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Popularization actions of food science and technology in south and metropolitan regions of Rio de Janeiro state*

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Abstract

The ignorance on concepts and practices in Food Science and Technology (FS&T) and the lack of specialized staff in agricultural educational institutions are factors that limit the interest of future technical on this topic. Such limitations may be overcome through actions to awaken curiosity and motivate the training technical to care for all matters of FS&T, constituting current educational techniques and encouraging the interest by potential agribusiness activity. Thus, was established a partnership between Embrapa Food Technology, Federal Institute of Education, Science and Technology of Rio de Janeiro - Campus Nilo Peçanha (IFRJ) and the Technical College of Rural University (CTUR). It was carried out a diagnosis of physical and educational structure of these institutions and localities conditions. Subsequently, the popularization of FS&T gave through five courses of capacitance, construction of web page and a discussion forum. It was constructed a network of relationships and communication that includes the actors concerned development in these localities and produced materials to disseminate these information. The point of views of the participants of courses and of the event were

evaluated. The data showed that the activities were mostly positive and which are necessary new actions.

Introduction

It is through diffusion and popularization of science that society shall be aware of the importance of scientific discoveries for development; it sets up an environment conducive to the identification of new vocations environment and comes to the realization that investments in science and technology are strategic at all levels for achieving the development and independence (Krieger, 2004). This fact is basic for the State of Rio de Janeiro where they are concentrated by one hand, educational institutions and research, and by the other, an agricultural tradition little known, but important economic and social potential applicant and capable of incorporating knowledge and technologies.

There are other initiatives to support food industrialization in the state of Rio de Janeiro, but they are only restricted to finance, fiscal legalization and safety under the National Program to Support of Family Agriculture (Pronaf) and Prosper Program, coordinated by the Company of Technical Assistance and Rural Extension (Emater-Rio). This paper presents a pioneer approach, adding socioeconomic agents to the discussion beside technical and scientific population aspects so that they can contribute to raising alternatives for the development and deployment of new agribusiness companies.

Methodology

The initial stage of this work was to perform a diagnosis about the physical and educational structure of the two agricultural technical colleges, partners of this work. They are: Federal Institute of Education, Science and Technology of Rio de Janeiro - Campus Nilo Peçanha (IFRJ) located in Pinheiral / RJ and the Technical College of Rural University (CTUR) located in Seropédica / RJ, and some local conditions. It was developed and tested a standard form to collecting information. Visits and surveys were conducted in 2008 and 2009, where the managers of these cited colleges were interviewed. During these visits, some demands and the possible themes of the future courses could be also identified. The municipalities of Seropédica and Pinheiral are far

from each other about 45 Km. Seropédica is located in the metropolitan area while Pinheiral is in southern area of Rio de Janeiro state.

The science popularization actions were given in form of five training courses with theoretical and practical lessons where students and staff were the target; by building a webpage for online communication; and finally, by conducting a discussion forum. Embrapa and Emater-Rio elaborated a list of possible courses that could be conducted in each institution in accordance with local conditions and characteristics identified in the previous diagnosis. The college's managers made notes, according to their own criteria, about the training courses themes. The training courses were evaluated. A webpage with information about the courses, discussion forum and other relevant information was set up to facilitate the access of students and other stakeholders.

The topics covered in the discussion forum were agreed between Embrapa, Emater –Rio, IFRJ and CTUR. This event was open to the community, especially to farmers, but it was also accessible to students, teachers and school staff. The local community participation was largely stimulated in order to find out the community demands for schools in terms of food processing. The event was publicized through the local media vehicles and the distribution of materials and also through visits. The event participant's views were evaluated and the collected data were analyzed.

Results and Discussion

It was carried out a diagnosis of the physical and educational structure of the educational institutions involved and localities conditions. The actions of FS&T popularization were five training courses for agricultural technicians, brochures, website construction and discussion forum that were open to the general public. The courses were attended by 76 people including students and school staff. The themes of training courses were: good manufacturing practices (GMP) – 2 courses, cheese processing (2 courses) and rural tourism. The evaluation of the action of promoting teaching as a manner to popularize FS&T was valid in the judgment by the participants. As showed in Figure 1, all participants (100%) thought that the proposed objectives for the courses were achieved; from which over 85% said that their expectations were fulfilled and for more than 92% practical application of the knowledge was achieved. For all courses there were

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more positive aspects pointed out spontaneously by the participants than negative (Figure 2).

The webpage containing information about the project was made available on the Internet hosted at the Embrapa Food Technology site (http://www.ctaa.embrapa.br/projetos/difusao). This page has facilitated the access of stakeholders and was easy to navigate.

On 14th August 2009 was promoted and held the Discussion Forum: Opportunities and Financing and Safety Legislation for Food Processing in Pinheiral /RJ bringing together the colleges involved in the project: IFRJ and CTUR, with a schedule of 8 hours. The records of the people present were performed and gave the number of 81 participants, including producers, technicians, students and the general public. The website of this project was official launched and demonstrated in this forum. From 81 participants in the event, 40 people evaluated anonymously some aspects of the forum. The promotion of the forum was effective to popularize Food S&T for general public and considered valid by the participants. For them, 55% of the information received was relevant and for 80% the information was useful for their daily life (Figure 3). Regarding the item "what did you like most on this forum?" it is observed that most people commented on the lectures demonstrating great acceptance of the format of the lectures and the chosen topics.

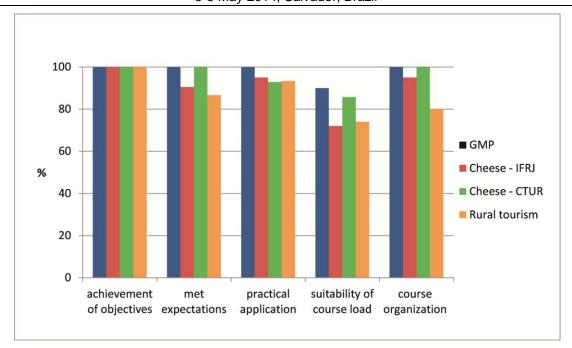


Figure 1 - Training courses evaluation in terms of achievement of objectives, met expectations, practical applications, suitability of course workload and course organization. Data expressed as percentage of responses.

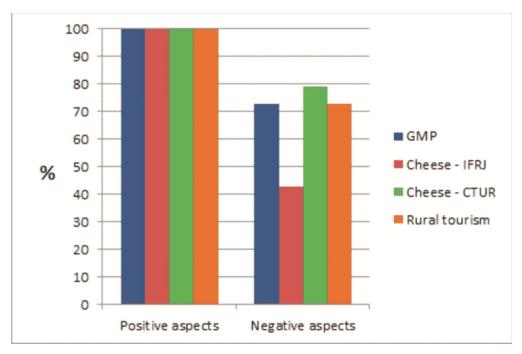


Figure 2 - Positive and negative aspects pointed out spontaneously by the participants.

Data expressed as percentage of responses.

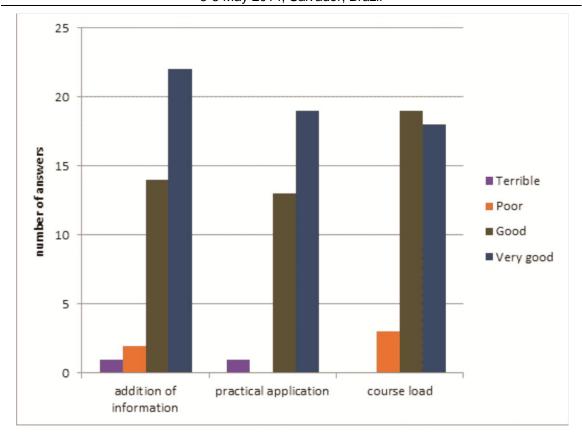


Figure 3 - Evaluation of lectures in terms of adding of information, practical application and workload. Data expressed number of answers.

Conclusion

The FS&T popularization actions in the form of training courses for agricultural technicians, internet site and forum discussion were considered positive by the target audiences. By looking at the reactions and suggestions received from trained and general public, it was observed the need to intensify the FS&T popularization actions in metropolitan and in the southern area of Rio de Janeiro state.

References

KRIEGER, E. M. (2004). "Abertura do encontro sobre a popularização da ciência". Rio de Janeiro, 2nd February. Available at: http://www.abc.org.br/arquivos/krieger_oea2004.html. Access in 16th July 2007.