GIS Center

Aceh Geospatial Data Center (PDGA), GIS Center Aceh Besar, GIS Center Banda Aceh.

#### Non-Government Organization

Gesellschaft für Internationale Zusammenarbeit (GTZ), Flora and Fauna International (FFI), Yayasan Leuser Indonesia (YLI), Germany Federal Institute for Geosciences and Natural Resources (BGR) ManGeoNAD project, Deutscher Entwicklungsdienst (DED).

#### University

Syah Kuala University GIS and Remote Sensing Center.

### Where to Find More Info about Us?

More info about pelaGIS can be found at [www.pelaGIS.net](http://www.pelaGIS.net)

### How to Contact Us?

Please feel free to contact us through email at [info@pelagis.net](mailto:info@pelagis.net) or visit pelaGIS' office at : Jl. Elang Lr. Enau Gg. Ahmad Ali no.18 Kampung Ateuk Pahlawan Banda Aceh. Phone (0651) 637845, Provinsi Aceh, Indonesia 23245.

The location of the office can be found at [www.pelagis.net/lokasi.php](http://www.pelagis.net/lokasi.php)