PAEPI Seminar-Workshop Proposal:

Introducing Geographic Information Systems (GIS) Technology as a Tool to Support the Enhancement of the Governance of the Province and LGUs of Bataan

Why this seminar-workshop for the Province of Bataan

The purpose of this introductory seminar-workshop is to introduce GIS technologies to the provincial government and LGUs of Bataan with the intention of initially building a core group of GIS-knowledgeable human resource. The ultimate goal is to enhance the decision-making capacities of the various departments of the province and local governments.

GIS is an information system that manages spatial and non-spatial data. Spatial data takes advantage of the unique location of people, places, things, and events on Earth to produce information to help in making informed, intelligent decisions.

GIS has seen exponential use in many disciplines, industries, and government institutions worldwide. It is by this premise that the province of Bataan ought to seize this opportunity and be empowered with GIS. As a notable and dynamic province mandated to institute efficient and effective management practices, the provincial government will have the upper hand against other provinces in the region and country, if GIS is integrated in its administrative and management functions and is enforced religiously province-wide. The sooner the province integrates GIS, the greater the opportunities and benefits that can be derived.

There are several advantages that GIS can bring to the province. One, of course, is adapting an emergent technology already practiced extensively by governments in developed countries. Another is the reputation that the province would be in-synched with private and other government institutions that are already ahead in adapting the technology. Another important result is cost reduction. Processes and procedures that employ GIS avoids duplication of data development efforts, induces data standardization and uniformity, faster changes and easier upgrading of data, paves the way for centralization of data sharing and sourcing, among others. The general outcome is governance and management efficiency.

Already, as host to a booming economy, a GIS-enabled province of Bataan can further build its case as an emergent province ready to adapt modern technologies to efficiently serve its present constituents and attract prospective investors.

Proponent	Dr Angelica M Baylon, PhD Director, Department of Research and Extension Services Maritime Academy of Asia and the Pacific Mariveles, Bataan Telephone: 919-476-8128 ambaylon@maap.ph.edu **PAEPI Chair Emeritus**
Resource person	Alejandro F Tongco, PhD **Research Specialist – Geographic Information Systems (GIS)** Oklahoma State University Oklahoma, U.S.A. Telephone: 405-744-6159 al.tongco@okstate.edu
Event date	Four days on **March 13-16, 2012 (4-days)**

Intensive Hands-on GIS Training-Workshop
(Duration: 4 days)

MAIN OBJECTIVE:
To introduce GIS technology as a tool for enhancing the decision making processes of the province and LGUs of Bataan

TARGET PARTICIPANTS:
Administrators, Office Heads, Engineers, Staff, and Researchers

PARTICIPANT QUALIFICATIONS:
Average computer literate; enthusiastic to learn and apply GIS

NUMBER OF PARTICIPANTS:
20

SOFTWARE TO USE (All are gratis)
MapWindow GIS, Quantum GIS, OpenOffice, Google Earth, ArcGIS Explorer Desktop, and 7-Zip.

WORKSHOP COVERAGE:
Teaching participants GIS skills to include the following:

1. Fundamentals of GIS
2. Basic hands-on skills how to use a common GIS and visualization software to process and display data
3. How to plan, implement, and report a GIS project.

WHAT TO BRING:

1. Laptop (at least 2-gig memory; installed with Windows XP, Vista, or 7)
2. Maps and datasets of the province and LGUs of Bataan, government agencies (e.g. DENR, NAMRIA, and DOST), and other sources (including digital maps, GIS datasets if any, paper maps, and tabulated data)
3. Thumb/flash drive

TO BE ACCOMPLISHED BY EACH PARTICIPANT:

1. All workshop exercises
2. Individual simple GIS project
3. Presentation of GIS project
4. Packaged project digital output (includes project report, presentation, datasets used and produced, and related files - all in single folder) to be submitted to Dr Baylon.

VENUE REQUIREMENT:
Adequate Internet connectivity

DAY 1

AM

- Registration (including participant's name, email address, office address, supervisor and email)
- Opening Introductions
- Introduction to Geographic Information Systems
- File Management
- Software Download and Installation
- Fundamentals and Demonstration of MapWindow GIS

PM

- Exercise 1: Creating a Simple Map
- Exercise 2: Creating Complex Maps with Several Layers; Labeling and Using the Coloring Scheme

DAY 2

AM

- Using Google Earth and ArcGIS Explorer
- Exercise 3: Digitizing Features (Creating Points, Lines, and Polygons) in MapWindow, Google Earth, and ArcGIS Explorer, including conversion between KML or KMZ and GIS files

PM

- Making a Simple GIS Project (includes title, summary of your project, background and significance, beneficiaries and implications, objective, data, procedure, results and analysis, conclusion, and future work)
- Exercise 4: Editing Attribute Tables, including using OpenOffice Calc (or Excel) to Populate Tables

DAY 3

AM

- Exercise 5: Geoprocessing
- Exercise 6: GPS, Projections, and Geographic Referencing
- Project Assignment
- [Work on Project]

PM

- [Work on Project]

DAY 4

AM

- [Work on Project]
- Participant Project Presentation (15 minutes each)

PM

- Participant Project Presentation -- Continued
- Feedback from Participant Audience
- Submission of Packaged Output (in single digital folder) to Dr Baylon
- Awarding of Certificates and Closing Remarks