Scientific Paper

Managerial capacity of the farming entrepreneurial sector in Cuba. Current situation and training gaps

Taymer Miranda-Tortoló[1], Luis Plácido Ortega-Izquierdo [2], Hilda Caridad Machado-Martínez[1], José Alberto Sardiñas-Alfonso[3]

[1] *Estación Experimental de Pastos y Forrajes Indio Hatuey. Universidad de Matanzas Central España Republicana. CP 44280. Matanzas, Cuba*
[2] *Programa Mundial de Alimento, La Habana, Cuba*
[3] *Asociación Cubana de Producción Animal, La Habana, Cuba*
Correo electrónico: miranda@ihatuey.cu

ABSTRACT: A study was conducted in order to identify the training gaps regarding the managerial capacity; the current situation in institutions, organizations and projects with regards to the determination of the demand of capacity building on entrepreneurial culture and management in the farming sector; as well as the actors with possibilities of undertaking work as promoters, facilitators and trainers, who would respond to a training program proposed for years 2015-2017. For compiling the information surveys were applied to actors associated to the farming sector, in institutions and projects at national and territorial level; and workshops were also carried out. The demanders stated that 60 % of their needs are framed in the logistics and infrastructure area, followed by capacity building to assume the transformations of the surroundings and the new ways to manage economic activities and people. However, for the providers, the equipment and capacity building on topics related to entrepreneurial culture and management constitute the relevant aspects. Fifty-five new economic activities were identified, from which 39 are related to providing services of technical advisory, introduction of technologies and talent formation. This determines the need to develop, in the actors of the institutions and contexts, the necessary capacities to guarantee the success of the new enterprises. In this sense, demanders as well as providers stated that the biggest efforts should be aimed at the advanced management of people and capacity building to promote innovation in the institutions. The work alerts about the importance of developing training programs on entrepreneurial culture, which are not only referred to the formation of enterprises and business plans, but also create values and expectations in people; so that they are receptors of the changes and also participants, in a such a way that they can respond to the constant transformations that are developed in the Cuban context at present.

Keywords: diagnosis, capital formation, innovation

INTRODUCTION

In past times people thought that having natural, financial and human resources allowed the development of enterprises and nations; however, currently the emphasis is placed on a correct management, which is as important as having resources. The driving engine for the development of a country, an enterprise or family economy is the capacity to lead or manage. In dynamic scenarios, sometimes turbulent, hardly foreseen, it is mandatory to make new decisions, adapt the entrepreneurial system to the modifications that emerge in the clients, competition, society, etc. They are made by an entrepreneur-manager and he/she will have to adapt his/her enterprise to the changes of the surroundings in the local, national or international environment in which he/she acts. That is, he/she has to be a manager of change (Ayala, 2005; Mateo-Campoy, 2005).

However, different experts state that the accelerated changes in world economy since the seventies have caused the existing knowledge about business administration to become obsolete (Doyle and Strauss, 1985; David, 1988; Hamel, 2008), including Peter Drucker, the "guru" of entrepreneurial management, who stated that «since the mid-seventies, what we knew about administration is not good for us anymore. In the immediate future, managers will have to be capable of forgetting what they did, as fast as they learn the new things they must do…» (Drucker, cited by Codina, 2009).

For such reason, already in 1984, the top echelon of the Cuban Government instructed to improve our direction and management techniques in all the fields. In the mid-eighties systematic exchange was started of Cuban university professors with groups of foreign specialists about advanced management techniques (Codina, 2007a). Nevertheless, the

changes that occurred in the nineties caused stagnation of this process.

At present, the performance of knowledge-intensive actions is required in all aspects of entrepreneurial management, because in the country a deep rearrangement process of the economic model is being developed, supported by the Guidelines approved at the 6th Congress of the Cuban Communist Party, which has generated the implementation of several actions which are aimed at the decentralization of processes, the modification of the legal framework for the economic development and changes in the paradigms that rule social development for the achievement of a prosperous way of life. In this context it is acknowledged that municipalities have little used resources and capacities which can generate benefits for the population. However, the indispensable need to make efficient and pertinent use of them generates the need to apply new concepts and values which lead to a change of mentality in all the actors at this scale, so that the innovative initiative of the state as well as the private sector is unchained.

The changes in the management processes of the farming and soil administration sector constitute examples of deep transformations. Thus is proven by the process of granting agricultural lands in free usufruct, which, according to the data published by the ONEI (2015), in June, 2014, amounted to 312 296 people. Other transformations in the management and commercialization aspects, which have determined the conception of development programs with integral approach, implemented through local subprograms and projects led by the Municipal Administration Councils, are expression of the State's intention of boosting these modifications in the development management model of the country.

Nevertheless, in this context most executing actors in each one of these cases lack managerial competences that would allow them to develop successful initiatives, for which the expected response is not observed.

It is timely to emphasize that the centralized and vertical character which prevailed for years in our economy has been a factor that has remarkably hindered the real participation possibilities of actors at multiple scales.

The entrepreneurs of the Cuban farming sector did not escape this reality. As a whole, they have been developed in a context where decisions were not made at the productive unit, but at the strata of the techno-bureaucracy, which includes the acquisition of productive inputs and the decisions on the production, distribution and commercialization plans; all this discourages the entrepreneurial management and managerial capacity of those who, at the base, execute the productive chain, and constitutes an important cause of the low response observed to the efforts of the Cuban State to recover the productive dynamics of the sector. It is sufficient to say that the primary sector of agriculture occupies 20 % of the active labor force in the country, but it contributes only 4 % of the gross domestic product. If the agroindustrial production is included (food, fishing and sugar industry) the labor force is increased to 24 % and the contribution to the GDP is 5 % (ONEI, 2013). All this shows an important underutilization of the available human resources, due to the low innovative capacity of this important labor force.

In this sense, according to the Central Report of the 7th Congress of the Cuban Communist Party presented by the First Secretary (PCC, 2016), in order to enhance the role of the socialist state enterprise and its autonomy, advance has been made in the separation of the state functions from the entrepreneurial ones, progressively modifying the relations of the Government organisms with the enterprises, whose managers have today higher faculties for their management. Nevertheless, this is a pathway that is not traveled in one day, weeks or months, but it will rather mature at medium and long terms as the organizational conditions and manager training are consolidated, and the habit of waiting for instructions from the top to act in the framework of faculties already granted, instead of promoting initiative and entrepreneur spirit, is overcome.

Every society that aspires to go up the ladder of economic and social development needs to draw on entrepreneurs; they, however, do not emerge spontaneously, but are the object of educational actions within a scheme of «training for entrepreneurship» (Aguirre-Espinosa, 2014), aimed at promoting the development of entrepreneurship culture with actions based on the formation of basic, labor, citizenship and entrepreneurial competences. In that sense, achieving changes in attitudes and habits requires learning processes that demand the building of new capacities and new perceptions.

In such sense, the development of capacities for the successful promotion of new economic activities is a highly important topic in Cuban present times, which is expressed in the specific objectives number 5 and 6 of the strategic axis «Human potential, science, technology and innovation» of the «National

plan of economic and social development until 2030»; in which it is stated as priority «to promote a culture that propitiates the scientific, innovative and entrepreneurial vocation at all society levels, especially in early ages» and the need to «maximize innovation and its generalization in the productive sector, using the necessary incentives, so that it constitutes an essential component of the increase of economic efficiency, competitiveness of productions and technological change»[1]. In this regard, there are many initiatives, projects and national institutions that have promoted processes in order to reach with noticeable success the work of strategic planning and planning and stimulation of new economic activities at productive level in their groups of receivers; however, they are still insufficient.

Taking the above-stated facts into consideration, the objective of the study was to identify the formation gaps on entrepreneurial culture and management in the farming framework, in national, provincial and municipal institutions, organizations and projects, in order to determine the capacity building demand; as well as the identification of actors with possibilities of taking up functions as promoters, facilitators and trainers in the determination to transform this reality.

METHODOLOGY

Information compilation. Surveys and workshops, tools which were applied to actors associated to the farming sector, in institutions and in national and territorial projects, were designed and used.

The survey was designed to document criteria of providers and demanders, who answered the questions stated into or outwards their organization, according to the case.

A total of 115 people were surveyed (43 % are entrepreneurs and farmers, 37 % belong to institutes and 20 % to associations). From them 59 % are professionals, and among these, 42 % are women. On the other hand, 69 % of the surveyed persons belong to organizations at provincial and municipal level and 33 %, at national level. The largest representation, at provincial as well as municipal scale, corresponded to entrepreneurs, with 30 and 40 %, respectively, from the total; while the people associated to universities accounted for 80 % of all the surveyed people at national level.

For performing the surveys, the work was divided into several stages distributed in a period of five months:

- Identification of institutions, projects and possible action areas. Planning and coordination of the action program for the consultancy.
- Elaboration of the tools for the application and elaboration of the work schedule.
- Field work in diagnosis and workshop development.
- Information processing and elaboration of the partial report.
- Elaboration of proposal of training program based on the results of the diagnosis.
- Delivery of the final report.

With the obtained criteria, a frequency analysis was made, allowing to represent graphically the obtained variables according to their incidence on the problem. The gathered information was grouped into eight criteria, which were summarized. In addition, the Pareto diagram was used.

RESULTS

Diagnosis of the demand of capacity building on entrepreneurial culture and management

The demanders (entrepreneurs and farmers, essentially) responded to the needs identified within each organization. In this regard, it could be observed that the identified criteria with higher bearing (figure 1) were related to the need of having material resources, technical infrastructure and mobility to develop their economic activity, followed by the training to adapt to the modifications of the context and the management of new business models as alternative to this problem. This criterion is followed, in order, by the need to develop new ways for the management of human talents and the scientific-technical training.

These results show that the productive sector considers that 60 % of their needs are placed in the logistics and infrastructure area, which can be ascribed to the strong decapitalization in the state sector during the crisis of the nineties; when the collapse of the socialist bloc eliminated, at once, the input supply of the sector. Nova (2008) summarizes a group of global economic indicators, which help to synthesize how the development of the pro-

[1]Taken from the document «National plan of economic and social development until 2030: Vision proposal of the nation, strategic axes and sectors», published in 2016.

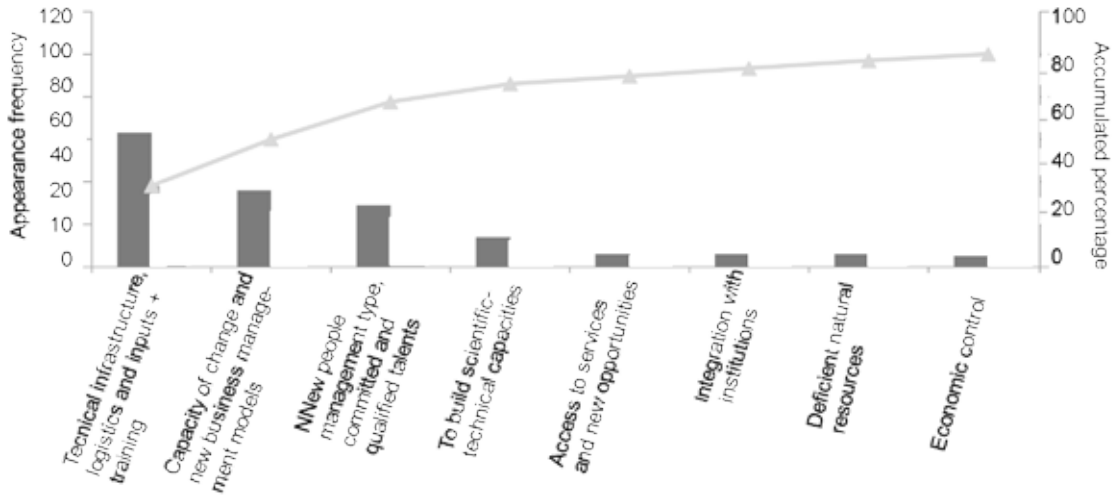

Figure 1. Needs identified by the institutions.

ductive forces of the farming sector was detained in the late eighties and early nineties; period in which the industrial agricultural model, supported on high inputs and with high external dependence, showed signs of exhaustion and important transformations were required in the production relations of the sector. Thus, while the yield of the basic funds decreased to 48 %, the investment per produced peso increased to 143 % and the work productivity decreased to 77 % in 1989 with regards to 1976. This occurred in 80 % of the lands that constituted state funds in 1990, year in which only 27 % of the enterprises were profitable, according to this author. This also coincides with the reports by Figueroa (1998), Pérez *et al*. (1999) and Codina (2007b), who have made reference to the results of the application of this model.

Yet, it is encouraging that in order of importance this criterion is followed by capacity building to assume the transformations of the surroundings and the new ways to manage businesses and people. So that, according to the surveyed subjects' opinion, 80 % of the problems of the farming sector could be solved. In this sense, Callejón (1993) states that technology results from cumulative knowledge processes, in which specific knowledge developed by the enterprise along its accumulated productive experience intervene and also the learning processes are highly important. Thus, it is necessary to state that innovation is not a linear process from R+D to the enterprise, but it constitutes an interactive and complex process where the entrepreneurial experience has huge influence, which searches for the technologies or processes close to its knowledge stock, hence the need to learn to innovate. «The innovating capacity is united to the learning capacity and is the main result of the accumulation of human capital», all of which corroborates that the need of learning in the sector is as important or more than material resources.

With regards to this same question, but from the view of providers towards the entrepreneurial or service surroundings, the answers of the surveyed people were gathered in ten groups (figure 2). Among the needs identified as the ones with higher bearing, the following were included:

- equipment,
- building of economic and managerial capacities,
- development of capacities to adapt to the transformations of the environment, and
- capacity building in business management.

They were considered the most important ones; nevertheless, the relative bearing the surveyed people ascribe to each one is proportionally distributed among all of them, which revalues the capacity building needs in topics related to entrepreneurial culture and management from the perspective of this group of surveyed persons.

New economic activities according to providers

With regards to the new economic activities 55 were identified, from which 39 were related to providing services of technical advisory, introduction of technologies and talent formation. Such activities were identified in 94 % by associations and institu-

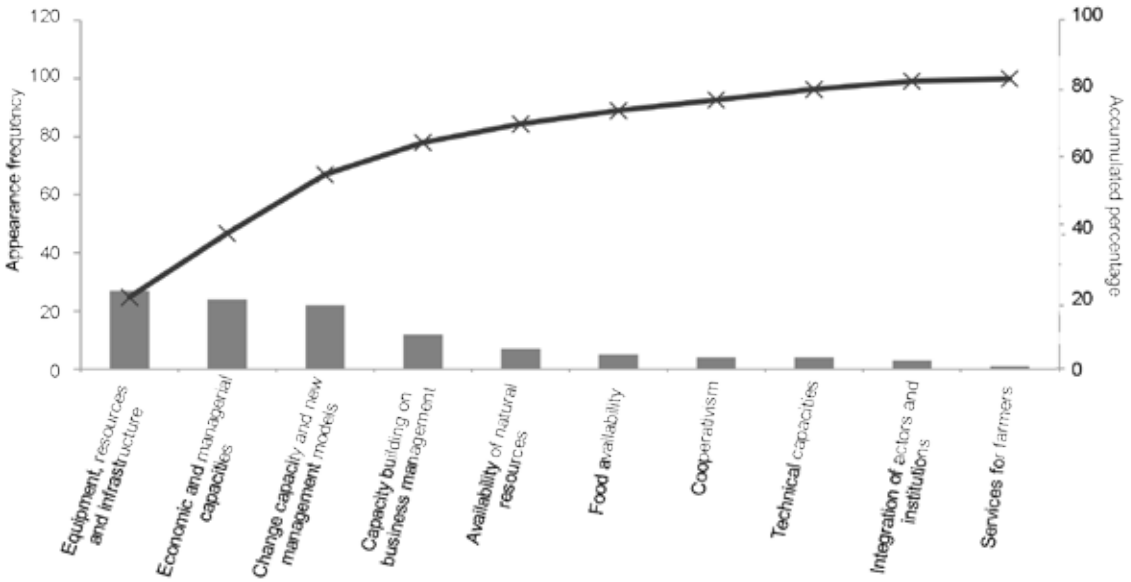

Figure 2. Needs identified in the environment of the institutions.

tions, while 50 % of the productive activities were diagnosed by the entrepreneurs.

Regarding the 122 new economic activities identified from the demanders' position, they were grouped as follows: i) commercialization of science products, which was acknowledged in 74 % by institutions and associations; ii) agroproductive activities by 100 % of the surveyed entrepreneurs and iii) marketing and value addition (industry and gastronomy), acknowledged by 46 % of this same group of actors during the research.

These results can be explained from the opening created in scientific institutions with regards to the possible modifications of the social object, which has not been accompanied by a training process to assume the changes, in some cases; and in others, there is not an adequate regulatory framework, as in the case of the new value addition activities. This is corroborated when it is known that 90 % of the surveyed people stated that they required modifying their social object for the materialization of these activities. Entrepreneurs, on the other hand, had the highest incidence on the answers that corresponded to this aspect (44 % of the total).

The identification of these demands led in turn to the identification of the training needs to guarantee talents capable of assuming the changes to be developed in the institutions and contexts, as well as the success of the new enterprises. According to Alpizar (2008), the development of competences for the success of enterprises is an imperative of any economy.

In this sense, demanders as well as providers opined coincidently that the biggest efforts should be aimed at building capacities in advanced management of people and businesses; criteria which are followed, in that order, by the need to build capacities to promote institutional innovation and the change processes (figure 3). These aspects accumulated 80 % of the relative bearing of the criteria expressed by both groups of surveyed people, which shows high coincidence with the reports in the world literature about the importance of competence in the development of the entrepreneur capacities.

Many studies coincide in stating that to promote an entrepreneurship culture it is necessary to develop the basic, labor, citizenship and entrepreneurial competences, which in turn will demand the development of methodological abilities, and the capacity to learn on their own, to assume a permanent learning and risk- and change-facing practice. In this sense, Alpizar (2008) lists the categories of competences more widely used in the world:

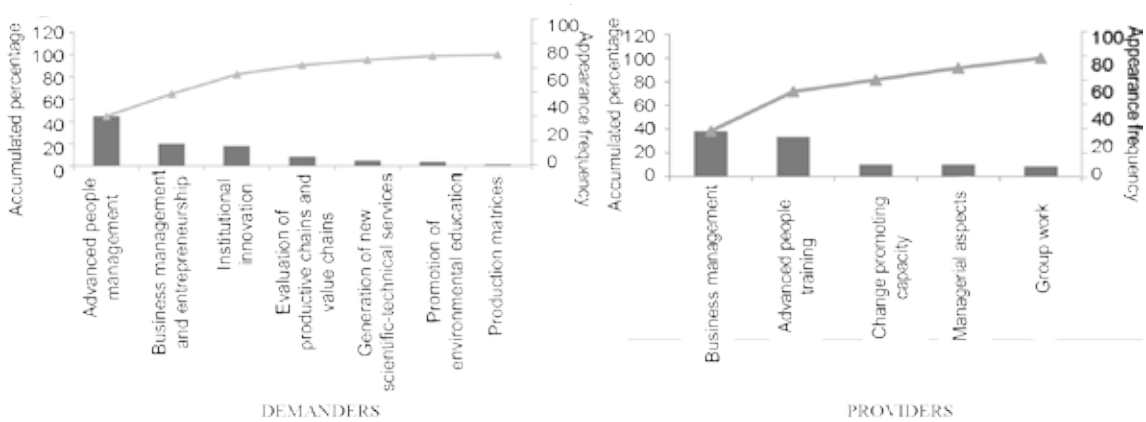

Figure 3. Pareto diagram applied to the needs of competences in demanders and providers.

- Specialized competence
- Methodological competence
- Social competence
- Participatory or participation competence

On the other hand, during recent years, under the auspice of the Alfa Tuning Program (González and Wagenaar, 2003) a project of the European Union is developed that promotes the integration of curricula at the level of this bloc of nations, which promotes this work among a significant number of universities and whose purposes have been extended to Latin America; in its fundamental foundations the typology of competences is adopted from two main types:

- Generic competences (instrumental, interpersonal and systemic).
- Specific competences of each thematic area (including dexterities and knowledge).

These arguments alert about the fact that in a national context of constant and increasing transformations all the actors must promote forming programs of entrepreneur culture, which are not only referred to the formation of enterprises and business plans, but which create abilities in people to transform their conduct from receptors of changes to important parts of them.

When asking about the perspective of the surveyed persons regarding how the formation of competences is considered by their organization, it could be observed that only 11 % does not look for training options and the remaining 89 % looks indistinctly in institutions at territorial, national and even international level.

In addition, it could be noticed that among the surveyed institutions 50 % provide consultancy services, which are supported by agreements, within the framework of projects, as part of their social object, through contracts, by resolutions or statutes.

Among these institutions, 28 stated knowing the methodologies to build capacities in institutions and people in entrepreneurial management and entrepreneur qualities. Among the tools used the following were identified:

- Business plans
- Feasibility studies
- Entrepreneurial management
- Institutional innovation
- Methodologies of participatory techniques
- Quality management
- Economic management
- Direction by objectives
- Leadership, people management and knowledge management
- Project administration and management

In addition, the work conducted allowed to identify a set of actors formed with attitudes for the development of medium- and long-term training processes. Among the sampled institutions 63 promoters, 124 facilitators and 136 trainers were identified; from the last ones, 35 are younger than 35 years old, and they were formed in Cuba from the effort of the NGOs present in the country and abroad.

This identified mass mostly expressed (79 surveyed people), their willingness to participate in the training of new trainers, because they consider it an opportunity for their professional accomplishment and a social work (74 and 48 surveyed people, respectively). Those actors opine they could cover 1 642 institutions at the different levels: territorial (1 277), extraterritorial (247 and national (118), with

which they could train up to 84 624 persons in these same contexts.

CONCLUSIONS

It is essential to acknowledge the importance of innovative capacity in the entrepreneurial sector as dynamic agent of the national and world economy, as alternative of social development and as source of technological innovation. In that sense, it is necessary that from the State policies are generated to commit sustainable efforts of the public and private sectors to generate and maintain sustainable processes which, through the stimulation to entrepreneurship, allow to boost the local economies.

It is presented as an extremely important factor the development of training programs in entrepreneur culture, which are not only referred to the formation of enterprises and business plans, but which also create values and expectations in people –even since early ages– so that they are receptors of the changes and also participants, in such a way that they can respond to the constant transformations that are developed in the context of Cuba at present and in the future.

BIBLIOGRAPHIC REFERENCES

Aguirre-Espinosa, Angélica. *Cultura del emprendimiento.* http://www.gerencie.com/cultura-del-emprendimiento.html. [20/10/2014], 2014.

Alpízar, J. L. ¿Profesionales competitivos o competentes? II. Tipología de competencias. *Revista Pedagogía Universitaria*. XIII (4):1-14, 2008.

Ayala, J. C. *Manual de competencias básicas en gestión. Programa de certificación de competencias laborales*. Buenos Aires: Banco Interamericano de Desarrollo, 2005.

Callejón, María. *Innovación tecnológica y sistemas productivos locales. Cooperación entre empresas y sistemas productivos locales*. Madrid: IMPI, 1993.

Codina, A. Cambios en el entorno económico-social en Cuba (1959-2000). *Quaderni del Laboratorio Europeo per la crítica sociale*. 3:47-48, 2007b.

Codina, A. La Consultoría: Difusión de tecnología y formación gerencial. *Revista BETSIME*. 1. http://www.betsime.disaic.cu/secciones/ger_abr-jun_07.htm#1. [29/06/2015], 2007a.

Codina, A. Tendencias del management en el siglo XX. Evolución, crisis y búsquedas *CoFin Habana. Revista Cubana de Contabilidad y Finanzas*. 8 (1):42-48, 2009.

David, F. R. *La gerencia estratégica*. Colombia: Editorial LEGIS, 1988.

Doyle, M. & Strauss, D. *How to make meeting work. The new interaction method*. New York: Jove Publications, 1985.

Figueroa, V. M. El nuevo modelo agrario en Cuba bajo los marcos de la reforma económica. En: Niurka Pérez, E. González y Miriam García, eds. *UBPC: Desarrollo rural y participación*. La Habana: Universidad de La Habana. p. 1-45, 1998.

González, Julia & Wagenaar, R. *Tuning Education al Structures in Europe. Final Report, Phase one*. Bilbao-Spain, Gröningen-The Netherlands, 2003.

Hamel, G. *El futuro de la Administración*. Bogotá: Grupo Editorial Norma, 2008.

Mateo-Campoy, D. *Gestión emprendedora: estrategias y habilidades para el emprendedor actual*. Ideaspropias Editorial S.L., 2005.

Nova, A. El modelo de desarrollo agrícola cubano en el período 1959-1990. Cuba Siglo XXI. *Economía*. XC. http://www.nodo50.org/cubasigloXXI/economia/novag3_310808.pdf. [10/05/2009], 2008.

ONEI. *Anuario estadístico de Cuba 2012*. La Habana: Oficina Nacional de Información y Estadísticas. http://www.one.cu/aec2012.htm. [05/05/2016], 2013.

ONEI. *Anuarios estadístico de Cuba 2014*. La Habana: Oficina Nacional de Información y Estadísticas. http://www.one.cu/aec2014.htm. [05/05/2016], 2015.

PCC. *Informe Central al VII Congreso del Partido Comunista de Cuba*. La Habana: Consejo de Estado, 2016.

Pérez, Niurka; Echevarría, Dayma; González, E. & García, Miriam. Transformaciones en el agro cubano durante la década de los años ´90. En: Niurka Pérez, E. González y Miriam García, comps. *Cambios tecnológicos, sustentabilidad y participación*. La Habana: Universidad de La Habana, 1999.

Received: August 3, 2015
Accepted: September 12,2016