

## **The statistics profession in Costa Rica and its challenges**

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### *Abstract*

A description of the statistics profession in Costa Rica is made to highlight how several problems faced in the past have been confronted and how others still remain. The problems need to be addressed if professional statisticians want to become more useful to society. The existence of a College of Professionals in Economics, where for historical reasons, statistics graduates must belong, has contributed to exclude unqualified statisticians, solving an existing problem before 1970. Recent survey data collected from graduates and employers produced positive comments of employers about the competence of the statistics graduates, and a high degree of satisfaction among graduates concerning the academic training received in statistics at the School of Statistics of the University of Costa Rica. Part of the positive comments reflect changes in the curriculum, especially the introduction of professional practice courses and more familiarity with non-statistical competences. Besides technical competences, statistical consulting requires excellent oral and written communication, and familiarity with research methodology, research project management and formation in professional ethics. Particular attention should be given to statistical consulting. Statistics teaching should include frequent use of practical case studies and internships in public and private institutions and organizations, to bring students closer to real settings. Complex statistical analyses can be done nowadays with the help of statistical packages like SPSS, without the assistance of a statistician, with all the dangers involved. The unity of statistics may be affected in the future with new developments in data mining, software development and dangerous imbalance between theory and practice. An international conference gathering professional statisticians and employers from many countries and contexts, is very much needed to learn about their experiences, expectations and future challenges.

**Keywords:** problems; evaluation; threats; challenges