

Original article

Training model of the Higher Technician in Agricultural Cooperative Management and Development professional



Modelo de formación del profesional de Técnico Superior en Gestión y Desarrollo Cooperativo Agropecuario

Modelo de formação do profissional do Técnico Superior em Gestão e Desenvolvimento Cooperativo Agrário

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ABSTRACT

In the updating of the Cuban Economic and Social Model, the development of the cooperative sector has remained among its strategic guidelines, with special attention to the agricultural cooperative sector. To strengthen and consolidate the management of agricultural cooperatives, the Ministry of Agriculture and other agencies are implementing 17 solutions to improve the management and development of agricultural cooperatives. Solution 9 is aimed at implementing a communication and education system that contributes to the promotion of the values and principles of cooperativism in Cuban society through the media and higher education institutions, the latter being essential for the development of actions aimed at implementing the solution. This article is based on the curricular design of a training model for the Higher Technician in Agricultural Cooperative Management and

Development, as a methodological and organizational support for the cooperative training process, with a more coherent and comprehensive approach. To carry out the research, the dialectical-materialist method was assumed as the general method, which made possible the integration of theoretical methods such as the historical-logical, modeling, systemic-structural and empirical methods such as observation. Associated with these, the procedures of analysis and synthesis and induction and deduction were applied, as well as the documentary analysis technique. The main result offered lies in the foundation of the training model for professionals in this sector in a structured, sequenced, systemic and contextualized manner.

Keywords: curriculum design; agricultural cooperative management and development; professional training model; cooperative training process.

RESUMEN

En la actualización del Modelo Económico y Social Cubano, el desarrollo del sector cooperativo se ha mantenido entre sus directrices estratégicas, con especial atención al sector cooperativo agropecuario. Para fortalecer y consolidar la gestión de las cooperativas agropecuarias, se lleva a cabo por el Ministerio de la Agricultura y otros organismos, la implementación de 17 soluciones para perfeccionar la gestión y el desarrollo de las cooperativas agropecuarias. La solución 9 está dirigida a la implementación de un sistema de comunicación y educación que contribuya al fomento de los valores y principios del cooperativismo en la sociedad cubana a través de los medios de comunicación y las instituciones de educación superior, siendo estas últimas imprescindibles para el desarrollo de acciones encaminadas a la ejecución de la solución. El presente artículo se fundamenta en el diseño curricular de un modelo de formación del Técnico Superior en Gestión y Desarrollo Cooperativo Agropecuario, como soporte metodológico y organizativo del proceso de formación cooperativa, con un enfoque más coherente y abarcador. Para realizar la investigación, se asumió como método general el método dialéctico-materialista, que posibilitó la integración de métodos teóricos como el histórico-lógico, la modelación, el sistémico-estructural y de métodos empíricos como la observación. Asociados a estos, se aplicaron los procedimientos de análisis y síntesis e inducción y deducción, y la técnica de análisis documental. El principal resultado que se ofrece radica en la fundamentación del modelo de formación de los profesionales en este sector de forma estructurada, secuenciada, sistémica y contextualizada.

Palabras clave: diseño curricular; gestión y desarrollo cooperativo agropecuario; modelo de formación profesional; proceso de formación cooperativa.

RESUMO

Na actualização do Modelo Económico e Social Cubano, o desenvolvimento do sector cooperativo tem sido mantido entre as suas orientações estratégicas, com especial atenção para o sector cooperativo agrário. A fim de reforçar e consolidar a gestão das cooperativas agrárias, o Ministério da Agricultura e outras organizações estão a implementar 17 soluções para melhorar a gestão e o desenvolvimento das cooperativas agrárias. A solução 9 visa implementar um sistema de comunicação e educação que contribua para a promoção dos valores e princípios do cooperativismo na sociedade cubana através dos meios de comunicação e das instituições de ensino superior, sendo este último essencial para o desenvolvimento de ações destinadas a implementar a solução. Este artigo baseia-se na concepção curricular de um modelo de formação para o Técnico Superior em Gestão e Desenvolvimento de Cooperativas Agrárias. A fim de realizar a investigação, foi utilizado como método geral o método dialético-materialista, que tornou possível a integração de métodos teóricos tais como métodos histórico-lógicos, de modelação, sistémico-estrutural e empírico, tais como a observação. Associado a esses procedimentos, foram aplicados além do mais, os procedimentos de análise e síntese e indução e dedução, bem como a técnica de análise documental. O principal resultado oferecido reside na fundação do modelo de formação para profissionais deste sector de uma forma estruturada, sequenciada, sistémica e contextualizada.

Palavras-chave: concepção curricular; gestão e desenvolvimento de cooperativas agrárias; modelo de formação profissional; processo de formação cooperativa.

INTRODUCTION

The term Higher Education indicates reaching a higher stage of the educational process, i.e., all the formative trajectories of the preceding teachings that each country contemplates in its system. It is made up of educational programs offered at universities, higher academies or higher professional training institutions.

Within Higher Education, there are short-cycle tertiary educational programs, recognized by the United Nations Educational, Scientific and Cultural Organization (Unesco) in its International Standard Classification of Education (Cine), specifically at the Cine 5 level, under the denomination of short-cycle tertiary education which, for international comparison purposes, is used with that term, but can be identified among other denominations, as technical (higher) education (Unesco, 2019).

Cine 5 or short-cycle tertiary education programs offer professional knowledge, skills and competencies. They have a practical component aimed at training in specific occupations and preparing students for the world of work. Hence, the content of the programs that comprise them, the entry requirements and the minimum duration of this level are indispensable aspects in their conception (Unesco, 2019).

The emergence of these training programs constituted a response of the States to the incapacity of the existing university models to receive the growing demand for higher studies which, together with the needs of the business sector and its demand for functionality of Higher Education with respect to its adaptation to the conditions of the labor market, evidenced the need to review the university models in search of flexibility and adaptation of the professional offerings and the organization to meet them (Unesco, 2019).

In European and Latin American countries, the experience in this training shows that in order to achieve an increase in the culture of the population and massification at the higher level, the way has not only been to increase admission to universities, but also to promote the diversification of new proposals with the offer of short-cycle Higher Education study programs, which, being of short duration and less costly for institutions and students, will allow the latter to access the labor market more quickly. In this context, the interest of the States in generating this type of study programs is also noteworthy, at least in some countries of the region. For their initial establishment, institutions called: *junior colleges, colleges or community colleges* in the case of Anglo-Saxon countries and University Institutes of Technology (*Instituts Universitaires de Technologie*) in countries such as France, which are a reference for the implementation of these types of programs at the international level, were created.

In Cuba, until the 1960s, programs equivalent to this level of education were offered in several universities, in specialties such as chemical expert witness, accounting, hydro-engineering, sugar machinery, surveyor and basic secondary school teachers.

Currently, it is in Decree-Law 359/2018, where the institutionalization of the Short Cycle Higher Education Level as a subsystem of Higher Education in Cuba is approved, being the Ministry of Higher Education (Mes) the governing body of this level of training. The creation of this new level is based on the need for professional training for different branches of the economy and services in the country, in a context of an aging population. In addition, it is important to increase the levels of entry to higher education, since this type of education is a priority for the country. It is aimed at training people for certain positions or occupations required by organizations that do not require a university graduate, but do require training beyond the average technician.

Resolution 98/2018 of the Mes in Cuba governs the operation of this subsystem; in it, the Short Cycle Higher Education Level is defined as a terminal profile vocational training that responds to production and service needs in activities or areas that require a professional qualification oriented to the solution of labor tasks of various profiles, so it is distinguished by its theoretical-practical approach.

It is a subsystem that provides access to a larger group of people in Cuba, since it is not required to take entrance exams as an entry requirement, students must have expired high school level or a technical specialty with 12 degrees, can also enter those who caused discharge from a university career, which will be considered enrollment of Higher Education, according to Resolution 98/2018 of the Mes.

The opening of training programs and the shaping of the demand at the Short Cycle Higher Education Level are based to the Mes by the bodies, agencies of the Central State Administration, national entities and provincial Administration Councils of the People's Power, as is the case of the Ministry of Agriculture of Cuba (Minag) which, taking into account the need for training professionals in the agricultural cooperative sector, has requested from the Mes a Short Cycle Training Program in Agricultural Cooperative Management and Development of national character.

The above request is based on the fact that, in spite of the fact that in this sector, since its emergence and up to the present time, actions have been carried out to strengthen the cooperative training process, there is still no training program from the undergraduate, short cycle tertiary education level or Higher Education level or degree directly aimed at the training of professionals in the agricultural cooperative sector, who are capable of solving problems with a theoretical-practical approach and with the use of techniques, technologies and methods according to their development,

that contribute to the promotion of the values and principles of cooperativism in Cuban society and that respond to the needs of the sector in the current context.

A proposal for a short-cycle tertiary education level, which characteristics are adjusted to the needs of the agricultural cooperative sector, will constitute an essential way for its strengthening and development in the country. In this sense, the research presented here is based on the curricular design of a training model for the Higher Technician in Agricultural Cooperative Management and Development (TSGDCA), as a methodological and organizational support for the cooperative training process, with a more coherent and comprehensive approach.

MATERIALS AND METHODS

In order to achieve the proposed objective, a qualitative research was carried out, where the dialectical-materialist method is assumed as a general method, which allowed determining the components of the object of study and the main dialectical relationships between them, as well as their contradictions. In addition to the foundation and integration of the other methods (theoretical and empirical) that were used to delve into the essence of the cooperative training process in Cuba.

The theoretical methods used were:

Historical-logical method: to analyze the functioning, development and main trends of the cooperative training process at the international and national level, as well as its characteristics at the University of Pinar del Río.

Modeling method: to discover and study new relationships and qualities of the cooperative formation process in the agricultural cooperative sector, through the training model of these professionals, where the interrelations of its structure are represented in a systemic way.

Systemic-structural method: to support the conception of the proposed model for the training of professionals in the agricultural cooperative sector in Cuba, establishing its components, dimensions, relationships, dynamics and behavior, as well as its logical sequence.

The procedures used were:

Analysis and synthesis: its use made it possible to determine the essential aspects of the process under study, breaking it down into its parts and qualities for the theoretical analysis, which were unified taking into account those common elements, which made it possible to understand its structure and thus be able to model it later.

Induction and deduction: made it possible to reason about the particularities of the cooperative training process in order to reach certain generalizations that constitute the starting point to confirm theoretical formulations concerning the process under study, both from the Cooperativism theory and from Didactics.

The essential empirical methods employed were:

Observation method: it was developed through the application of the documentary analysis technique for the evaluation of the bibliographic material related to the different tendencies and conceptions about the cooperative formation process, both in the international context and in Cuba and its role in the development of the agricultural sector in the country.

RESULTS AND DISCUSSION

The process of cooperative formation and Cooperative Education: background

Since the origin of cooperativism and during its evolution, many have been the contributions and ideas developed about educational processes for the formation of that sector and in some cases concrete actions to develop Cooperative Education, referred to by authors such as: Mateo Blanco (1976), Alfonso Alemán (2003), Marín de León et al. (2013), García Pedraza et al. (2018), Hernández Arteaga et al. (2018), Juárez Pulido et al. (2019); Martínez Charterina (2020), Imen (2021).

In spite of the different points of view approached by these authors on aspects related to Cooperative Education, they all recognize the importance of Education as an essential instrument to put cooperative ideas into practice, the dissemination of knowledge of the cooperative system and the training of cooperative members in terms of the consolidation of the sector and the transformation of the quality of life of all its members.

Cooperative Education as a guiding principle of the cooperativization process, from 1848 to the present, has been analyzed by the International Cooperative Alliance (ICA), considering it as the foundation of the ideological formation of the cooperative member, which marks the difference of the cooperative system with respect to the rest of the sectors of the economy.

In its conception and definition, it went through four moments or stages: first, in 1848 with the foundation of the Rochdale Pioneers, where education was established as a principle for the first time in the history of the movement. Then in 1937, at an ICA Congress, the cooperative principles were updated and Cooperative Education was approved as the seventh principle; but it was not given the importance required by this principle for the sector, giving more relevance to the economic principles. In the 1966 Congress, the principle of Cooperative Education was not present among the priorities of the ICA as a guiding principle that should at all times guide the cooperative movement. It was not until the 1995 ICA Congress in Manchester that the guiding principles of the cooperative movement were reviewed and it was decided to include this principle. In addition, the importance of training and information as a systematic and continuous process is highlighted (International Cooperative Alliance, 1995).

Cooperative Education is conceived as a continuous training process oriented to the development of skills, which allows ensuring the integral management of the cooperative, based on the values and principles of cooperativism, in such a way that its economic and social management is consolidated as a socialist social property enterprise, where the sense of belonging and the integral training of members, managers, workers, family, community, other members of the locality and all people linked to the sector are fostered (Marín de León et al., 2013).

Its functions contribute to strengthen this model and allow it to become a real way of development, by favoring the transfer of behavioral norms in correspondence with the cooperative culture, the conservation of the basic ideas of the cooperative process and its updating in the current conditions, the socialization of learning through the feedback of the participants in the process, the homogenization of knowledge that from different points of view becomes a regularity, the development of leadership as an indispensable requirement and distinctive feature of management in cooperative enterprises, as well as the foundation of programs that are adapted to the characteristics of the sector (Marín de León et al., 2013).

In order to fulfill these functions, cooperative education is carried out through the development of training actions within the framework of non-formal education, with the realization of workshops, courses, debates, events and other activities of an educational nature, based on the principles of popular education, or with the development of educational actions linked to structured programs that are inserted within formal education (Marín de León et al., 2013).

The latter are training programs, designed with an adequate pedagogical foundation, which must include components that, from the didactic point of view, allow to approach cooperativism from the general to the particular, reflecting the context of each country in correspondence with the needs of members, employees, managers, family, community and other sectors involved with cooperatives, giving greater relevance within the training process to the community as a decisive factor for the development of the movement, so as to guarantee the generational replacement and, in addition, the transformation of its reality.

In this sense, the implementation of short-cycle tertiary education level training programs, higher education level or degree training programs, as well as courses, training, master's degrees and other training activities, planned with the collaboration of institutions of the Education and Higher Education System, research centers and organizations linked to the sector, play a significant role in the training process of the members involved.

Currently, the training of professionals for this sector is highly widespread in universities in all countries of the world, evidencing the existence of a significant number of training programs at the higher education level or degree level. Despite this, the implementation of short-cycle tertiary education training programs has been boosted by the characteristics of this type of training, its theoretical-practical approach and the flexibility of its curricula, especially in Latin American countries.

In both levels, although training programs have been articulated with different qualifications, as shown in Table 1, they have elements in common: the duration of programs for each level, the study modality, the subjects, the contents and functions.

Table 1 - Name of training programs at the international level

Level	Training programs
Short-cycle tertiary education level	<ul style="list-style-type: none"> • Higher Technician in Administration of Cooperatives and Mutuals • Higher Technical Degree in Management of Cooperative Societies Degree in Cooperativism • Higher Technical Degree in Microcredit for the Development of the Social Economy • Higher Technical Degree in Social and Solidarity Economy • Higher Technical Degree in Social Economy for Local Development
Level or degree in higher education	<ul style="list-style-type: none"> • Bachelor's Degree in Cooperative and Mutual Administration • Bachelor's Degree in Cooperativism • Bachelor's Degree in Cooperativism and Mutualism • Bachelor's Degree in Social Economy and Cooperativism

Source: Own elaboration

In Cuba, the cooperative training process has been developed since the beginning of this sector in the country. During the first years, this process was carried out through the National Association of Small Farmers (Anap), as the organization that represents Cuban peasants, collaborating with the training of young peasants to study different specialties related to agricultural work, the foundation of the National School "Niceto Pérez" with the necessary infrastructure conditions for the training and political and cultural improvement of the organization's leaders, the development of study circles and seminars with materials on cooperativization in all the peasant bases, the distribution of the Anap Magazine as didactic material for the dissemination of cooperativism and its advantages, as well as the coordinated visits of groups of peasants from all over the country to show experiences related to technical assistance, as another educational action carried out by Anap for the dissemination of cooperativism.

With the development of the Cuban agricultural cooperative movement, derived from the creation of higher forms of production, it became necessary to strengthen the training of its members. Anap,

with the objective of training the leaders of the sector, continued a broad training program through its National School and the Provincial Training Schools.

During all these years of consolidation of the cooperative movement in Cuba, as well as the Anap and the Ministry of Agriculture, many training and education activities have been carried out by universities with the Cuban cooperative sector, currently standing out the Latin American Faculty of Social Sciences (Flacso) belonging to the University of Havana, where an area of cooperative studies is coordinated, and the Center for Management, Local Development, Tourism and Cooperativism Studies (CE-GESTA) attached to the Faculty of Economic Sciences of the University of Pinar del Río, which leads the line of research, management of cooperative enterprises.

The Cooperative Studies Area, coordinated by Flacso from 1980 to the present, is integrated not only by researchers from this faculty, but also by professors from other areas of the University of Havana such as: the Faculties of Accounting and Finance, Law, Economics and Geography, the research centers on the Cuban Economy, International Economics and Management Techniques, as well as from the Agrarian University of Havana. This interdisciplinary academic group carries out activities for the development of the cooperative sector, related to postgraduate studies (Coordination of the Master's Degree in Management and Development of Cooperatives), research (Participation in the Agricultural, Non-Agricultural and Second-Degree Cooperatives Project) and university extension (Coordination of the Network of Cooperative Studies of the University of Havana RedCoop UH).

The Cooperative Enterprises Management research line currently developed by CE-GESTA has its antecedents in the 80's, when the Cooperative Studies Group attached to the Marxism-Leninism Department of the University of Pinar del Río was constituted, developing improvement actions since 1986. From this date, research on cooperativism and its impact on Cuban society began; from the initial moments, this group is projected as a leader in this research, initiating a whole process of consolidation of science in it.

As a result of the work developed in this initial period, the Center for Studies on Cooperative and Community Development (Cedecom) was created by the Mes, with the purpose of contributing to the development of the theory and practice of cooperativism, through research, training and scientific-methodological advisory activities, which is why it led the national advisory for the creation of cooperatives in other sectors of the economy.

From that date until 2018, subjects related to the subject were taught at the undergraduate level, corresponding to the Higher Education level in careers of Economic Sciences and more than 200 courses, trainings and diploma courses in Cuba and in countries such as: Honduras, Ecuador, Peru, Dominican Republic, Puerto Rico, Costa Rica, Panama, El Salvador, Colombia, Brazil, Argentina, Angola and Spain.

As of 2018, the aforementioned Cedecom is integrated with the Center for Management, Local Development and Tourism Studies (Gedeltur) and the Center for Management, Local Development, Tourism and Cooperativism Studies (CE-GESTA) is created.

At present, Cooperative Business Management as a line of research coordinated by CE-GESTA is integrated by researchers from the center of studies and other areas of the university such as the Department of Law, the Department of Management Development, the Department of Global Economics, the Department of Accounting and Finance, the Agroecology Research Group, the Department of Agronomy, the Center for Forestry Studies and the Center for Environment and Natural Resources Studies, specialized in various branches of science, which shows interdisciplinarity in the study of the line. Having this group of researchers favors the design and teaching of undergraduate (a unique experience in the country) and graduate courses related to the topic of cooperativism, which is inserted within the line and guarantees the systematic introduction of the main scientific results of this topic in teaching.

Undergraduate courses are taught at the tertiary and higher education levels. At the short-cycle tertiary education level, the following subjects are taught: Social and Solidarity Economy and Food and Nutritional Security Management corresponding to the basic curriculum and Cooperativism and Development of the optional curriculum, all within the Higher Technician Training Program in Local Development Management. At the Higher Education level, the following subjects are taught: Management of Cooperative Enterprises in the Bachelor's Degrees in Economics and Industrial Engineering as part of the optional curriculum of Study Plans D and E of both degrees; Seminars on Cooperatives and New Forms of Management in the Bachelor's Degrees in Economics Education and Accounting and Finance, within the optional curriculum of Study Plans D and E of these degrees, all belonging to the Faculties of Economic Sciences and Technical Sciences of the University of Pinar del Río.

At the postgraduate level, within the level of master's degrees, specializations or equivalents, the course on Agricultural Cooperative Enterprises is taught as part of the Master's Degree in Agricultural Business Administration; the Integral Management of Agricultural Cooperatives Diploma on Intercooperation Bases is coordinated; Training Plans have been designed for members of agricultural cooperative enterprises in the province of Pinar del Río, as well as other professional improvement courses for members of the cooperative sector in general. In addition, a Master's Program in Management of Cooperative Enterprises with provincial, national and international scope is being designed.

The above analysis shows that, in Cuba, the training process in cooperativism, from its beginnings to the present, has evolved and has been developed, to a greater extent at the postgraduate level, with the development of professional improvement courses, master's degrees and diploma courses specifically aimed at the cooperative sector and other sectors related to this sector. It has also been developed at the undergraduate level, but to a lesser extent, with the design and incorporation of subjects of the basic and optional curriculum within short-cycle tertiary education programs and university careers, but in other areas of knowledge, which are only actions that contribute to the integral development of professionals in these study plans, and not to the training of professionals in the area of cooperativism specifically, despite the significance of training professionals who enhance the management and development of cooperativism in Cuba at the present time.

In order to base the proposal of the present research, not only the guidelines established by the Mes for this type of training program were assumed, but also certain theoretical bases that, from Pedagogy and Didactics, provided the development of the curricular design in question, which constitutes a result of the professors that integrate the research line Management of Cooperative Enterprises of CE-GESTA, who, after its approval by the Mes, will be in charge of its implementation.

Need for the creation of the training program in the country or territory

In the updating of the Cuban Economic and Social Model, the development of the cooperative sector has remained among its strategic guidelines, with special attention to the agricultural cooperative sector, as it plays an important role in the Cuban economy due to the significant contribution made by these cooperatives to the country's food balance.

In order to strengthen and consolidate the management of agricultural cooperatives, the Minag and other agencies are implementing 17 solutions to improve the management and development of agricultural cooperatives.

Solution 9 is aimed at the implementation of a communication and education system that contributes to the promotion of the values and principles of cooperativism in Cuban society through the media and higher education institutions, the latter being essential for the development of actions aimed at the implementation of the solution.

In this sense, the request, design and approval of a training program on cooperativism at the Short Cycle Higher Education level, called TSGDCA Training Program, by the Minag, constitutes a significant solution to strengthen the preparation on cooperativism in Cuban society from Higher Education institutions and aimed at promoting the development of the sector in the country.

The implementation of this solution is based on the fact that agricultural cooperative enterprises do not have a sufficient number of senior-level workers and that there is also a high potential with training needs, who have professional experience, but show a need for improvement in order to fulfill their work assignment and, at the same time, contribute to the development of these entities, hence the need to train professionals prepared in cooperativism.

To this end, cooperative training is required to move to a higher stage in its design and implementation, based on the identification of certain problems that underlie the development of the Cuban cooperative movement itself and the conception of a methodological and organizational support of the cooperative training process, with a more coherent and comprehensive approach, oriented to the solution of labor tasks of this profile, which allows a consolidation of the cooperative entity in particular and of the movement in general as required in the current context. It is precisely through TSGDCA's Training Program that it is intended to enhance this process of cooperative and professional training in this sector, in a structured, sequenced, systemic and contextualized manner.

Problem of the profession

The graduate of the TSGDCA Training Program will have to face professional problems mainly associated with the integral management of the agricultural cooperative. Hence, its definition was based on objective and subjective difficulties existing in the economic, productive, social and

environmental management of the entities of the agricultural cooperative sector. Consequently, this professional must solve problems related mainly to:

- Theoretical foundations of cooperativism, its principles and values
- The economic, productive, social and environmental process
- Management in agricultural cooperative enterprises
- The accounting and financial process that takes place in the company
- The environmental dimension
- The gender and quality approach
- The social performance of the cooperative as a central axis for the integral performance of its management model

The problems mentioned are given by social needs that require the performance of professionals to satisfy them. These problems will have an impact on the integral management of the agricultural cooperative.

Object of the profession

From the statement of the problems of the profession, the object of the profession is established, which will be determined by the following characteristics:

- Object of work

The integral management of the agricultural cooperative in which the problems to be solved by the professional of the agricultural cooperative sector are manifested.

- Spheres of action

The action of these professionals to solve the problems of the profession will be manifested in: agricultural cooperatives, companies in the agricultural sector, institutions linked to the Ministry of Agriculture, non-governmental organizations with which agricultural cooperatives are linked, government bodies at the local level and global bodies at the provincial and municipal level with which agricultural cooperatives are related, these being the spheres of action of this professional.

- Fields of action

The fields of action of these professionals will be in correspondence with the particularities of administration in agricultural cooperative enterprises and with the development of their economic, productive and social activity. In this sense, the fields of action are identified with the processes of: administration with its four functions: planning, organization, management and control, production, marketing, economic-financial and human resources. In addition to the identification of other fields of action that derive from dimensions that are developed in agricultural cooperatives such as: research-development, the environmental dimension, the gender and quality approach and social responsibility as cross-cutting elements in the management of these enterprises. From the identification of these fields of action, the subjects and contents that will make up the training program are derived.

- Mode of action

The mode of action expresses how the professionals of the agricultural cooperative sector should act in the occurrence of professional problems related to the object of their profession in the different spheres of action. Therefore, the mode of action will be directed to: Solving the problems generated in the integral management of the agricultural cooperative, from the integration of the theory and practice of cooperativism.

General training objectives of the professional

The objectives of the profession will characterize the graduate that is aspired to form. They will be an expression of the invariants of the most general and essential contents of the theory and practice of cooperativism, their level of mastery and assimilation. Its formulation will be made taking into account that the TSGDCA Training Program will be developed in two years for the day course and three years for the course by meetings and at the request of the Minag, so its determination was made in correspondence with the academic years to be studied, identifying that the professionals graduating from this program should be able to:

1. To base the theoretical-methodological bases, principles and values of cooperativism, as well as the importance and contribution to the process of updating the Cuban Economic and Social Development Model, strengthening the love for the profession and the sense of belonging

2. Manage agricultural cooperative enterprises on the basis of the particularities of the administration of this type of enterprises, promoting the development of cooperative principles and values
3. Solve the problems generated in the integral management of the agricultural cooperative, from the integration of the theory and practice of cooperativism, in function of the development and consolidation of the agricultural cooperative sector

Contents of the profession

It is essential that the Training Model of the Professional of the Short Cycle Higher Education Level in Agricultural Cooperative Management and Development reflect the general training contents, that is, those General, Basic, Specific and Exercise contents of the profession that integrate, following a certain logic: the most essential knowledge, skills, values and attitudes of the profession, where the mode of action of this professional is signified.

Consequently, the knowledge will be determined taking into account the notions of each subject that make up the curriculum that must be studied and learned by these professionals throughout the years of the training program, in a logical and sequential manner, where the aspects related to Agricultural Cooperative Management and Development as an integrating subject for the training program will constitute the starting point and a common element that, in a transversal manner, will be reflected in all the years.

- System of general or basic knowledge, basic knowledge specific to the practice of the profession

- Theoretical and methodological foundations of cooperativism and its role in current times. Principles and values of cooperativism
- Management in cooperative enterprises in Cuba. Its functions
- Management of financial and accounting processes of agricultural cooperatives. The financing of the business activity. The decision-making process. Annual economic plan
- The social activity of agricultural cooperatives and their management. Social responsibility programs of agricultural cooperatives. Management, accounting and social auditing in the cooperative
- Environmental education. Environmental policy of the cooperative

- The development program in agricultural cooperatives. Elements that integrate it. Its elaboration and implementation

In order to appropriate this knowledge, these professionals must also acquire certain skills that will be generalized and trained during the course of the training program, so that they become the mode of action through which the reality of the agricultural cooperative will be transformed. These skills will be developed from the first to the second year for the day course and from the first to the third year for the meeting course, and they will be developed in ascending order, that is, from the least complex to the most complex, which will be developed in the second and third years, according to the modality of study and which will respond to the mode of action.

- System of skills to be trained by years

1st year:

- Analyze the theoretical and methodological foundations of the social and solidarity economy, as well as the enterprises that constitute it.
- Integrate the theory of cooperativism to the management of agricultural cooperative enterprises based on cooperative principles and values.
- Assess the fundamental aspects of Cooperative Law, in order to contribute to its adequate implementation and application by members of agricultural cooperatives and managers of institutions related to the sector.
- Implement training and improvement strategies in agricultural cooperatives for the development of cooperative education.
- Integrate agricultural extension approaches through the application of methods and tools for the implementation of agricultural extensionism.
- Analyze agricultural processes, production-value chains and new forms of economic-productive management of production processes in a systemic way, from a sustainable agriculture and agroecological basis.
- Apply the most current research and innovation methods and tools to solve cooperative management problems and take advantage of opportunities for their development.

2nd year:

- Apply methodological tools for the organization, planning, execution and control of agricultural cooperatives.
- Develop economic, productive and social analyses of agricultural cooperatives.
- To develop control and audit processes by analyzing their components, as well as the strategies and techniques used for their implementation, in order to reduce risk exposure in agricultural cooperative enterprises.
- To design economic and social projects, programs and plans in agricultural cooperatives based on their contribution to local development.
- Implement agricultural policies within the scope of the cooperative sector.
- To analyze the food and nutrition security management process, its implication and the role of the agricultural cooperative in this process, from an integral, multisectoral, interdisciplinary and participatory approach.
- Manage development projects that contribute to the improvement of cooperative management in its different subsystems.
- Implement procedures for cooperative intercooperation, taking into account the changes introduced in the process of updating the Cuban economic model.
- Evaluate the effects of ecological factors based on the principles that govern the sustainability of agricultural systems, applying the scientific principles and methods of ecology as resources that make it possible to influence the structure and functioning of agroecosystems, in order to increase their yields.

3rd Year:

- Evaluate cooperative social responsibility as part of the integral management process of agricultural cooperative enterprises and its contribution to strengthening the role of the cooperative as a socioeconomic enterprise, in terms of the development of its members, the community and society in general.
- Develop environmental management programs for the mitigation or solution of adverse environmental impacts in the scope of work performance.
- Design the communication strategy for agricultural cooperatives, applying information and communication technologies.

- To design the development program of the cooperative enterprise based on the use of strategic foresight procedures and techniques.
- Solve problems of integrated management of agricultural cooperative enterprises.

It is not only important to interpret those elements of the theory and practice of cooperativism that occur in a given context and the ways of acting in response to them, but also to take into account the values that will be fostered in the professional as an expression of the attitude that will be assumed by him/her in his/her sphere of action. In this sense, the values and attitudes to be promoted will be the cooperative values and the basic values for the exercise of the management and development of the agricultural cooperative, which will influence the conduct and professional performance of the cooperative members in this sector, regardless of the specific functions they perform.

- Value system of the profession

- **Mutual aid:** Based on cooperation, reciprocity and teamwork, which entails or implies a mutual benefit, as well as the achievement of the proposed individual or collective goals.
- **Solidarity:** It takes as a starting point the free and voluntary adhesion for the creation of a human relationship of mutual support, where the individual welfare depends on the collective welfare, which allows the appropriation of an attitude through which individual problems can be solved with the help and assistance of all.
- **Social responsibility:** Based on the adoption of consistent attitudes and actions in the face of problems related to the organization's internal and external actors, as well as the obligation to answer for one's own actions.
- **Democracy:** To promote coexistence as a collective, where each associate represents a vote with active participation in the establishment of action policies and decision making, which allows the consolidation and success of the processes carried out in it.
- **Equality:** To offer equal treatment and development conditions to each associate.
- **Equity:** Refers to the notion of justice, of giving to each one what he/she deserves or has earned, according to his/her degree of participation.
- **Honesty:** In the information to be provided for the management and development of the cooperative.

- **Transparency:** To show clear, understandable and reliable information to the work team and external actors related to the cooperative.
- **Social justice:** Based on equity, equal opportunities and human rights for each member of the cooperative, which is essential for each member to develop their full potential.
- **Professionalism:** based on the development of an attitude of constant improvement and self-criticism for the solution of problems and conflicts that occur in the cooperative, always looking for their main causes. It is identified with the fulfillment with quality and excellence of the work performed, as well as with the full use of the capacity to fulfill the tasks efficiently and effectively.
- **Creativity:** To promote proactivity in the management of the organization through the search for the best solutions to existing problems, as well as the development of innovative and creative solutions that facilitate the continuous updating and improvement of the members of the cooperatives.
- **Leadership:** Directed to the development of an attitude of influence over people that allows to encourage them to work enthusiastically for a common goal.
- **Humanism:** To enhance the empathetic attitude towards the human problems of the organization, to value human beings in terms of generosity, compassion and concern for others, through a willingness to dialogue and effective communication.
- **Austerity:** To emphasize the need for rational and measured use of the cooperative's individual and collective resources.
- **Objectivity in decision making:** To develop impartiality, truthfulness and honesty in the information generated in the processes carried out in the cooperative and its impact on decision making.
- **Patriotism:** Commitment to the values, culture and history of Cuba through the respect and love owed to the homeland; it is directly related to the pride and commitment of feeling Cuban today.

The training contents of the TSGDCA professional are in correspondence with the new economic changes that are taking place in the country, so that once trained, they can solve the real and objective problems that arise in the agricultural cooperative sector.

The training program is designed with a duration of 2 years for the daytime course and 3 years for the course by meetings. For its design, curricular flexibility has been an essential element, as it is

structured in each teaching modality by a basic curriculum, of obligatory compliance, as well as its own curriculum and/or an optional one.

Both for the day course and for the course by meetings, the subjects corresponding to the basic curriculum and to the specific and/or optional curriculum were conceived following three cycles: General Training where the general training subjects are inserted, Basic Training in Cooperativism where contents that constitute the basis for the study of cooperativism are addressed and Specific Training in Cooperativism where the contents of the integral management of cooperatives and their development are consolidated; in the latter, the subjects are designed attending to the processes or dimensions that are developed in agricultural cooperatives: economic, productive, social, environmental and others that are considered transversal processes.

MODELO DEL PROFESIONAL TSGDCA



Fig. 1 - Proposed TSGDCA training model

Source: Own elaboration

The study made possible the analysis of the trends, background, characteristics, operation and advantages of the Short Cycle Higher Education Level in general and its particularities in Cuba, aspects that constitute the basis for the proposal of the Training Model for the TSGDCA.

The proposal made is based on the curricular design of a TSGDCA Training Model as a methodological and organizational support of the cooperative training process, with a more coherent and comprehensive approach, oriented to the solution of labor tasks of this profile, which allows a consolidation of the cooperative entity in particular and of the movement in general as required in the current context.

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Conflict of interest:

Authors declare not to have any conflict of interest.

Authors' contribution:

Yenileidys Lorenzo Cabezas carried out the curricular design of the training model of the Higher Technician in Agricultural Cooperative Management and Development.

Yamira Mirabal González made the theoretical conception of the cooperative training process, as well as the analysis of its international and national background.

Iriadna Marín de León prepared the draft and made the final revision of the article.

Jineht Pérez Martínez and Reinier González Garrido carried out the data collection, analysis and interpretation.

All the authors reviewed the writing of the manuscript and approve the version finally submitted.



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