



AGRARIAN TRAINING FROM FARMERS' VIEW IN BOYEROS MUNICIPALITY, HAVANA, CUBA

La capacitación agraria desde la visión del agricultor, en el municipio Boyeros, La Habana, Cuba

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ABSTRACT. At present, Credit and Service Cooperatives (CSC) are the most productive and numerous in the country, with the greatest amount of partners and usufructuaries, which have promoted training needs of information on scientific and technical advances; therefore, this work was conducted with the objective of analyzing agrarian training from farmers' view. The investigation was performed in 20 CSCs from Boyeros municipality, Havana, Cuba, by applying a survey to 256 producers, which had two general questions aimed to know producers' working experience on the agrarian activity and three specific questions responding to three variables: training significance, the way producers receive training information and how producers demand training. The survey was processed through SPSS statistical package version 19 for complex designs. The main results showed that the development of training activities is very important to producers; besides, a high percentage of them refer that their training attendance obeys decision-makers' indication and, finally, most of them point out that they have rarely or never participated in a training demand inquiry.

RESUMEN. Las Cooperativas de Créditos y Servicios (CCS) son actualmente las más productiva, las de mayor número en el país y con el mayor número de socios y usufructuarios, lo cual ha incrementado la necesidad de capacitación, para de esta forma brindarles la información sobre los adelantos de la ciencia y la técnica, por tanto este trabajo tiene como objetivo el análisis de la capacitación agraria desde la visión de los productores. La investigación fue realizada en las 20 CCS del Municipio Boyeros, La Habana, Cuba, donde se aplicó una encuesta a 256 productores, en la que se realizaron dos preguntas de carácter general dirigidas a conocer los años de experiencia del productor en la actividad agraria y tres específicas respondiendo a tres variables: la importancia de la capacitación, la forma en que los productores reciben la información sobre las actividades de capacitación y las formas en que los productores demandan la capacitación. La encuesta fue procesada a partir del paquete estadístico SPSS versión 19 para diseños complejos. Obteniéndose como principales resultados que los productores le confieren gran importancia al desarrollo de actividades de capacitación, un alto por ciento de productores refieren que su asistencia a los espacios de capacitación responden a una indicación de los decisores y por último, la mayoría de los productores refiere que en muy pocas ocasiones o nunca han tenido participación en el levantamiento de las demandas de capacitación.

Key words: participation, cooperative, farmers, training

Palabras clave: participación, cooperativas, agricultores, capacitación

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INTRODUCTION

With the triumph of Cuban Revolution, there were deep profitable changes for state land ownership and small farmers who grouped into cooperatives of various types (1); also, a conventional agricultural

model characterized by large companies, high inputs and great centralization was adopted (2).

Despite the 1960s and 80s advances, Cuban agriculture could not reach the developing level required to provide enough and variable food to our people (3); consequently, a series of measurements have been implemented to find solutions and achieve the revival of this sector leading to substitute food imports. The most important measure was to deliver idle lands to natural persons^A as usufruct under leasing for 10 years, which was registered in the decree-law 259/2008 and the further decree-law 300/2012.

Considering what is mentioned above, Credit and Service Cooperatives (CSC) outnumbered Cooperative Production Basic Units (CPBU) and Agricultural Production Cooperatives (APC), and it has nowadays the greatest amount of partners and usufructuaries, besides being the most productive one^A. This considerable increase of usufructuaries, some with agricultural experience and others without it, has promoted higher training needs of information on scientific and technical advances, or on the required knowledge to achieve an efficient production. The positive training impact on the use of new techniques and resources as well as productive results has been shown in several studies (4, 5).

At present, municipal CSC trainings are determined by agroecological suppliers from the National Association of Small Farmers (ANAP), who select the subjects to be developed by taking into account the social purpose of each cooperative or any interesting subject for the municipality; for example, any pest causing economic damages that must be destroyed. Trainings are performed by suppliers along with monthly associates' meetings. Sometimes and depending on the subject, persons from outside are invited, which is not often, since it makes the cost of the course much more expensive.

It is essential to remark that several agricultural training programs have been designed and developed to benefit different production forms, with the purpose to report about new technologies, prepare actors depending on their working skills and improve their

professional performance; for example, LAIP project at the National Institute of Agricultural Sciences (INCA) and ANAP's Agroecological Farmer-to-Farmer Movement (AFTFM), just to mention a few. These projects have been mainly based on producers' participation, who have been helped and given information on different technologies, crops and seed varieties, among other results, especially enhancing their own management, critical skills addressing problems, innovative power and possibility of extending their own results, which has been well accepted by rural actors; therefore, these positive experiences can be included in future training processes.

However, farmers' participation in training need diagnosis is still insufficient, so this study was carried out to analyze their view on the subject at the CSCs of Boyeros municipality.

MATERIALS AND METHODS

The study was conducted in Boyeros municipality, to the southwest of Havana, which has different forms of agricultural organization, such as five Enterprise Base Units (EBU), 24 farms destined for consumption of certain state entities and 20 CSCs; this municipality has the most numerous CSCs of the entire province. In addition, it has a considerable amount of research centers and the Educational, Training and Extension Center (ETEC) from the Ministry of Agriculture (MINAG).

For this study, 20 CSCs were selected, as it is the production form with greater land extension at present, a bigger number of partners and usufructuaries, also the highest provider of agricultural food products to Cuban people.

A survey with the following closed and direct questions of multiple and unipolar response was applied to this production form (6):

1. Years of stay in the activity
2. Experience in the current job
3. Do you think that any training activity could provide the required information?
4. How did you know about this training? (the one received in the last two years)

^A Nova, A. *Medidas recientes y agricultura cubana* [en línea]. 2011, [Consultado: 2 de febrero de 2011], Disponible en: <http://www.ips cuba.net/index.php?option=com_k2&view=item&id=2325:medidas-recientes-y-agricultura-cubana-i&Itemid=10>.

5. Have you ever been asked (directly or by survey) which subject you would like to deal with in any training course?

This survey was applied to 256 farmers from different cooperatives (Table), out of a total of 1708 that constitutes 15 % population of each, between the second half of 2014 and the first half of 2015, taking into account the two previous years before the survey.

Table. Credit and Service Cooperatives and survey sample selection

CCS	Number of total partners and usufructuaries	Selected survey sample
Fructuoso Rodríguez	187	28
Mariana Grajales	85	13
Antonio Maceo	82	12
2 de Diciembre	84	13
Haydee Santamaría	60	9
13 de Marzo	58	9
José Martí	112	17
Lino Álvarez	46	7
Héroes de la Sierra Maestra	87	13
Capitán San Luis	67	10
Sabino Pupo	124	19
Francisco de Alvear	68	10
Camilo Cienfuegos	123	18
28 de enero	72	11
Desembarco Granma	95	14
Cesar Escalante	115	17
Urcelia Díaz	54	8
Raúl Gómez	80	12
Camilo Torres	53	8
Simón Bolívar	56	8
Total	1708	256

Cochran's criterion was used for sample selection (7). The information was processed through SPSS statistical package version 19 (8) and a descriptive statistical frequency analysis showed results through bar charts.

RESULTS AND DISCUSSION

In order to study agricultural training processes, it is necessary to consider producers' level of experience in two ways: years of stay in farming activity and their

work experience in the current job; this is important in order to know how far it is necessary to design a training course or a program, besides the required updated information on scientific and technological advances.

After analyzing survey results (Figure 1), it was observed that 54,5 % respondents had less than 10 years of agricultural work, caused by a large portion of them were benefited by decrees-laws 259/2008 and 300/2012; such implementation has allowed to exploit many idle lands, making them productive and contributing to people's food, but it has also encouraged a greater number of farmers without agricultural knowledge to get enrolled in these tasks, suggesting the need to intensify training programs, so that they can properly perform the required actions and meet people's food demands. Different authors^B obtained similar results (3) related to training, as an educational exchanging process of knowledge and skills, according to predetermined goals and considering a further evaluation of its impact.

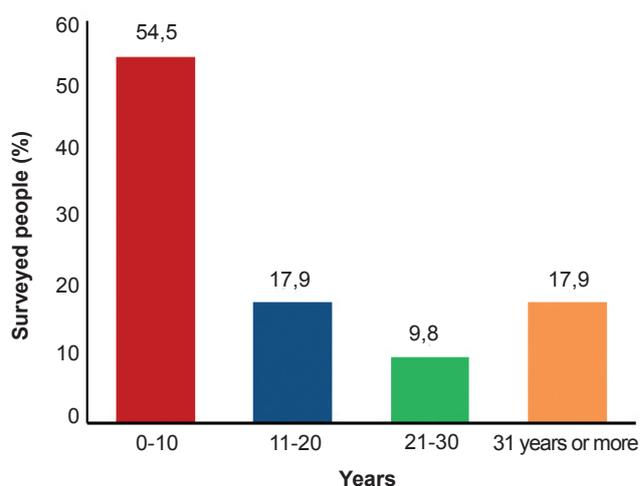


Figure 1. Years of stay in farming activities

^BPérez, M. y Delgadillo, O. *Aportes metodológicos en capacitación a agricultores campesinos: Experiencias de capacitación en riego por aspersión en la cuenca Pucara* [en línea]. edit. Centro Andino para la Gestión y Uso del Agua, Cochabamba, Bolivia, 2011, [Consultado: 17 de marzo de 2016], Disponible en: <<http://www.centro-agua.org/aportes-metodologicos-en-capacitacion-a-agricultores-campesinos-experiencias-de-capacitacion-en-riego-por-aspersion-en-la-cuenca-pucara/>>.

It can be seen in Figure 2 that 39,3 % surveyed respondents had no working experience whereas 22,3 % had experience as producers, but not exactly in their current work. This is mainly due to the implementation of the aforementioned decrees and also because a group of producers vary their duties or responsibilities depending on the inclusion of new crops, cultivars, technologies, market demands and social purpose of the farm to which they belong.

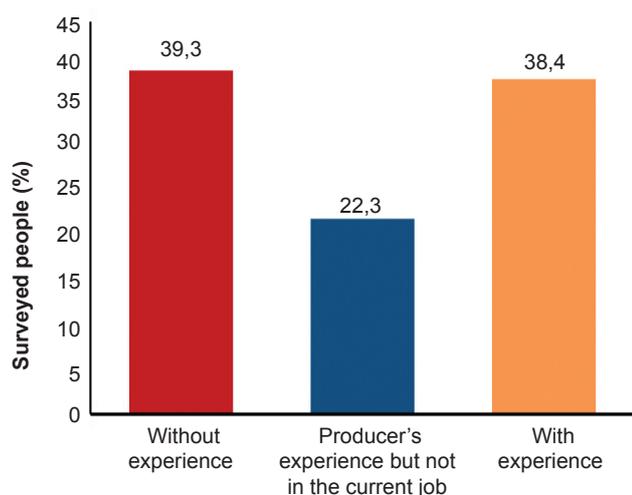


Figure 2. Producers' experience in their own activity

This confirms training needs to put scientific and traditional knowledge together as well as contribute to productive process improvement, which is consistent with the Organizing and Structuring Proposal of Agricultural Extension System from MINAG, 2011^C, which states that “training should be aimed at strengthening social actors' own capacity to innovate, generate proposals and organize to implement them, so as to achieve a higher and better production”.

Another notable aspect is that 38,4 % surveyed respondents say they have agricultural experience, which means strength, as these producers may be important for the training processes developed, so that they may transfer their experience to the rest of producers with fewer years in agricultural work, share the same production line or are interested in developing it.

When analyzing training contribution to improve farmers' performance, Figure 3 shows that 93,8 % survey respondents recognize the significance of these activities to make their work more efficient, which is very positive if considering their needs, because farmers' questions related to agricultural tasks can be answered just by this way (9), as they experiment and perform according to their needs, interests and curiosities, in order to test new things and acquire new knowledge.

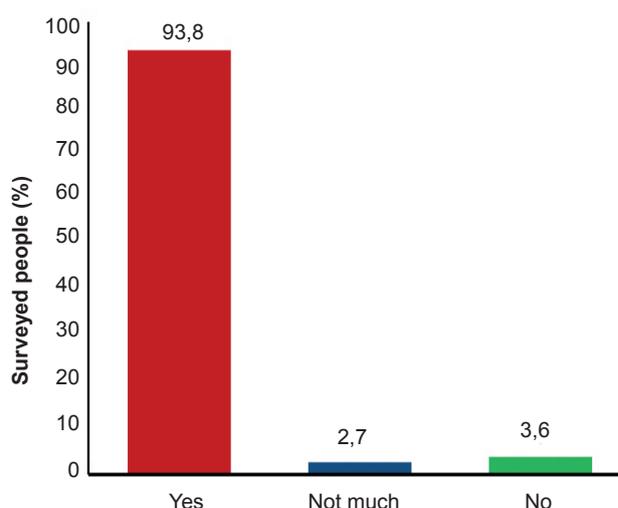


Figure 3. Training significance according to farmers' view

Moreover, only 6,2 % surveyed respondents believe that trainings in general supply nothing or not much to farmers' development, which is largely due to the activities in which they have enrolled are not the result of applying diagnosis to determine training needs or that they have not been developed with an adequate methodology (10). These authors argue that the use of multiple proposals to spread agricultural knowledge and skills can be effective and mutually reinforced; likewise, it has also been reaffirmed that by working with adults, it is necessary to involve them into process development that should respond to their interests and needs (11, 12), so as to help achieve better productive results, as it has been previously reported by several researchers^D (13, 14, 15).

^C MINAG. *Propuesta de organización y estructura del sistema de extensión agraria*. Inst. Dirección de Ciencia e Innovación Tecnológica, Ministerio de la Agricultura, Cuba, 2011, p. 25.

^D Iturbide-Flores, M. J. *Diagnóstico de Guatemala: Necesidades de capacitación para enfrentar los desafíos de la negociación internacional de actividades REDD+* [en línea]. Inst. Programa REDD-CCAD/GIZ, Guatemala, 2012, p. 67, [Consultado: 18 de marzo de 2016], Disponible en: <<http://docplayer.es/15542734-Diagnostico-de-guatemala-necesidades-de-capacitacion-para-enfrentar-los-desafios-de-la-negociacion-internacional-de-actividades-redd.html>>.

Figure 4 shows another aspect that has not been able to revert so far: the tendency to arrange trainings by offer rather than by demand, which often causes these spaces are not profitable and its investment is lost. As it is observed, 75,9 % survey respondents said they were obliged to attend trainings, so that not always the subjects developed have to do with farmers' interests, which make them feel they are wasting time and interest for future trainings.

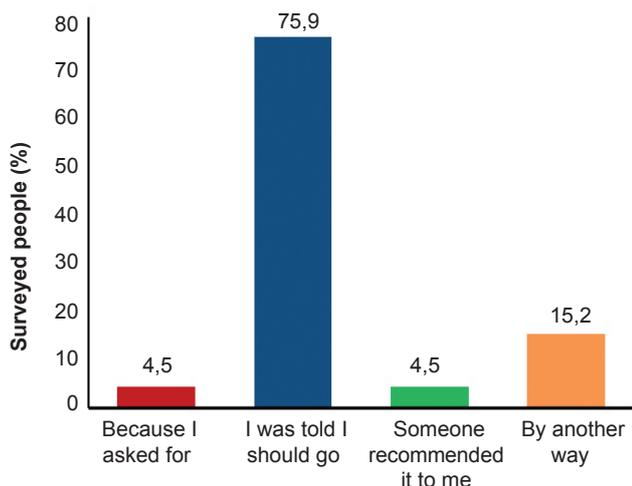


Figure 4. Information ways on training activities

Likewise, only 4,5 % surveyed respondents said they attended trainings because it was a demand, which assures their interest in attending and receiving knowledge, as well as its practical application that agrees with statements previously published by various authors^c (7), who argued that, in any training process, educational needs and expectations of individuals, communities and organizations must be addressed. Also, 4,5 and 15,2 % survey respondents said they attended trainings due to a third person's advice and to another way, respectively, which is usually by means of CSC's or ETEC's workers, that constitutes a municipal fortress.

Figure 5 shows that only 16,1 % respondents participated in training need survey, while 83,9 % said they have rarely or never been asked about those needs, which demonstrates this process is a failure and harmful for our economy, since both material and logistical resources are invested, as well as staff time involved, but expected goals are

not finally achieved: the implementation of what is learned. In this regard, it was previously stated that training is an essential tool for positive organizing changes, which today cannot be only conceived as training or instruction, besides constituting peoples' reflection and dialogue spaces when facing real situations (16, 17); thus, based on producers' own demands (18), it has been shown that their participation is directly linked to the social development of individuals (19).

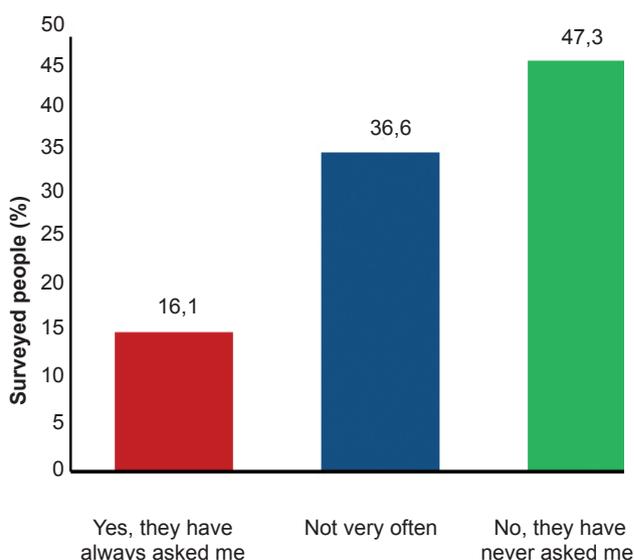


Figure 5. Producers' participation in training demands

FINAL CONSIDERATIONS

- ◆ Since decree-laws 259/2008 and 300/2012 were adopted, the percentage of people with poor agricultural experience in this sector has increased; therefore, technical trainings are essential to reach good results in production, quality and efficiency, as long as they arise from its diagnosis, which is not always true; some producers attend trainings without being interested on its subjects, causing that they do not pay any attention to the provided information, then what they learn does not fit to their social purpose; thus, the subject addressed is not implemented.
- ◆ All these aspects suggest the need to design a training model that allows its organization in the municipal CSCs studied and serves as a working tool to both decision-makers and providers of these spaces.

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