

FINAL PROJECT Earth Science 1st Trimester, AY 2017-2018

Case Study: Philippine Georesources

The Philippines is endowed with rich geological resources ('Georesources') which provide the society with services ranging from resource mining, scientific research and education, business and trade, agriculture, and tourism.

Knowledge on the distribution, formation and characteristics of these resources for various purposes can lead to economic progress, while ensuring environmental sustainability. Proper measures and extraction procedures of these resources also minimize effects of possible hazards.

It is therefore vital to understand the country's georesources in the goal of achieving development while pursuing environmental and public safety. In the context of the Philippines, a lot of environmental issues are due to the lack of properly communicated scientific information on what resources we have, how we should extract and use it, and or if we should maximize gains from it in exchange of exploitation and possible hazards. Questions that can arise from this include:

- 1. How many resources do we have?
- 2. How do these resources form?
- 3. How can we benefit from these resources?
- 4. How can we obtain or extract these resources?
- 5. Are we using these resources efficiently?
- 6. What are the risks involved in the extraction and use of these resources?
- 7. What will happen if this resource would run out?
- 8. How can we ensure that we strike a balance with environmental protection and economic development?

As a Lasallian student who is a critical and creative thinker, lifelong learner, and a servicedriven citizen, your task is to come up with a case study of georesources in the Philippines. The objective of this case study is to research specifically on the distinct mineral, rock, and soil profile of a specific province or municipality in the country. The paper should expound on the said georesources' estimated amounts (in raw and economic values), composition, and related geological processes that lead to its formation and disintegration.

The collected data would shed light on the suitability of specific activities/developments in the chosen study site (e.g. planting of specific types of crops or building massive structures in a particular type of land/soil profile), in consideration of other environmental conditions in the area. Possible health hazards upon exposure or in relation to extraction of these georesources should also be discussed.

Outline:

- I. Executive summary/Abstract (provide three keywords in the last part)
- II. Introduction
 - A. Description of the study site
 - B. Demographics of the study site
 - C. Objectives of the study (as based on the guide questions)
- III. Distinct Mineral (just focus on one), Rock and Soil Profile
 - A. Name, Image, Chemical composition
 - B. Amount and Economic value
 - C. Formation
 - D. Extraction process (for Minerals)
 - E. Use/Applications (specify who/which sectors/companies benefit from it)
- IV. Risks involved
 - A. In the use/extraction (for all organisms)
 - B. In depletion
 - C. Others (in relation to other environmental conditions)
- V. Discussion (On the suitability of activities/developments on chosen study sites, on the trade-offs (if any) in the use/extraction of these georesources in exchange of profit, on whether the resources are being used sustainably)

VI. Conclusion

VII. References (use APA referencing, arranged alphabetically)

VIII. Appendix

Format:



Title Group 1, STEM11A Name 1 Name 2 Name 3 Name 4 Paper Size: Letter , 8.5" x 11"
Manuscripts must be in American English
Spacing: double-spaced.
Use one side of the page only. (Don't use the back portion of each page)
Font size and Style: 11 pt. Times New Roman/Arial, paragraphs are indented.
Number all pages consecutively on the upper right corner of the paper.

Deadline Schedules:

Week Number	Date	Description of Activity	Deadline
2	June 12-16	Project Making: Part II	Week 3: June 19-23
4	June 26-30	Project making: Part III A-C	Week 5: July 3-7
6	July 10-14	Project Making: Part III D and E	Week 7: July 17-21
8	July 24-28	Project making: Part IV	Week 9: July 31- August 4
10	August 7-11	Submission of Final Output	

RUBRIC FOR EVALUATING Final Project (Case Study)

CRITERIA	EXEMPLARY	SATISFACTORY	DEVELOPING	BEGINNING
	4	3	2	1
Organization, 20%	Manuscript is well-organized and structured.	Manuscript is organized but lacks certain key elements.	Manuscript show organization but has several portions that are not relevant.	Manuscript is disorganized and the flow of information and arguments are confusing.
Scientific Accuracy, 40%	Scientific explanations or facts presented/cited are 100% accurate.	Scientific explanations or facts presented/cited show some inaccuracies.	Scientific explanations or facts presented/cited show a significant number of inaccuracies	Scientific explanations or facts presented or cited are all misconceptions
Presentation of Arguments or Explanations, 40%	Arguments and explanations presented are clear, valid, and convincing.	Arguments presented are clear, valid, and convincing but has several flaws.	The arguments and explanations presented only partially addressed the problem.	The arguments and explanations presented do not in any way address the problem.
			OVER-ALL SCORE	100