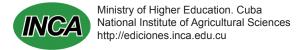
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# THE FARMER EDUCATION IN THE MUNICIPALITY BOYEROS, THE HAVANA PROVINCE, CUBA. THE TRAINERS PERCEPTION

La educación a productores agrícolas en el municipio Boyeros, La Habana, Cuba. Visión de los capacitadores

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ABSTRACT. After the year 1959 were carried out numerous transformations in the agriculture allowing to the peasant to increase their revenues and their level of life. In this sense the training constitutes an indispensable factor for the obtaining of good results, allowing the bring up to date of the new advances of the science and the technique and a constant flow of information. The facilitators, they play a fundamental paper in the development of these activities, since they are them those that facilitate them, therefore, it leaves of the results they are their responsibility; it is for it that this work intends to analyze the situation of the training in the Cooperatives of Credits and Services (CCS) of the municipality Boyeros, from the vision of the facilitators, for that which a survey was applied to 27 facilitators to know the bases for the design of the training programs, the actions that he/she is carried out for the development of the training activities, the existence of material resources and the presented difficulties; as well as, the reached participation level. The survey was processed by means of the statistical package SPSS version 19, obtaining you as main results that most of the training actions are designed based on the necessities of the producers, for the development of the trainings several teaching forms are used, it is not always had the necessary material resources for the development of the same ones.

Key words: training, cooperative, participation

RESUMEN. Después del año 1959 se llevaron a cabo numerosas transformaciones en la agricultura, permitiendo al campesinado incrementar sus ingresos y su nivel de vida. En este sentido la capacitación constituye un factor imprescindible para la obtención de buenos resultados, permitiendo la actualización de los nuevos adelantos de la ciencia y la técnica y un constante flujo de información. Los facilitadores, juegan un papel fundamental en el desarrollo de estas actividades, ya que son ellos los que las facilitan; por tanto, parte de los resultados son su responsabilidad. Es por ello que este trabajo se propone analizar la situación de la capacitación en las Cooperativas de Créditos y Servicios (CCS) del municipio Boyeros, desde la visión de los facilitadores, para lo cual se aplicó una encuesta a 27 facilitadores, para conocer las bases para el diseño de los programas de capacitación, las acciones que se realizan para el desarrollo de las actividades de capacitación, la existencia de recursos materiales y las dificultades presentadas, así como el nivel de participación alcanzado. La encuesta fue procesada mediante el paquete estadístico SPSS versión 19, obteniéndose como principales resultados, que la mayoría de las acciones de capacitación se diseñan en base a las necesidades de los productores, para el desarrollo de las capacitaciones se utilizan varias formas de enseñanza, no siempre se cuenta con los recursos materiales necesarios para el desarrollo de las mismas.

Palabras clave: capacitación, cooperativas, participación

#### INTRODUCTION

Agricultural sector plays an important role for Cuban economy, either due to its direct or indirect participation to make up Gross Domestic Product (GDP) or, in general, for its multiplier effect involved<sup>A</sup>, both as people's main source of food supply and its contribution to our national income.

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Before 1959, Cuban countryside was characterized by the existence of large extensions of land owned by foreign companies and Cuban landowners, which were mostly unproductive or underexploited with low technological level and a predominant monoculture structure (1).

After 1959, when the Agrarian Reform Laws were promulgated, more than 70 % agricultural lands were transferred to Cuban government, so that our agricultural state sector was created. In 1960, when banking institutions disappeared, which provided credits for tobacco crop, growers from Pinar del Rio province needed to make a mechanism to get credits; thus, Service and Credit Cooperatives (SCC) appeared, voluntarily integrated by farmers benefited from Agrarian Reform laws (2).

Since 2007, a series of measures have been implemented with the aim of finding solutions in order to achieve the revival of this important sector, leading to substitute imported foods and generate surplus to increase exported goods. The most important measure has been to deliver idle agricultural lands to inhabitants as usufructuaries under lease for a 10-year-period (3), which is registered by Decree-Law 259/2008 and further by Decree-Law 300/2012 (4).

These measures have led to a considerable increase of producers at SCC in recent years, which has provoked higher training needs, an important factor to develop agricultural activities, since it allows updating the new advances in science and technology, as well as provides a constant flow of information.

Training is a commonly proposed action basically conducted to transfer knowledge with a goal, which simultaneously works on two factors: the skill (the ability to perform a task with certain efficiency) and attitudes (frameworks of reference, usually emotional, through which reality is judged and behavior is conditioned); both factors can be modified by training<sup>A</sup>.

There are two main groups of actors in any training process: trainees (those receiving training) and facilitators, also called trainers or promoters (who give training); therefore, they play a key role in their development, as they provide them, which can be often limited by the lack of necessary material resources or organizational problems; consequently, this study was conducted with the purpose of analyzing SCC training situation in Boyeros municipality, from facilitators' viewpoint.

#### **MATERIALS AND METHODS**

The study was conducted in Boyeros municipality, Havana province, by applying a survey with closed, direct questions of multiple and unipolar response (5) to 27 facilitators between the second half of 2014 and the first half of 2015; then, 15 out of them work as agroecological facilitators in 15 of 20 SCC in such municipality and 12 are facilitators of different entities that belong to the staff of Human Resources from Agricultural Delegation of Havana. The two preceding years before applying the survey were considered as the evaluative period.

This survey contained the following questions:

- 1 What are the bases that should be taken into account to design training activities?
- 2 What kind of activities is used to develop courses?
- 3 Have you received the necessary material resources to develop training activities?
- 4 Do you think there has been any difficulty to perform trainings?
- 5 What level of participation have you achieved during training development?

Moreover, a semi-structured group interview was performed to 11 facilitators from SCC of the municipality, along with the Delegation meeting at the National Association of Small Farmers (ANAP), with agroecological facilitators, who have the role of training producers from different SCC, so they are considered training specialists in this research.

All information obtained was processed through SPSS Statistical Package version 19, 2010, besides a frequency descriptive statistical analysis, whose results are shown by a bar graph.

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#### **RESULTS AND DISCUSSION**

When analyzing the bases that are taken into account to design training courses (Figure 1), it was found that 40,1 % respondents said designs are made with training diagnostic results and 25,1 % claim to consider producers' request personally carried out when visiting farms or meeting associates, which confirms that, in most cases, producers' interest has priority; it is a very positive aspect if we want to achieve their attendance to the training space designed, their attention during its development and the application of what they have learned, since producers make experiments as long as they meet their needs or to solve a particular problem (6-8).

On the other hand, 22,3 % of them say that trainings only consider subjects guided by MINAG, which is negative during its development, as their attendance is obligatory and provokes participants' interest reduction as well as the information provided is not used, besides that a lower percentage of them remarks some interest for any ongoing project at a research center or any extensionist's request, which are usually based on producers' needs and it should be taken into account, since the great relationship between positive productive results and developed trainings has been previously stated, thereby contributing to raise their working skills and achieve sustainability (9, 10).

Figure 2 shows the type of activity employed for training development; 22,2 % respondents use workshops whereas 36,2 % combine all options, which is beneficial when considering that workshops or various teaching methods provide certain information and allow knowledge exchange between facilitators and producers or among producers themselves, considering that they have life experience to share, largely ensuring a good result at the end of each training, which is an adult education premise (11).

In addition, 22,2 % say they only use conferences to develop trainings, which is not negative, because they provide information while allowing producers' interaction during its development and practical or field activities that enable to observe everything addressed in the conference. Visits and fairs are recorded with a lower percentage, 13 and 5 % respectively, which must be analyzed, because these forms enable producers to have active participation and decision making in selecting varieties, technologies and innovations to improve their performance.

Moreover, 1,4 % respondents refer to the use of demonstrative areas, which is highly accepted by producers, so they are advisable to be used as long as the subject permits it. It is also recommendable to employ various teaching methods during educational space development (12).

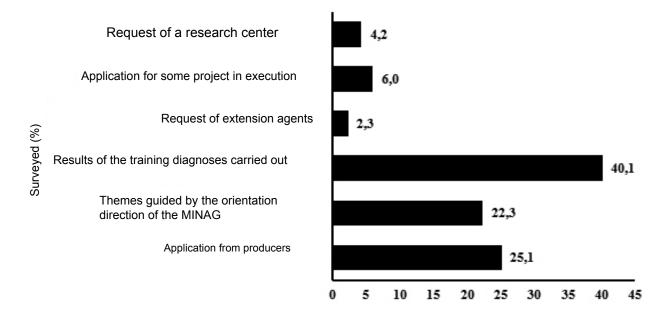


Figure 1. Criteria to design training activities

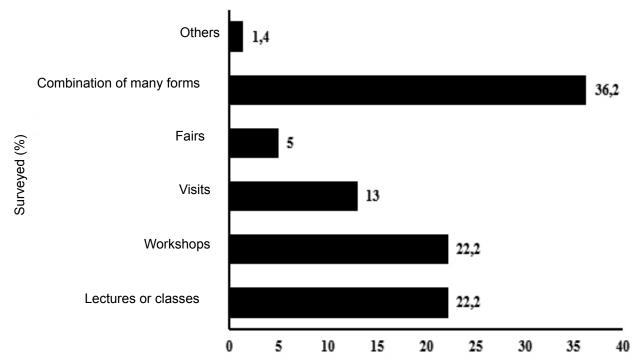


Figure 2. Activities used to develop trainings

Regarding available material resources for training development shown in Figure 3, it can be observed that 70,4 % respondents said they did not have all the necessary material resources whereas 25,9 % stated they did not have any material resource at all, which is negative, because an adequate training development with quality is not possible without it, since depending on the subject to be developed, the place where it is made and the teaching method used, will be the material resources employed, which allows a better familiarization with the knowledge discussed; therefore, it is necessary to have a minimum of resources to develop these spaces, which is essential to achieve the proposed objectives, because the availability of material resources and other resources are essential to promote the desired quality (13).

It should be noted that only 3,7 % respondents reported to have received the necessary material resources, which may have allowed a training development with quality, without analyzing other factors that directly affect this result.

When analyzing difficulties existing or not during training development, it was found that 70,4 % facilitators answered affirmatively, while 29,6 % considered that there were no difficulties. Figure 4 shows results related to these difficulties.

Material assurance is a key element inside the whole training process, which should be foreseen during its design and arrangement, since its existence will ensure quality to fulfill the proposed objectives. It does not mean to have specialized classrooms equipped by modern computers with internet access, it is about having the appropriate material to ensure that trainees can get the information discussed more easily.

Several authors have previously pointed out that training specialists, material resources, supplies and human resources, among other things, should be placed in a horizontal plane, enabling the efficiency of extension and training activities. Successful training programs not only depend on program design, materials and budget invested, but also on trainers' preparation, since they are responsible for its development (14-16).

Figure 5 shows the level of participation achieved along the course, where 39,3 % respondents say they have reached a high level of participation in every training performed, which may be largely due to the methodology used, the subject addressed and trainer's preparation or also to trainer's concept of participation, because such activity often means to attend these spaces.

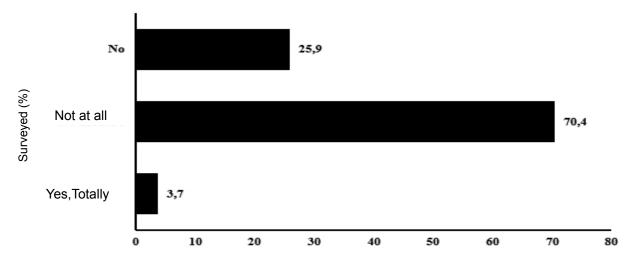


Figure 3. Availability of necessary material resources for training development

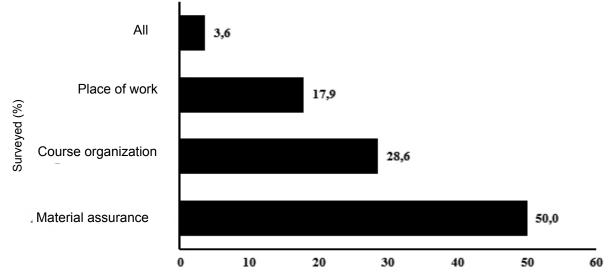


Figure 4. Difficulties presented during training development

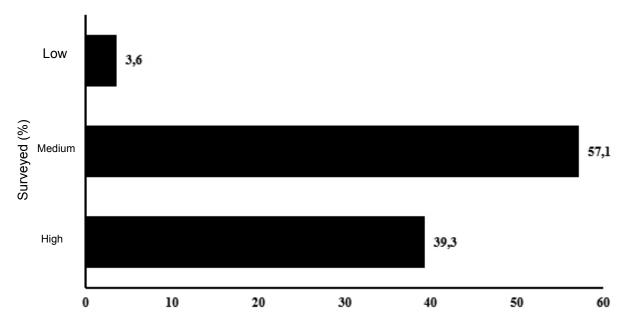


Figure 5. Level of participation achieved during the development of training activities

Anyhow, trainer's intention, participation, discussion and knowledge exchange should be ever stated (17), which is not always achieved. This is shown in the figure, where 60,7 % respondents say they have reached a medium to low level of participation, which may be due to the above mentioned causes, but also because of producers' poor interest on the subject addressed at a schedule that interferes with their work and training course duration; in short, there are multiple causes, which require a deep analysis to achieve high levels of participation.

Participation must be full and complete and should not be understood as the ability of response or reaction to an approach that is given to the group or person with whom you are working to be analyzed.

It also means that the group and every participant in the process developed can generate analysis, produce knowledge, question their own understanding and practice and theorize about it (18, 19).

### INTERVIEW ANALYSIS TO TRAINING SPECIALISTS

As a result of interviews so as to learn what aspects should be taken into account when developing a training process, there was consensus among respondents regarding:

- ◆ Existence of bibliographic materials: there are not always printed documents or useful digital forms as a theoretical support to perform different trainings.
- ◆ Performance of practical activities: they allow confirming the information provided in meetings.
- ♦ Trainer's methodological preparation: facilitators who often assume this task are undoubtedly specialists in the field developed, but they lack methodological knowledge to teach producers.
- ◆ Access to science and technological advances: trainings sometimes promote new technologies or others existing that are already available to rural population, but they are not really affordable for them, so that they create false expectations and discredits training.

Trainers should make a systematic analysis of their practices, the tools used and the methodology assumed to develop these spaces and, above all, the logical organization of these processes, which is the main link to expected success (20) and the development of practical activities enabling to implement the acquired knowledge (11).

#### **CONCLUSIONS**

- ◆ According to training specialists' view, most training programs or actions developed are designed according to producers' needs, using various teaching methods, which is a first step to ensure their quality, although material resources are not always available and an effective producers' participation cannot be achieved.
- ♦ All these aspects together with those analyzed at the first time, from producers' viewpoint, suggest to make a training model that allows its organization at the SCC in the municipality studied and serves as a working tool both to decision makers and facilitators of these spaces.

#### **BIBLIOGRAPHY**

- Ríos, R. A. La agricultura en Cuba. Apuntes históricos. 1.ª ed., edit. Instituto de Mecanización Agrícola (INFOIIMA), La Habana, Cuba, 9 de marzo de 2012, 256 p., ISBN 978-959-285-018-7.
- 2. Nova, A. "Las cooperativas agropecuarias en Cuba: 1959-presente". En: Piñeiro H. C., *Cooperativas y socialismo: una mirada desde Cuba*, edit. Caminos, La Habana, Cuba, 14 de febrero de 2011, p. 420, ISBN 978-959-303-033-5.
- 3. Nova, A. "Continuidad de los cambios en la agricultura". En: eds. Pérez V. O. E. y Torres P. R., Miradas a la economía cubana. Entre la eficiencia económica y la equidad social, edit. Caminos, La Habana, Cuba, 4 de octubre de 2013, p. 180, ISBN 978-959-303-076-2.
- 4. Ministerio de la Agricultura y Ministerio de Finanzas y Precios. "Decreto-Ley No. 300 Sobre la estrategia de tierras estatales ociosas en usufructo". *Gaceta Oficial de la República de Cuba*, vol. 110, no. 45, 20 de septiembre de 2012, ISSN 1682-7511.
- Hernández, S. R.; Fernández, C. C. F. y Baptista, L. P. Metodología de la Investigación. 5.ª ed., edit. McGraw-Hill/Interamericana Editores, México D.F., 10 de diciembre de 2009, 613 p., ISBN 978-607-15-0291-9.
- Landini, F. "Prácticas de extensión rural y vínculos conflictivos entre saberes locales y conocimientos técnicos. Contribuciones desde un estudio de caso realizado en la provincia de Formosa (Argentina)". Ra Ximhai, vol. 7, no. 2, 30 de agosto de 2011, pp. 263-279, ISSN 1665-0441.
- Ponce, M.; Ortíz, R. y Labrada, H. "La experimentación campesina en Cuba". Cultivos Tropicales, vol. 32, no. 2, 2011, pp. 46-51, ISSN 0258-5936.
- 8. Akpomedaye, J. F. O. "The Place of Agricultural Education in the Economic and Technological Development of Nigeria". *Multidisciplinary Journal of Research Development*, vol. 8, no. 1, 2012, pp. 1-10, ISSN 2349-5979.

- Rehaman, N. U.; Khan, J. y Tariq, M. "The impact of education on agricultural production in Khyber Pakhtunkhwa province of Pakistan (1975-2008)". Sarhad Journal of Agriculture, vol. 28, no. 2, 30 de junio de 2012, pp. 345-352, ISSN 1016-4383.
- 10. Stanef, M. R.; Manole, A. M. y Militaru, M. "Lifelong Learning – A Way to Reduce Development Gaps Between Rural and Urban Areas". *Procedia -Social and Behavioral Sciences*, vol. 46, 2012, pp. 4508-4512, ISSN 1877-0428, DOI 10.1016/j. sbspro.2012.06.286.
- 11. Cavaco, C. "Changes in the activity of the adult educator". *Bulletin of the Transilvania University of Braşov*, vol. 4, no. 1, 2011, pp. 39-48, ISSN 2066-7701.
- 12.Kayman, E. A.; Ilbars, Z. y Artuner, G. "Adult Education in Turkey: In Terms of Lifelong Learning". Procedia - Social and Behavioral Sciences, vol. 46, 2012, pp. 5858-5861, ISSN 1877-0428, DOI 10.1016/j.sbspro.2012.06.528.
- 13. Agholor, I. A.; Monde, N. y Odeyemi, A. S. "Analysis of the Use of Local Resources in Extension Education Programme in Nkonkobe Local Municipality of Eastern Cape". *Journal of Agricultural Science*, vol. 5, no. 4, 2013, p. 15, ISSN 1916-9752.
- 14. Reddy, P. A. y Devi, D. U. "Adult education teachers: Characteristics and training". Bulgarian Journal of Science and Education Policy, vol. 6, no. 1, 2012, p. 228, ISSN 1313-1958.
- 15.Mishra, P. "Agricultural Trainer Development System in India: An overview". Journal of Academia and Industrial Research, vol. 1, no. 10, 2013, pp. 591-594, ISSN 2278-5213.

- 16. Palkova, Z.; Schwarz, P.; Floris, N.; Schwarzova, L. y Bandlerova, A. "European projects as a tool for improving farmers skills via modern information technologies". Scientific Papers Series-Management, Economic Engineering in Agriculture and Rural Development, vol. 13, no. 2, 2013, pp. 449-453, ISSN 2284-7995.
- 17.Landini, F. "Necesidades formativas de los extensionistas rurales paraguayos desde la perspectiva de su función, sus problemas y sus intereses". *Trabajo y Sociedad*, no. 20, junio de 2013, pp. 149-160, ISSN 1514-6871.
- 18. Moayedi, A. A. y Azizi, M. "Participatory management opportunity for optimizing in agricultural extension education". *Procedia Social and Behavioral Sciences*, vol. 15, 2011, pp. 1531-1534, ISSN 1877-0428, DOI 10.1016/j.sbspro.2011.03.325.
- 19. Núñez, C. "Sobre la metodología de la Educación Popular". En: eds. Romero M. I., Mirabal A., Alejandro M., Dacal D. A., y Figueredo J., Concepción y metodología de la educación popular, edit. Caminos, La Habana, Cuba, 24 de noviembre de 2014, pp. 55-74, ISBN 78-959-303-068-7.
- 20.Landini, F. "Problemas en la extensión rural paraguaya: modelos de extensión en la encrucijada". *Cuadernos de Desarrollo Rural*, vol. 9, no. 69, 2012, pp. 127–149, ISSN 0122-1450.

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