

## Opponent assessment of the doctoral thesis

**Type of thesis:** Dissertation thesis

**Title of the thesis:** Factors influencing sanitation conditions in developing countries: insights from Ethiopia and Cambodia

**Autor:** Helena Humňalová, MSc.

**Affiliation:** Charles University, Faculty of Science

**Supervisor:** prof. RNDr. Josef Novotný, PhD.

### Dissertation thesis evaluation:

Evaluation	Excellent	Very good	Average	Poor	Failed
Relevance of the topic	X				
Meeting the goal and fulfilling the task of the thesis		X			
Quality of the scientific work		X			
Methodological approaches	X				
Merit of the thesis and applicability of results		X			
Formal level of the thesis	X				

**Comments and remarks on the dissertation thesis:**

The dissertation thesis covers a wide range of factors influencing sanitation, from individual behaviours to national policies, and includes multiple countries for comparison. This broad approach allows for a more holistic understanding of the issues. It quite succinctly outlines the aim to investigate sanitation conditions in rural Ethiopia and Cambodia, with some comparative insights from India. And the explanation for the chosen regions and the reasonings behind that is also outlined in the dissertation thesis.

As I am very much in favour of dissertation thesis compiled from scientific articles, I also enjoyed going through this dissertation thesis.

The use of mixed research methods, including fieldwork, policy analysis, and comparative studies, is a strong point. This diversity in methodology helps to triangulate findings and make the soundness of the results. I also found useful the Table 4.

The dissertation thesis provides valuable insights into the role of policy in sanitation improvement, particularly highlighting the importance of sustained political support and the potential pitfalls of policy misuse.

The emphasis on the role of perceived social norms in sanitation behaviour is an interesting contribution. It adds a good understanding of how social factors can influence sanitation practices and the sustainability of changes.

The comparative analysis between Ethiopia, Cambodia, and India, although insightful, appears to lack depth in some areas. More detailed comparative discussions could enhance the understanding of contextual differences and similarities. Especially, when the published articles are covering either Ethiopia, or Cambodia or Ethiopia and India.

Some findings, such as the importance of political support and social norms, are well-established in the existing literature. While the thesis provides confirmations of that and some new insights, maybe more emphasis on novel findings that add to the existing body of knowledge would help.

The thesis could be strengthened by providing more practical recommendations based on the findings. While the theoretical contributions are clear, the practical implications for policy makers and practitioners in the field are less developed and less clear. So, as you will see mentioned at the end of the review, maybe some summarised outputs of

the main findings through some popularisation articles and maybe some info sheets would be a nice extension of the reach of the dissertation thesis.

The main findings are well-organized and clearly linked to the research questions. The contributions of the published articles are highlighted effectively, demonstrating the research's impact on the field. Acknowledging here again the Table 5.

Overall, this doctoral thesis makes a significant contribution to understanding the factors influencing sanitation conditions in developing countries. It is well-organized and sound, with insights into the role of policy and social norms.

However, it could benefit from a little bit more detailed methodological descriptions, deeper comparative analysis, and a stronger emphasis on novel findings and practical implications. With these improvements, the thesis would offer even greater value to scholars, policymakers, and practitioners in the field of sanitation and public health. On the other hand, this could be also done via some summarised outputs of the main findings through some popularisation articles and maybe some info sheets (maybe table 5 could be a good basis for that). Let me here also acknowledge the popularisation work you did (i.e. Vesmír etc), but my question/suggestion is aimed more towards either English popularisation or local languages of target regions.

Nevertheless, the thesis makes a valuable contribution to the field of sanitation research and therefore I recommend the thesis to be defended in front of the Committee.

### Questions:

1. Could you provide more details on the sampling procedures and data analysis techniques used in your fieldwork in rural Ethiopia and Cambodia? How did you ensure the reliability and validity of your data? And what issues did you encounter during the data collection?
2. In your comparative analysis of sanitation policies in Ethiopia, Cambodia, and India, what were the most significant contextual differences that influenced the success or failure of these policies? How did these differences shape your overall findings? And how are you planning to share your recommendations with the target audience?
3. Your thesis emphasizes the importance of sustained political support for sanitation change. Could you elaborate on specific policy measures or political strategies that were particularly effective or ineffective in the countries studied? And also elaborate on the amount of discussions you had with the local policy makers?
4. You highlighted the role of perceived social norms in influencing sanitation behaviours. Can you discuss how these norms were identified and measured in your study? Additionally, how can policymakers effectively work with such social norms to promote sustainable sanitation practices? Having in the consideration, that this concept might sometimes not be clear to them?
5. Based on your findings, what practical recommendations would you suggest for improving sanitation conditions in rural areas of developing countries, which you could realistically imagine being quickly and feasibly implemented? Furthermore, what are the key areas for future research that you believe should be prioritised to build on your work?
6. And one smaller question: The topic might be sometimes sensitive, especially in some regions. Given the challenges of conducting field research in rural areas, especially over multiple years, what were the main obstacles you maybe had during data collection, and how did you overcome them to ensure the reliability and validity of your findings?

**Opponent's statement whether the dissertation thesis meets the academic title requirements and whether it is recommended for defense:**

I recommend Dissertation thesis "Factors influencing sanitation conditions in developing countries: insights from Ethiopia and Cambodia" by **Helena Humňalová**, MSc. to be allowed for defense and after successfully defending the thesis to award the title Ph.D.

*Date: 17.6.2024*

With best regards,



Associate Professor Dr. Hynek Roubík  
Vice-dean for Science, Research and Doctoral Study  
Biogas Research Team – Group leader  
Faculty of Tropical AgriSciences  
Czech University of Life Sciences Prague  
Czech Republic, [roubik@ftz.czu.cz](mailto:roubik@ftz.czu.cz)