

Guidelines for Bachelor's Project Proposals



School of Science

Department of Environmental Science & Engineering

Kathmandu University

Dhulikhel, Kavre,

NEPAL

TABLE OF CONTENTS

<i>Item</i>	<i>Page No.</i>
1. Sequence of items required in project proposal	3
2. Guidelines for layout and format of project proposal	4
3. Sample title page	5
4. Main body of the project proposal	6
5. Sample figure layout and captions	8
6. Sample table headings and layout	9
7. Sample reference listings	10

1. *Sequence of items to be included in Project Proposal*

- A. Title page { project report title should not exceed 25 words}
- B. Table of Contents
- C. Chapter 1: Introduction,
 - Background
 - Rationale of Study
 - Research questions/Hypothesis (Optional)
 - Objectives of Study
 - Scope & Limitations of Study
- D. Chapter 2: Literature Review
- E. Chapter 3: Methods and Materials
- F. Chapter 4: Expected Output(s), Schedule and Budget
- G. List of References

NOTE: *The recommended length of project proposal should be within the range of maximum 10 typed pages (1.5 line spacing) or in about 10,000 words. This is excluding the preliminary pages.*

2. Guidelines for layout and format of project proposal

1. Preliminary pages (**title page, table of content**) should be numbered: **i, ii**, etc. A page number should not be shown on the title page even though it is counted as **i**.
2. Margins should be maintained on all pages as follows:
 - i.** Left margin = **3 cm** (wider for binding)
 - ii.** Top margin = **2.5 cm**
 - iii.** Right & bottom margins = **2 cm**
3. Page number should be placed at the **bottom, center** of page.
4. Use 1.5 line spacing for all text in the main body of the thesis.
5. Use Times New Roman (**12 point** size), or Arial (**11 point** size) fonts, for text.
6. Label figure captions at bottom of the figure and label table headings at the top of the table such as, Figure 1.1, and Table 1.1
7. Cite references in the text of the thesis according to the convention:
 - a. "author's last name (date)" -- in case there is only one author
 - b. "last name of first author" *and* "last name of second author" (date) -- in case of two authors
 - c. "last name of first author" *et al.* (date) -- in case of multiple authors
8. List references alphabetically and using correct citations for books, journal articles and conference/seminar proceedings as shown in the examples (following pages).
9. If more than one reference of the same author exists then the references with the same author should be listed chronologically according to publishing date (year).
10. If more than one of the same author's publications exist in the same year (date), then use suffixes a, b, c, etc., after the publication year {e.g., 1998a; 1998b; etc.)

SAMPLE TITLE PAGE

A Project Proposal on

"TITLE OF PROJECT PROPOSAL"

by

"Students name in Chronological order, Semester, Year"

Name of Supervisor/co-supervisor

Bachelor's (Honors) Degree in Environmental Science /B. Tech. in
Environmental Engineering



Department of Environmental Science and
Engineering School of Science
Kathmandu University

"month year "

5. Main body of project proposal

The main body of the project proposal should include the four **Chapters** starting from **INTRODUCTION, LITERATURE REVIEW, METHODS AND MATERIALS, EXPECTED OUTPUTS, PLAN AND BUDGET (in uppercase i.e. ALL CAPS)**. Each chapters has to be in different pages.

1. **INTRODUCTION:** This chapter should discuss the background of the project, issues being dealt, rationale of the project, research objectives, and scope and limitation of the study.

1.1 Background: A brief background on the issues should be discussed here. It should be done in the form of brief review of related literatures, which is essential to build rationale and project objectives.

1.2 Rationale: This section presents rationale why you are doing this research/project. Likewise, the need to conduct this research/project should be discussed supported by the statistics and evidences. This section should connect the background of the problem with the research objectives by provoking possible research questions among the readers.

1.3 Research Questions: Write few research questions which motivated for the research.

1.4 Hypothesis: If the project can assume hypotheses such as
i) Null hypothesis (H₀): There is no trend inii) Alternative hypothesis (H₁): there is a trend in, it can be included. Otherwise, it is not a compulsory.

1.5 Objectives: This section should be about what student want to achieve from the research project. Usually objective is presented as general objective (one line in consistent with the title of the project) and specific objectives (in consistent with the general objective only if necessary).

1.6 Scope and limitation of the study: This section includes the focus of the project (geography, target group or population, research variables under the project, research areas. Similarly, the challenges that may limit the project work should be discussed under the limitations.

2. **LITERATURE REVIEW:** Generally, a literature review is a survey of published materials on the topic of the interest authored by accredited scholars and researchers. It is quite important to uncover what is already been known to the scientific community and what is the gap in knowledge before conducting a research. It is encouraged to refer to recent research articles published in peer-reviewed journals during the literature review process. This section needs to be divided into different sub-headings based on the information gathered during the review.

3. **METHODS AND MATERIALS:** This chapter includes the explanation about the way a project is conducted to meet the objectives.

i) **Study Area:** A study area with a location map should be kept in this section. If

possible, a map of Nepal in an inset and a large map of study area should be prepared as shown in Figure 4.2.

ii) Methods: Appropriate methods and materials used in the research should be explained in detail along with the justification for selecting such methodologies. This chapter should include the research design, study population, sample selection methods, sample size, methods of data collection and data analysis for field research. For experimental and modelling work detailed description of the experimental set-up, models used or proposed and analytical techniques should be presented.

iii) Materials: A list of materials and data which are necessary for the project should be listed in this sub-section.

- 4 EXPECTED OUTPUTS, RESEARCH PLAN AND BUDGET:** This chapter should include the expected results of the project in line with the specific objectives. Research/project plan/activity should be presented in forms like Gantt chart. Tentative budget (with breakdown) required for the proposed study should be presented.

Reference: In a research evidences and supporting arguments presented by referring to earlier publications such as journals, reports, books, theses and other published and unpublished works. Hence, all these works cited in the main body of the proposal should be duly listed in the reference section.

SAMPLE FIGURE LAYOUT & CAPTIONS

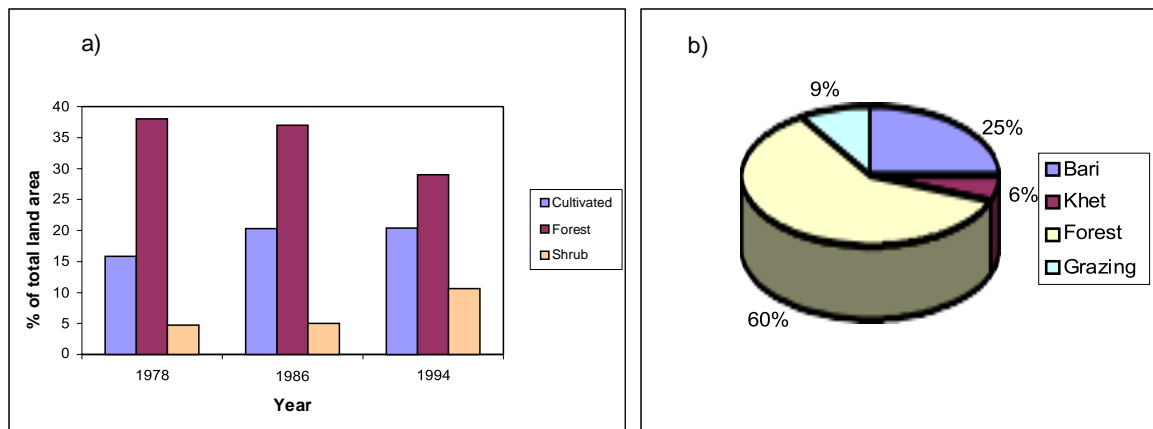


Figure 4.1. a) Change in land use between 1978 and 1994 in Nepal; b) proportion of carbon stocks in different land use categories.

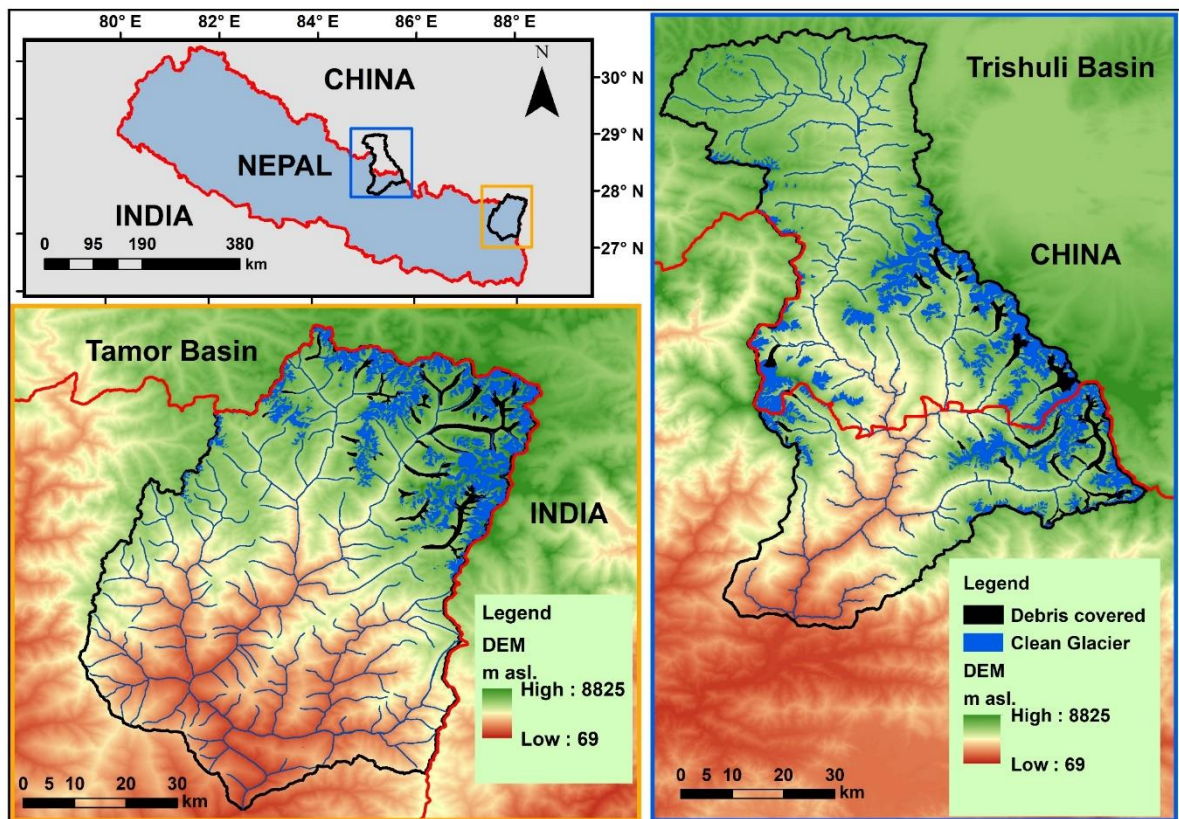


Figure 4.2 Location map of the study area.

SAMPLE TABLE HEADINGS & LAYOUT

Table 5.2. Factorial analysis of variance of soil air carbon dioxide-C concentrations by erosion phase and season.

Source	DF	Mean Squares	F-test
Replication	2	0.94	0.92ns
Erosion Phase	3	15.34	15.00**
Error A	6	1.02	
Sampling Time	18	124.00	96.10***
Time X Rep	36	1.21	0.93ns
Phase X Time	54	19.00	14.71***
Error B	108	1.29	
Residual	119		
Total	227		

DF = degrees of freedom; ns = non-significant; **, and *** indicate significance at the 0.01 and 0.001 levels of probability for the ANOVA F-test.

SAMPLE REFERENCE LISTING

APA 6th Edition (Elsevier or Springer format) should be followed while preparing the list of references and in the main text. Some examples for different sources of references are as follows:

Journal papers:

Kayastha, R. B., Ohata, T., & Ageta, Y. (1999). Application of a mass-balance model to a Himalayan glacier. *Journal of Glaciology*, 45(151), 559-567.

Wetzel, C. E., Jüttner, I., Gurung, S., & Ector, L. (2019). Analysis of the type material of *Achnanthes minutissima* var. *macrocephala* (Bacillariophyta) and description of two new small capitate *Achnanthidium* species from Europe and the Himalaya. *Plant Ecology and Evolution*, 152(2), 340-350. <https://doi.org/10.5091/plecevo.2019.1628>

Books:

De Vaus, D. A. (2014). *Surveys in social research*. Sydney, Australia: Allen & Unwin.

Books Chapters:

Ghimire, A., Luongo, V., Frunzo, L., Pirozzi, F., Lens, P.N.L., Esposito, G. (2016). Engineering strategies for enhancing photofermentative biohydrogen production by purple non-sulfur bacteria using dark fermentation effluents. In F. D. Harzevili and S. Hilgsmann (Eds.) *Microbial Fuels: Technologies and Applications* (pp. 275-313). Boca Raton, Florida: Taylor and Francis Group, CRC Press.

Papers in Proceedings:

Dahal, B. M., Sitaula, B. K., Bajracharya, R. M., Sharma, S., and Atreya, K. (2006). Socioeconomic conditions in relation to agricultural intensification in Ansikhola watershed of central Nepal. In (Eds.), *Proceedings of the international seminar on 'Environmental and Social Impacts of Agricultural Intensification in Himalayan Watersheds'* (pp xx-xx). Kathmandu, Nepal.

Reports:

CBS. (2012). *National population and housing census 2011*. Kathmandu, Nepal: Central Bureau of Statistics (CBS). Retrieve from http://mofald.gov.np/mofald/userfiles/docs_206.pdf

Thesis:

Dahal, M. (2013). *Solid Waste Manage in Kathmandu University*. (Master's thesis). Kathmandu University, Dhulikhel, Kavre, Nepal. Retrieved from <http://ku.edu.np/...> (optional)

Newspaper Article (Online):

Aryal, C. (2019, July 23). Human-leopard conflict: Ecological reasons to blame. *The Himalayan Times*. Retrieved from <https://thehimalayantimes.com/opinion/human-leopard-conflict-ecological-reasons-to-blame/>

Webpage:

HealthTimes. (2015). The future of aged care nursing in Australia. Retrieved from <https://healthtimes.com.au/hub/aged-care/2/news/nc1/the-future-of-aged-care-nursing-in-australia/495/>

Refer to following links for more examples of referencing:

- <https://guides.library.uq.edu.au/referencing/apa6>
- <https://libguides.library.usyd.edu.au/c.php?g=508212&p=3476096>

Note: List your references in alphabetical order; do not separate the reference list in different categories (as presented above).