

# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Tropical AgriSciences

## Evaluation of the Bachelor Thesis by Opponent

Thesis Title **Assessment of the environmental and economic potential of biomass in Cambodia**

Name of the student **Nariputhisak Vong**

Thesis supervisor **doc. Bc. Ing. Tatiana Ivanova, Ph.D.**

Department **Department of Sustainable Technologies**

Opponent **Ing. et Ing. William Nkomoki, Ph.D.**

Formulation of the aims	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Choice of suitable methods	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Fulfilment of the aims	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Scientific contribution of the thesis	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Originality of the thesis	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Theoretical background of the author	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Handling with data and information	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Handling with scientific literature (citations)	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Argumentation and critical thinking	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Abstract and keywords	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Structure of the chapters and paragraphs	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Comprehensibility of the text	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Accuracy of the terminology	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Quality of scientific language	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Formatting, layout and general impression	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Evaluation of the work by grade (1, 2, 3, 4)	<b>2</b>			

Evaluation: 1 = the best

Date 03/09/2021

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Signature of Opponent

**Other comments or suggestions:**

The Bachelor thesis presented titled "Assessment of the environmental and economic potential of biomass in Cambodia" is authored by Nariputhisak Vong under the supervision of Associate Professor Tatiana Ivanova and in consultation with Charles Amarachi Ogbu, MSc. The main objective of this thesis was to analyze and summarize the data and information on biomass role and energy potential in Cambodia.

The study is well-structured, over 31 pages, excluding the references. The study is a literature review consideration. I appreciate that the author was able to incorporate the citation in the text.

Limitation includes -

The main objective indicates the component of analyzing and summarizing the data; however, the literature does not show the summarized data aspect apart from the information on the role.

The author does not indicate how the data was processed and analyzed from relevant sources on the methodology.

The author performed a decent work reviewing the literature. However, I would have appreciated it if more recent references were used, especially on statistical data. For example, "A total of 15.3 million people in Cambodia was without electricity in 2012". "Cambodia's overall rice production in 2014 was estimated to be at 9.3 million tons (page 25)".

My main concern is that the economic assessment did not consider past literature, especially on overall inputs costs and outputs of biomass energy in Cambodia. Consideration of prior environmental and economic literature, particularly from the Southeast Asia region, would have integrated well with identifying what may be beneficial for Cambodia.

Minor comments

The text has minor typos and inconsistencies (some spaces on %, Ministry- upper and lower case, CO2).

I would like to appreciate the chosen topic as it is relevant to understanding how renewable energy from biomass may contribute to livelihood, especially for local communities and with practical implications. I recommend an overall grade of very good (2).

**Questions for thesis defence:**

What do you think are some of the essential requirements for economic assessment (in terms of biomass inputs) to make the power generation economically viable for smallholders in Cambodia?

Based on your literature consideration, what should be the top priority for policymakers that you recommend promoting the uptake of biomass as an energy source in Cambodia?

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