Theory and econometrics of individual and collective choice analysis: choice and controlled experiments

A practical training offered by CEEPA

Pretoria, 20-24 May 2019

Description and main topics

The objective of the training is to offer young scholars an overview of the current empirical methods aimed at understanding preferences and economic behaviour towards natural resources: how to design, implement and analyse a choice experiment or more broadly an economic experiment to anticipate individual and collective behaviours. The training is mainly methodological in nature. Participants will be exposed to a large set of tools to help them decide upon the best tools/methods to be used to answer their current research questions.

The course begins with an introduction to how economics as a science conceptualizes discrete choices made by agents based on their preferences, which can be analysed as either being fixed as in choice experiments or influenced by external factors (e.g. including other people) as in some experimental economics.

In the choice experiments (CE) section, the course will initially present a solid foundation on the different approaches to modelling economic choices, followed by the different steps of a stated choice experiment. The presentation of the steps of a CE will alternate between theory and lab exercises to cover topics like research question formulation, questionnaire design, experimental design, survey design, sample design, and data analysis, where students will work with standard choice models including conditional logit, mixed logit, and latent class models. The following more advanced topics will be presented at the end: the possibility to detect other choice heuristics and their influence on the results of a CE, and the possibility to integrate perception and attitudinal variables that could influence choices in a CE.

In the controlled experiments section, basic concepts and methods of economic experiments in the laboratory and field will initially be presented. Key concepts of experimental economics (e.g. validity of an experiment, framing, etc.) will follow. Students will learn all steps of an experimental protocol, from design through data analysis. Practical examples will be used to augment class lectures, and real experiments with students as subjects will be run.

The final half a day of the course will be dedicated to the analysis of students case studies. For this reason, this course encourages participation of PhD students at different stages of developing their research projects on any aspect related to how individual or collective decision-making connects with the economic valuation of non-market goods and services.

Target audience

The course will be designed for **Post-graduate** students and **young professionals** in Agricultural, Natural Resources or Environmental Economics. PhD students are particularly encouraged to apply to this training.

Pre-requisites

Knowledge in (fairly) advanced level microeconomics and basic econometrics is assumed. Participants will use R during lab exercises. Instructions on how to install R and materials about basic operations are available through a website: https://ecoo.netlify.com

Lecturers

Pr. Eric Mungatana, CEEPA, Department of Agricultural Economics, University of Pretoria

Pr. Thomas Lundhede, Department of Food and Resource Economics, University of Copenhagen

Pr. Stefano Farolfi, French Agricultural Research Centre for International Development (CIRAD), GEAU, France

Dr. Damien Jourdain, CIRAD / CEEPA / GovInn, University of Pretoria

Organization of the training

The training will take place from 20 to 24 May 2019. Each day will consist of 7 hours alternating lectures and practical exercises with real case studies proposed by the lecturers.

Outline of the program

The training will be organized into five sessions (two of which are mainly introduction and debrief/evaluation by students).

The training will span over a period of five days. Participants will make sure they have consulted and practiced the materials "Introduction to R" before coming to the course.

Topic	Time (in Hours)			
	Theory	Practical / Tutorial	Independent Study	**Total**
1. Introduction to R			30	**30**
2. Analysing Discrete Choices in Economics: an introduction	4	2	5	**11**
3. Stated Choice Experiment: From research question to data analysis	5	8	10	**24**
3. Experimental Economics	3	1	10	**14**
4. CE and/or EE for student projects		5	10	**15**
5. Student evaluation & feedbacks		1	0	**1**
Total	**12**	**18**	**65**	**95**

Responsible Center

The Centre for Environmental Economics and Policy in Africa (CEEPA), Department of Agricultural Economics

Other information

CEEPA reserves the right to cancel the course if there are not more than 5 students who have applied to the course. There is no tuition fee. The participant is responsible for any housing and travel cost.

Application to the training

If you are interested in participating, please send a one paragraph motivation letter to yvonne.samuels@up.ac.za with a copy to eric.mungatana@up.ac.za