OPERATIONS RESEARCH AND MODELING IN R: AN EVALUATION OF A COURSE OFFERED TO UNDERGRADUATE STUDENTS OF AGRICULTURAL ECONOMICS

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The paper describes the innovative use of *R* statistical computing environment in solving problems in Operations Research and Modeling. Operations Research and Modeling is offered to final year students of agricultural economics at Bunda College of Agriculture-University of Malawi. The course has been mathematical with rigorous hand computations. The use of computers was inexistent. The course facilitator was anxious in using computer packages to implement some of the rigorous computations. *R* was selected among a myriad of other programs because of its versatility and usefulness both in solving linear programming problems as well as in statistics. The paper thus provides a summary of how *R* packages like **linprog**, **lpSolve** and **queueing** are used to solve locally (Malawi) relevant problems while offering a course in Operations Research and Modeling to students who do not have prior knowledge of *R*. The applications include linear programming problems like; diet problems, transportation problems, assignment problems, employee scheduling problems and production planning problems. And also, queuing models and inventory management problems.

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