

Environmental perception of Kayambi community, Cayambe-Ecuador



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INTRODUCTION

Ecuador is located northwest of South America. It has approximately 14'600,000 inhabitants, of which 7% belong to a nationality or indigenous people (INEC, 2010). The study was conducted in the province of Pichincha, Cayambe canton, Cangahua parish. The Cayambe canton is characterized by having a 34% indigenous population. The parish of study reaches the highest concentration of this population, being 47%. 92% of the population of Cangahua belongs to the Kickwa Kayambi people.



The Cayambe canton shows environmental problems, such as: forest degradation, due to deforestation (748.45 ha lost approximately until 2013), changing the use of land to agriculture and agriculture and the degradation of water resources, because the sources of water (rivers and their tributaries) are contaminated by human activities mainly by the generation of urban solid waste, industrial solid waste, urban and industrial wastewater (Gonzáles, 1999).



According Tamayo (2006), the main environmental problems in the Cayambe canton are: damage to workers health from exposure to chemicals, noise, solar radiation humidity, another and environmental problem is the generation of pollutants to soil, air and water due to the use of pesticides. These problems plus the expansion of the agricultural frontier, monoculture, deforestation, gradual loss of soil productivity, could influence a decrease in the quality of life of the inhabitants of the city.

The aim of the work was to analyze the environmental perception, citizen participation and gender equity of the inhabitants of Cangahua. In this context, this study presents the results of the application of a survey, carried out on a random sample of the population.

METHODOLOGY



To obtain data on environmental perception, surveys were applied through the personal assisted interview. The applied sampling was simple random probabilistic distributed in the urban and rural parishes; the survey was conducted with a number proportional to the population of each of the parishes. The participants were surveyed in public areas such as parks, plazas, church, markets, public institutions, educational institutions and shopping centers.

The size of the sample was calculated from the population of the Cayambe canton distributed in the eight parishes. The following formula was used to obtain the sample size with a confidence level of 95%.

$$n = \frac{N * Z^2 * p * (1 - p)}{e^2(N - 1) + Z^2 * p * (1 - p)}$$

N= 85795 (sample size) Z = 1.96 e = 0.05p = 0.5 The number of applied surveys corresponds to 384, of which 206 were applied in the rural area and 178 in the urban area.



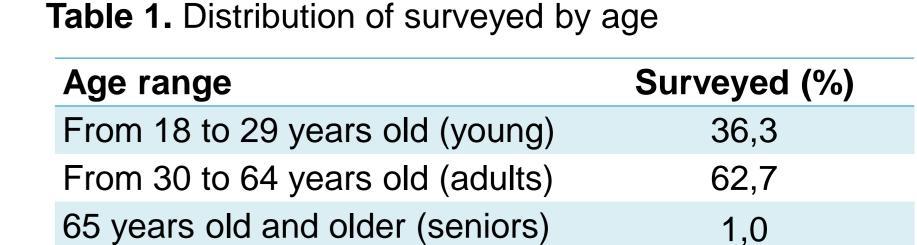
The instrument to apply the surveys was a structured questionnaire with closed and open questions, the topics covered by the survey are:

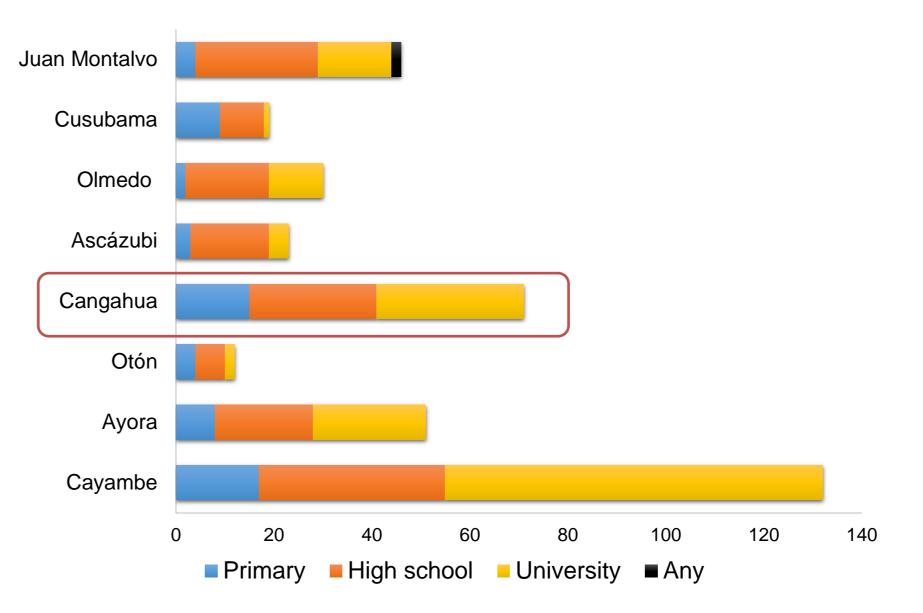
- Personal information of the person surveyed.
- Level of knowledge about biodiversity.
- Environmental problems.
- Environmental Protection.
- Water quality.
- Markets.

RESULTS

Characterization of the population

The representative group of surveyed was adults (Table 1), 50% men and 50% women.





higher education (university) Fig. 1.

99.2% of the total surveyeds, have

The majority of surveyed have

99.2% of the total surveyeds, have some occupation. The largest percentage of people represents public employees (44.3%), followed by private employees and merchants.

Figure 1. Number of people by level of education

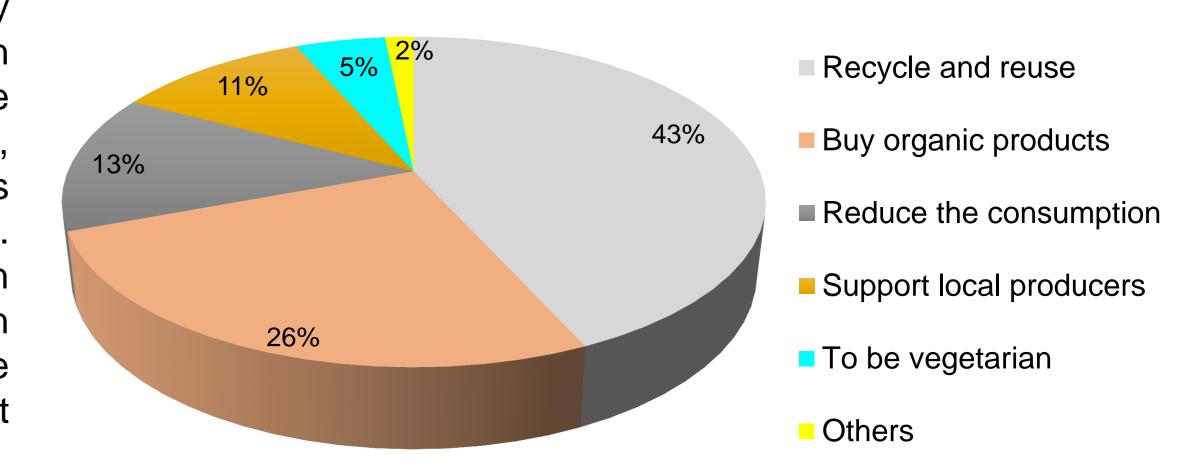
Environmental perception



The results indicate that, the environment is very important for the 94% of surveyed, being their main concern the loss of natural resources, they know the term biodiversity and its meaning, they consider that the biodiversity in their community has diminished by the expansion of the agricultural frontier. 57% feel that intensive agriculture, deforestation and overfishing have increased. 27% think there is contamination of water, air and soil.

Suggested solutions

They perceive that they receive little information on for the how to care which, environment, although insufficient, comes from the local government. 82% think that decisions on environmental protection issues should be made between the government and the population.



The surveyed showing the desire to promote citizen participation in environmental protection.

CONCLUSION

The importance of this work is the contribution in understanding the environmental and social perceptions of the population of Cayambe canton and Cangahua parish, which will strengthen environmental conservation processes, through the definition of social and environmental indicators, which is considered a fundamental management factor for the protection of the environment.

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