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Link of Ecuadorian Universities with the Rural Sector through Preprofessional Practices

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Abstract

During academic training, agricultural professionals acquire skills that are a fundamental pillar for revitalizing the agricultural sector, generating social change, meeting the needs of the productive sector and sustainable growth in rural areas. To promote this, Ecuadorian legislation requires the establishment of pre-professional practices that effectively bring students closer to the rural sector. The Organic Law on Higher Education (LOES) in Ecuador establishes the obligation to link producer organisations, public and private companies through a pre-professional practice program, which must be implemented and managed from the University. The present investigation tries to find out if this linkage is being carried out successfully in universities. For the purpose of the study an on-line survey was carried out in five of the main universities in Ecuador that are offering agricultural studies. In order to explore perceptions of different stakeholders four study groups were identified: managers of agri-food companies, students of agri-food studies, professionals already working after training, and finally, public and private institutions that have included pre-professional practices in their curricula. Data analysis was carried out by using multivariate hierarchical cluster technique. As expected, results show that Ecuadorian university complies with regulations regarding roles and functions of teaching and research. However, a direct relationship with the agricultural-rural environment is not well established yet, as the student's training is being undervalued in the framework of pre-professional practices. However, several interesting strong points and deficiencies have been identified, and together they can very well contribute to high education decision makers to enhance their practices programs.

Keywords: Ecuador, high education, pre-professional practices

Introduction

In the university education, the pre-professional training and internships create a “bridge” between the academy and the society (Rueda 2014). However, the implementation of acquired knowledge based on the needs of the territories is still a challenge for the academy. The rural sector into different territorial contexts require the participation of competent professionals (Soto and Sanchez 2014), who are able to face the great challenges of the future (Tilbury 2011).

In Ecuador, the linkage with the society takes part of the academic curricula according to the professional profile (Corte Constitucional del Ecuador 2018). Consequently, academy should respond to: i) to form competent professionals which respond to the needs of the rural-productive

sector; ii) critical and proactive capacity enables the agricultural professional to provide accurate solutions adjusted to the economic and social needs of the country; iii) understanding of the agricultural production systems; more resilient, productive and sustainable. In this context, the research aim is analyzing the linkage of pre-professionals practices in the rural-productive sector in the agricultural graduate training through perceptions analysis of four study groups.

Material and Methods

The research is semi-quantitative; through perceptions of four study groups, it seeks to know the degree of linkage of the Ecuadorian University with the productive-rural sector, through pre-professional practices in the training of the agricultural professional (agronomist, farming). The study has two phases; the first one refers to a bibliographic review related to the Organic Law of Higher Education (LOES) in Ecuador, regulations on the compliance of pre-professional practices in higher education institutions (IES) and scientific information on the connection with society from the University. In the second phase, the data collection and analysis carried out using the multivariate Hierarchical Cluster technique to search for the grouping of variables, to achieve maximum homogeneity in each group and the most significant difference between them. The IBM SPSS Statistic 25 program used, the Ward method used since it is essential to minimize the variance between hierarchical groups and maximize homogeneity within groups (Phakiti 2018). Figure 1 shows the methodological design of the research.

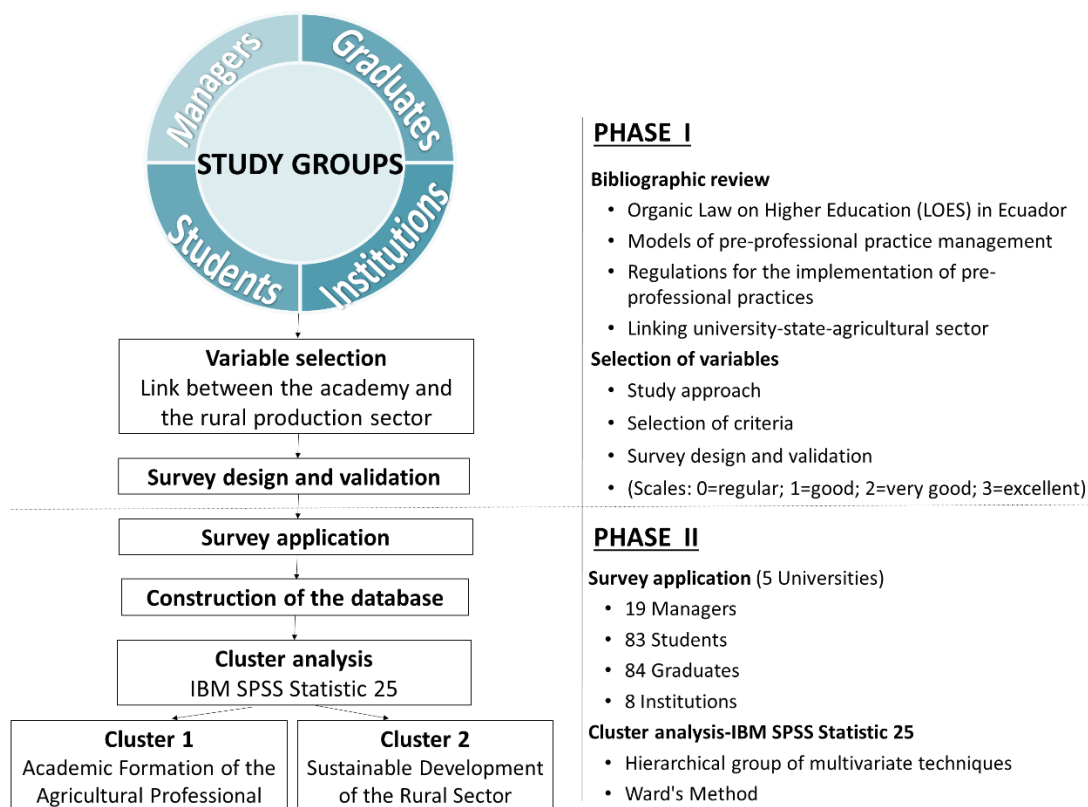


Figure 1. Methodological design of the research

Results and Discussion

Two clusters were obtained through the multivariate technique Hierarchical Cluster analysis. The information used was the perceptions of the level of linkage between the university and the rural-

productive sector. Four groups of study were considered in the analysis. Cluster 1 groups the academic training variables, which are reflected in the organization, teaching functions, research, planning of pre-professional practices and in the curricula. Cluster 2 groups the variables of territory context and the productive-rural sector, where the academy must establish strategic alliances to guarantee quality training.

Figure 2 shows independence between the variables of academic training and the context of the territory. This could mean, on the one hand, that an accurate articulation between what is academic training and the productive-rural sector has not yet been achieved. On the other hand, it has not managed to transcend in the training space of the agricultural graduate. Cisneros and Mendoza (2018) determine that the link between the university and society presents limitations in the personal, professional and social growth of university students. Also, they emphasize that it is crucial to enhance university extension as space where training-experience-community context is integrated.

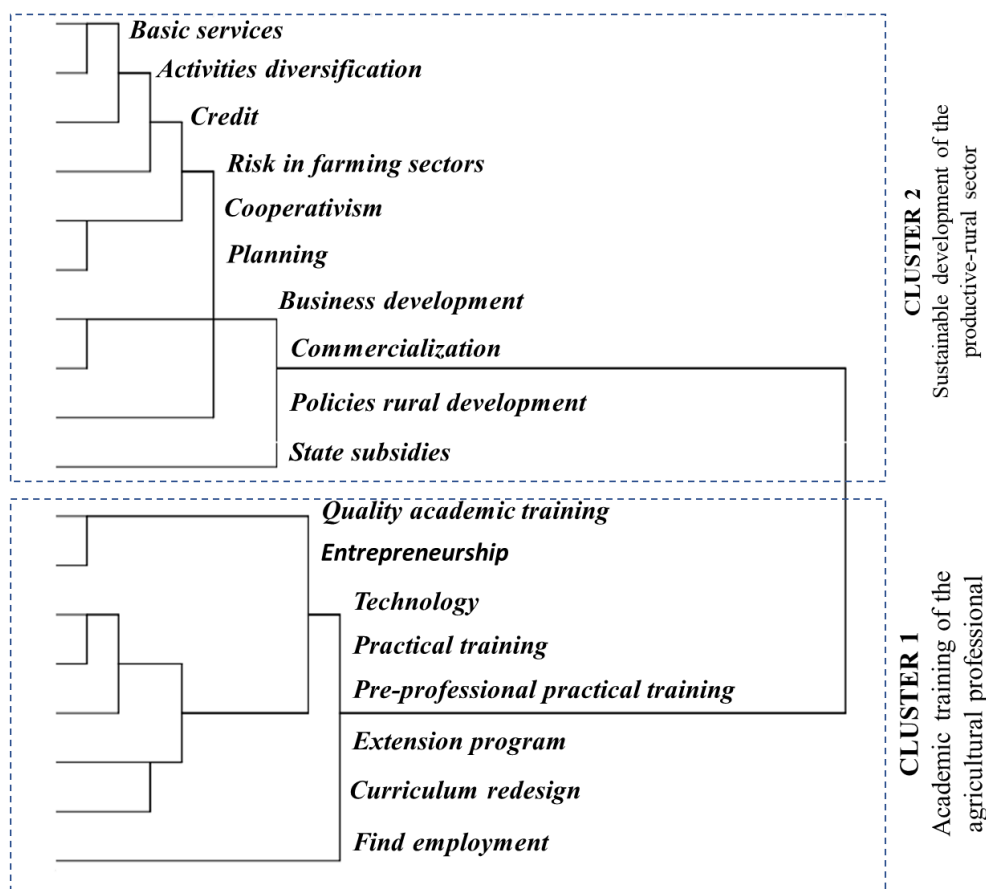


Figure 2. Perceptions of the study group on the contribution of pre-professional practices in linking the University with the rural sector

Conclusions and Outlook

In the context of the linking of pre-professional practices with the productive-rural sector in the training of the agricultural graduate, the results allow us to conclude:

- ✓ The perceptions of the study groups show that the link between pre-professional practices with the rural productive sector has not been made visible.
- ✓ The current linking regulations for the fulfilment of pre-professional practices have not managed to transcend the articulation between the university and the rural productive sector.

- ✓ It is necessary to integrate the context and knowledge variables in the curricula, to achieve an adequate inter-institutional articulation in the territories.
- ✓ State and institutional policies have failed to influence the articulation processes between academia, the state and the productive sector, to meet social demands.

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