

Establishment of lines of research in the field of surveying engineering and university outreach activities

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SUMMARY

The production of knowledge cannot be carried out effectively and in a targeted manner without lines of research. In turn, the dissemination and use of knowledge and technology produced in universities cannot be carried out in society without university extension. In addition, projects can be, in part, the result of problems identified in society, which are transformed into projects whose results translate into knowledge or the production of technology that must also be at the service of society itself. However, for research to be focused and receive contributions from various areas, it must be within the scope of a line of research to deepen knowledge, even in broad areas, which should be the focus of teaching and research institutions and be cross-cutting, both for the administrative structure, mainly in teaching and research departments, and for research groups, generally centred in laboratories. This paper presents some reflections on university extension at the Faculty of Natural Sciences of Agostinho Neto University (FCNUAN), particularly in the Department of Geographical Engineering, as well as the need to implement at least one line of research. Initially, the importance of university extension and the dissemination of science is addressed, problems are identified in order to transform them into projects, and the important collaboration that must exist between the university, society and business is highlighted. An assessment is made of existing capacities and human resources, the possibilities for obtaining funding and the available journals. It addresses the possibility of taking advantage of final degree projects if they are included in lines of research, their continuity, the contribution of lines of research to the concentration of researchers, and the search for synergies for the rational use of the limited resources available. The results of the university outreach experience are presented with good examples from the Department of Geographical Engineering (Surveying Engineering) in Camacupa (Bié province), the Mabubas dam (Bengo province), as well as the activities carried out at the Cabo Ledo training ground since 2010, some existing agreements and those that may be established with public and private institutions. Finally, it is concluded that it is not possible to

expect good results by separating the teaching-learning process from university extension. Furthermore, research is irrelevant if its results are not applied to solve the problems affecting populations. Therefore, lines of research must be defined in such a way as to stimulate extension activities and promote synergies.