

Project Seminar
Behavioral Change for Food Choice

Objective of the seminar

Human activities and land-use change are causing major impacts on ecosystems. As a result, human-wildlife interactions reorganize dynamically, leading to the emergence of zoonotic diseases. By making conscious choices about abstaining from hunting, trading and consuming wild meat, one can reduce the risk of zoonotic disease outbreaks. In this seminar, we will analyse (i) how wildlife hunting, trading and consumption in Western Africa is motivated by a mix of ecological and socio-economic factors, cultural norms, and personality traits; and (ii) how in turn this could be altered by targeted behavioral change interventions (BCI).

The thought of interventions need to be selected based on a meaningful diagnosis (e.g. using the Behavioral Change Wheel). Students will have the opportunity to design their own research in a group of 3. All groups are expected to come up with their own idea on how to study a specific element of this problem (designing survey items, choice experiment and blind tasting, interventions in restaurants). The work from the seminar will potentially be carried out within the project of our Working Group (<https://ivosteimanis.github.io/project/behaviorchange/>) and two students may have the chance to join the fieldwork in Ivory Coast starting February 2024 as student assistants (please indicate if you are interested) or to write their master thesis within the project. Groups will present their progress regularly to receive feedback on their design, implementation, and evaluation strategies. Interactions between groups are highly encouraged. In the final session, all groups will present their final research design and hand in a short research paper afterward.

Recommended prerequisite for participation

The course is open to Master students from economics and other social sciences with an interest in resource management, behavioral science and economic development and who like to be part in an interdisciplinary research project.

Application and allocation of seminar places

Via Marvin (opens 14.8.2023) first-come-first serve. **The seminar is limited to 12 students.**

Information meeting and kick-off-meeting

The attendance of the kick-off (20.10.2023 // online via zoom) and other appointments are compulsory. An active participation in all discussions should be self-evident..

Learning objectives

By the end of this seminar, students will be able to design and develop a research question, plan and execute a research design, and analyze data related to the topic of wildmeat in Western Africa. Students will also be able to evaluate the ethical implications of conducting research on this topic and present their findings in a clear and concise manner.

Grading

There will be two graded examinations: (i) an individual presentation (33%) and (ii) a group presentation and essay (66%). The former will determine your 'presentation' grade where you have to share the key aspects of a journal article(s) to the other students and lectures. This will help all students to get a general understanding of the topic before developing their group research projects. The latter, will determine your 'essay' grade. Group projects will be graded as a whole. One grade for all group members. Groups are required to (a) hand in an essay and (b) present their paper in a twenty minute presentation followed by a group discussion. Details on graded examinations, deadlines and meetings are provided below and at the end of the document in the section "Seminar schedule"

Seminar Topics and literature

Theoretical concepts

1. Socio-ecological systems framework:

Ostrom, Elinor. 2009. 'A General Framework for Analyzing Sustainability of Social-Ecological Systems'. *Science* 325 (5939): 419–22. <https://doi.org/10.1126/science.1172133>.

2. Behaviour Change Wheel

Michie, Susan, Maartje M. van Stralen, and Robert West. 2011. 'The Behaviour Change Wheel: A New Method for Characterising and Designing Behaviour Change Interventions'. *Implementation Science* 6 (1): 42. <https://doi.org/10.1186/1748-5908-6-42>.

3. Transformation: Leverage point

Abson, David J., Joern Fischer, Julia Leventon, Jens Newig, Thomas Schomerus, Ulli Vilsmaier, Henrik von Wehrden, et al. 2017. 'Leverage Points for Sustainability Transformation'. *Ambio* 46 (1): 30–39. <https://doi.org/10.1007/s13280-016-0800-y>.

Literature reviews

4. Zoonotic risk and environmental degradation

Gibb, Rory, David W. Redding, Kai Qing Chin, Christl A. Donnelly, Tim M. Blackburn, Tim Newbold, and Kate E. Jones. 2020. 'Zoonotic Host Diversity Increases in Human-Dominated Ecosystems'. *Nature* 584 (7821): 398–402. <https://doi.org/10.1038/s41586-020-2562-8>.

5. Evidence on wild meat supply chain (2002-2020)

Ingram, Daniel J., Lauren Coad, E.J. Milner-Gulland, Luke Parry, David Wilkie, Mohamed I. Bakarr, Ana Benítez-López, et al. 2021. 'Wild Meat Is Still on the Menu: Progress in Wild Meat Research, Policy, and Practice from 2002 to 2020'. *Annual Review of Environment and Resources* 46 (1): 221–54. <https://doi.org/10.1146/annurev-environ-041020-063132>.

6. Importance of wild meat for food security

Booth, Hollie, Michael Clark, E. J. Milner-Gulland, Kofi Amponsah-Mensah, André Pinassi Antunes, Stephanie Brittain, Luciana C. Castilho, et al. 2021. 'Investigating the Risks of Removing Wild Meat from Global Food Systems'. *Current Biology* 31 (8): 1788-1797.e3. <https://doi.org/10.1016/j.cub.2021.01.079>.

7. Sustainable use of wild species

Fromentin, Jean-Marc, Marla R. Emery, John Donaldson, Ganesan Balachander, Elizabeth S. Barron, Ram P. Chaudhary, Marie-Claire Danner, et al. 2023. 'Status, Challenges and Pathways to the Sustainable Use of Wild Species'. *Global Environmental Change* 81 (July): 102692. <https://doi.org/10.1016/j.gloenvcha.2023.102692>.

Drivers of wild meat consumption / trading / hunting

8. Economic and geographical

Brashares, Justin S., Peter Arcese, Moses K. Sam, Peter B. Coppolillo, A. R. E. Sinclair, and Andrew Balmford. 2004. 'Bushmeat Hunting, Wildlife Declines, and Fish Supply in West Africa'. *Science* 306 (5699): 1180–83. <https://doi.org/10.1126/science.1102425>.

Brashares, Justin S., Christopher D. Golden, Karen Z. Weinbaum, Christopher B. Barrett, and Grace V. Okello. 2011. 'Economic and Geographic Drivers of Wildlife Consumption in Rural Africa'. *Proceedings of the National Academy of Sciences* 108 (34): 13931–36. <https://doi.org/10.1073/pnas.1011526108>.

9. Cultural I

Bachmann, Mona Estrella, Jessica Junker, Roger Mundry, Martin Reinhardt Nielsen, Dagmar Haase, Heather Cohen, Joseph A. K. Kouassi, and Hjalmar S. Kühl. 2019. 'Disentangling Economic, Cultural, and Nutritional Motives to Identify Entry Points for Regulating a Wildlife Commodity Chain'. *Biological Conservation* 238 (October): 108177. <https://doi.org/10.1016/j.biocon.2019.07.022>.

Bachmann, Mona Estrella, Martin Reinhardt Nielsen, Heather Cohen, Dagmar Haase, Joseph A. K. Kouassi, Roger Mundry, and Hjalmar S. Kuehl. 2020. 'Saving Rodents, Losing Primates—Why We Need Tailored Bushmeat Management Strategies'. *People and Nature* 2 (4): 889–902. <https://doi.org/10.1002/pan3.10119>.

10. Cultural II

Chausson, Alexandre M., J. Marcus Rowcliffe, Lucie Escoufflaire, Michelle Wieland, and Juliet H. Wright. 2019. 'Understanding the Sociocultural Drivers of Urban Bushmeat Consumption for Behavior Change Interventions in Pointe Noire, Republic of Congo'. *Human Ecology* 47 (2): 179–91. <https://doi.org/10.1007/s10745-019-0061-z>.

Morsello, Carla, Blanca Yagüe, Letícia Beltreschi, Nathalie van Vliet, Cristina Adams, Tatiana Schor, Maria Paula Quiceno-Mesa, and Daniel Cruz. 2015. 'Cultural Attitudes Are Stronger Predictors of Bushmeat Consumption and Preference than Economic Factors among Urban Amazonians from Brazil and Colombia'. *Ecology and Society* 20 (4). <https://doi.org/10.5751/ES-07771-200421>.

Interventions to change wild meat consumption

11. Social marketing

Chaves, Willandia A., Denis R. Valle, Martha C. Monroe, David S. Wilkie, Kathryn E. Sieving, and Brooke Sadowsky. 2018. 'Changing Wild Meat Consumption: An Experiment in the Central Amazon, Brazil'. *Conservation Letters* 11 (2): e12391. <https://doi.org/10.1111/conl.12391>.

12. Entertainment-education

Veríssimo, D., C. Schmid, F. F. Kimario, and H. E. Eves. 2018. 'Measuring the Impact of an Entertainment-Education Intervention to Reduce Demand for Bushmeat'. *Animal Conservation* 21 (4): 324–31. <https://doi.org/10.1111/acv.12396>.

Seminar schedule

Date	Seminar
20 Okt. 2023 10:00-12:00 Room: <i>zoom</i>	Kick-Off: Introduction to the seminar and the project <ul style="list-style-type: none"> • Examples on what students can work on will be given • Topics for the reading group are presented and will be allocated on a first-come-first-serve basis on ILIAS
15 Nov. 2023 13:00-16:00 Room: <i>will be announced</i>	Reading group (individual, 33% of final grade) 15 min. presentation + 5-10 min. discussion each. You should be familiar with your paper and summarize the key aspects (methods, results, sample, etc.) and highlight insights that could be important for the group research design part of the seminar.
03-09 Jan. 2022	Design Feedback Round (Peer-to-peer) Groups exchange their research designs to provide feedback to each other. <ul style="list-style-type: none"> • Besides the obvious benefit of receiving feedback, reviewing the designs of the other groups will also give you some new ideas (especially on how to phrase your questions) and will help you recognize the shortcomings of your design. • Research designs have to be shared via email (lecturers in cc) to the other groups until 03 Jan. 2022.

	<ul style="list-style-type: none"> Feedback has to be provided in the word document (track changes, comments) and shared via mail until 09 Jan. 2022 to the other groups and the lecturers (in cc).
19 Jan. 2024 9:00-11:00 Room: <i>online</i>	Group Consultation (optional via zoom) <ul style="list-style-type: none"> Up to 30 min per group <p>Each group will be allocated a time slot to briefly present the current state of their research project and to talk about anything you need feedback on before you start with your data collection.</p>
29 Jan 2024 09:00-13:00 Room: <i>will be announced</i>	Presentation of Final Design (group, 66% of final grade) <ul style="list-style-type: none"> 20 min presentation + 20 min discussion for each project <p>Present your research question, state of the literature, your methodology and design (how did you answer your research question), and how your results will improve our understanding of the problem beyond the current state of the literature. Following the presentation, we then have time to have an open discussion to talk about your research design, way forward and any remaining questions. Presentations should include:</p> <ol style="list-style-type: none"> What is your research objective and why is it interesting? <ul style="list-style-type: none"> Motivation: What is the problem? Why is it important? What do we already know? (current state of the literature, theoretically and empirically) What is your research objective? (including main research questions and hypotheses) How are you going to answer your research question? What methods, sample and data (variables) do you need to test your hypothesis? Experiment/Survey design <ul style="list-style-type: none"> What are you going to do? What behavior are you trying to change? With whom are you conducting the experiment/survey? (consumers, sellers, traders)? What are you going to tell your participants? -> write it down! What items are you going to ask and in what order? How are you going to analyze your data? If you have a model in mind (e.g., OLS, probit, etc.) what are your variables?
15 Feb 2024 (until mid-night)	<p>Deadline Essay: Submit research report on ILIAS. Your research report should be structured like a detailed pre-analysis plan and not be longer than 8 pages (see kick-off slides for details). It should include an introduction, methods (incl. hypotheses, design & data collection process) and planned analysis. Keep the report focused on the design, how it helps you to answer your research objective, and how your study will contribute to the existing literature.</p> <p>Formatting: The line spacing within the text should be 1,5 (1 for footnotes). A common and legible font should be used (ex. Times New Roman or Arial). The font size should be 12 within the academic text itself and 10 for footnotes. The block format should be used for paragraph formatting. The term paper can be written in English or German. The format of the essay should follow the requirements of a master/diploma thesis. If any form of plagiarism is found the term paper will be rated with the grade 5,0. Term papers should include at least a minimum of linguistic elegance and accuracy. More info on our website: https://www.uni-marburg.de/en/fb02/research-groups/economics/sustuse/folder_docs/sustuse_thesis-guide_extern.pdf</p>