Management profile diagnosis of the Product Systems. A case study in Aguascalientes

Diagnóstico del perfil gerencial de los Sistemas Producto. Un estudio de caso en Aguascalientes

MONTERO-MENDOZA, Roxana†*, HERNÁNDEZ-TORRES, Rebeca and DE VELASCO-GALVÁN, Soren Héctor

Universidad Tecnológica del Norte de Aguascalientes. Rincón Station, Av. University No. 1001, 20400 Rincón de Romos, Ags.

ID 1st Author: Roxana, Montero-Mendoza / ORC ID: 0000-0002-6833-6374, CVU CONACYT ID: 687833

ID 1st Coauthor: Rebeca, Hernández-Torres / ORC ID: 0000-0002-6866-3631, CVU CONACYT ID: 688394

ID 2nd Coauthor: Soren Héctor, De Velasco-Galván / ORC ID: 0000-0001-9401-5403, CVU CONACYT ID: 889682

DOI: 10.35429/JLDE.2019.5.3.13.22

Received August 21, 2019; Accepted December 17, 2019

Abstract

Our society and its organizations demand an effective management, being the role of managers essential for success, in particular at the Product System created to increase the quality and competitiveness of the agrifood chains of strategic products. This project aims to identify the degree to which managers in Aguascalientes cover the profile required to face the challenges that demand promoting the integration of agrifood chains of added value and achieve the sustainability of the Product System Committee. The process was developed under a mixed research approach (qualitative and quantitative) of descriptive scope, as a case study, with the application of specific tools from the position and performance analysis, to 50% of managers, with a non-sampling probabilistic for convenience. The diagnostic results indicate a high average (90%) in the position-person profile affinity, placing planning less than 75% as the main areas of opportunity, which negatively influences the achievement of sustainability, and on the other hand the level of mastery (33%) of the guidelines and strategies of integration and operation of the Committees. Derived from the analysis of results, recommendations related to talent management and managerial development were outlined.

Resumen

Nuestra sociedad y sus organizaciones exigen una administración efectiva, siendo el papel de los gerentes esencial para el éxito, en particular de los Sistema Producto creados para incrementar la calidad y competitividad de las cadenas agroalimentarias de productos estratégicos. Este proyecto tiene como objetivo identificar el grado en que los gerentes en Aguascalientes, cubren el perfil requerido para enfrentar los retos que demanda promover la integración de cadenas agroalimentarias de valor agregado y lograr la sustentabilidad de los Comités Sistema Producto. El proceso se desarrolló bajo un enfoque de investigación mixto (cualitativo y cuantitativo) de alcance descriptivo, a manera de un estudio de caso, con la aplicación de herramientas propias del análisis del puesto y desempeño, al 50% de los gerentes elegidos mediante muestreo no probabilístico, por conveniencia. Los resultados diagnósticos indican un promedio alto (90%) en la afinidad perfil puesto-persona, ubicando como principales áreas de oportunidad la planeación menos del 75%, que influye negativamente en el logro de la sustentabilidad, y por otra parte el nivel de dominio (33%) de los lineamientos y estrategias de integración y operación de los Comités. Derivado del análisis de resultados, se perfilaron recomendaciones vinculadas con la gestión del talento y el desarrollo gerencial.

Manager, Profile, Product-Systems

Gerente, Perfil, Sistema-Producto

Citation: MONTERO-MENDOZA, Roxana, HERNÁNDEZ-TORRES, Rebeca and DE VELASCO-GALVÁN, Soren Héctor. Management profile diagnosis of the Product Systems. A case study in Aguascalientes. RINOE Journal- Labor and Demographic economic. 2019. 3-5: 13-22.

* Correspondence to Author (email: perea_angel@hotmail.com)

† Researcher contributing first author.

Introduction

Research on management management and its decisive role in the success of organizations is abundant especially as regards private enterprise companies, in the various sectors of industry and in a globalized world. These studies continue to be a challenge when it comes to addressing different contexts, such as management in public administration projects related to the rural and agribusiness sector referred in this case to the Product Systems, where it is not about directing to a structure hired to achieve its objectives, but to convene, integrate and bring together the efforts of producers and other agents that make up an agri-food production chain for the integration and operation of the Product System Committees. The work carried out is part of a program to support the State Agricultural Council, in order to achieve the professionalization of the Managers of the Strategic Product Systems for the state of Aguascalientes in order to optimize their management and fulfillment of objectives.

Within this context and in the initial phase of the project, a descriptive diagnostic study was proposed, which does not start from the hypothesis approach but the objective of identifying the degree to which the managers in Aguascalientes cover the profile required to face the challenges which demands promoting the integration of value-added agrifood chains and achieving the sustainability of the Product System Committees.

This diagnostic study of the case referred to the managers of the Aguascalientes Product Systems was outlined as a fundamental basis for later stages in the establishment and implementation of management development strategies to increase the degree of adequacy of the post-person profile of the managers that allow to achieve efficiency and effectiveness in its management.

The structure of the work begins with the presentation of the frame of reference around the management, the Product Systems and their managerial profile, as well as the methodology used in the study, to later give an account of the results and finally the conclusions about the diagnosis and the suggested improvement proposals.

Framework

The management. Importance and implications

There is abundant evidence that successful administration is the fundamental determinant for organizational success, studies have been carried out through various industry sectors, international contexts and types of organizations. The research findings show, almost unquestionably, that if organizations want to be successful in productivity as in the improvement of services, they must have skilled and competent managers. (Wetten & Cameron, 2005). For Hellriegel (2005, p. 7), the manager is a person who plans, organizes, directs and controls the allocation of human, material, financial and information resources in pursuit of the organization's goals. There are different types of managers, but what they have in common is the responsibility for the efforts of a group of people who share a goal and access to resources to pursue their achievement. A manager is in principle the right individual to direct the maintenance phases in which the main mission must be the administration of the pre-established organizational order, the implementation of systems and procedures, coordination and control. (Hernández, 2005, p. 5). The manager must be integrated in a downward direction, that is, with the work of the persons subordinated to him and collaterally with those who do not exercise administrative control. The manager needs to develop, exactly like the company and society. First of all, you must stay alert and mentally awake, you need to face problems, you have to acquire the skills that will give you effectiveness, you need the opportunity to reflect on the meaning of your own experience and learn how to assert your qualities. (Castro & Marchant, 2005).

Being a manager means having responsibility, because its purposes must reflect the objective needs of the company. Participatory management, quality assurance, customer service programs, the implementation of new technology, share purchase programs, awards, entrepreneurs, change techniques in the organization, all these management approaches have a thing in common: they must be directed. Managing requires an accumulation of particular competences that are not part of the formal education curricular programs but it is possible to learn them. (Castro & Marchant, 2005, p. 65).

Hernández (2005) proposes a holistic approach to managerial development where it is assumed that their training requires the participation and performance of transdisciplinary criteria with the participation and cooperation of professionals from different disciplines to provide the manager with knowledge that allows him to respond to specific needs, interacting in the various work teams and strengthening the organization through the creation of cooperation networks.

Management skills form the link through which management strategy and practice, tools and techniques, personality attributes and style work to produce effective results in organizations. These skills are related to a more complex knowledge than other skills and are inherently connected to the interaction with other individuals and a high practical application. The foregoing then implies that the development of managerial skills and competencies is linked to conceptual learning and behavioral practice. (Wetten & Cameron, 2005). In this sense, Castro & Marchant (2005, p. 66) carry out a conceptual review that allows formulating the following grouping of basic competences in managerial development.

- **Personnel Motivation Management:** Ability to make others maintain an intense work pace, having self-directed behavior towards important goals.
- **Driving Working Groups:** Ability to develop, consolidate and lead a work team encouraging its members to work autonomously and responsibly.
- **Leadership:** Skill necessary to guide the action of human groups in a certain direction. Inspiring action values and anticipating action development scenarios of that group.
- **Effective Communication:** Ability to listen and understand, ask questions, express concepts and ideas effectively, as well as give verbal recognition, expressing positive emotions.
- **People Management:** Effort to improve training and development, based on a previous analysis of the needs of people and the organization.

- **Change Management and Organization Development:** Ability to manage change to ensure long-term competitiveness and effectiveness.

The analysis of the competences and abilities mainly those related to the managerial function has been the object of numerous studies that cover perspectives of cases of business success, qualities associated with personality, as well as the application of tools associated with the environment. It is also recommended that the manager or director of the company, be a person in which they can identify the following values and competences: Imagination and creativity in the projection of the company, the spirit of teamwork, the ability to plan, Sociability and ease in communication.

In addition to the stated values, that manager who will transmit his vision to the entire organization, must make known to his work team the key elements to take into account for the fulfillment of his goals, and these in turn, should be assumed on a day-to-day basis, as the only way to achieve long-term objectives. (Gonzales, Manriquez, & González, 2010, pág. 45)

The Product System

The product systems are part of a comprehensive strategy implemented by the Government of the Republic to promote the integration of value-added agrifood chains. This systemic strategy obtained its legal scaffolding with the promulgation of the Sustainable Rural Development Law (LDRS), which defines the Product System as “The Set of concurrent elements and agents of the productive processes of agricultural products, including the supply of technical equipment, productive inputs, financial resources, primary production, collection, transformation, distribution and marketing” (DOF, 2001, p. 3).

This law also establishes the conformation of the Product System Committees as a “Mechanism for planning, communication and permanent agreement between the economic actors that are part of the productive chains (Art. 149 LDRS) (DOF, 2001).

Forming these committees, part of the premise that competition in the globalized world occurs between productive chains not only between specific products, the one that loses competitiveness one link in the agrifood chain impacts the other links and puts the entire chain at risk. (SEDRAE, 2017). The areas of action in which the product system committee has to work range from information generation and planning, through research, transfer, financing, health, safety, to commercialization and industrialization. Product Systems have utility for different actors.

For whom	Utility
Civil servant	Identify priority strategies and actions to trigger the competitiveness of agricultural chains. Strengthen agricultural chains with targeted public resources and according to the problems of each System-Product.
Producers	Determine actions to improve productivity. Design development and expansion plans.
Marketer	Identify the logistics infrastructure for product mobilization Locate the areas with the highest product availability
Professor-Researcher	Identify research, innovation and technology transfer needs Price high impact areas in research, innovation and technology transfer actions Identify priority areas and issues by product-system and producer profile

Table 1 Utility of the Product Systems
Source: (SAGARPA, 2017, pág. 23)

Also, the product systems allow: to establish, an information bank; conduct technical feasibility studies; apply technology packages; improve producers' access to agricultural credit; build infrastructure for collection, packaging and transformation; provide technical and organizational assistance; improve information and knowledge of markets; manage marketing agreements; diagnose the phytosanitary or animal health situation of the product system; and train producers and agribusinesses. (GEO, 2010)

Considering the attributions established by the Sustainable Rural Development Law and the SAGARPA sector program, the objectives of the Product System are: To achieve permanent integration, communication and coordination between the agents of the chain and the different levels of government; Harmonize production and consumption to generate quality and competitive products; It will improve the social and economic well-being of producers as well as the other agents in the chain; and achieve the sustainability of the Product System Committee. (SAGARPA, 2017)

Management Profile of the Product System

The definition of what a public official is one of the most imprecise aspects of Public Administration, since it changes radically not only between countries, but within the same Mexican Public Administration, where it is possible to differentiate different types of officials: federal, State and municipal. Referring to the Regulations of the Law of the Professional Career Service in the Federal Public Administration cited by (Rivas, Trujillo, Lámbarry, Chávez, & Chávez, 2013), three types of public servants are distinguished:

- Base worker in the Administration: they are the unionized workers who work in the APF.
- Career public servants: eventual and incumbent. The eventual ones include those of the first level of income in their first year; the exceptional cases established by article 34 of the law, and those that temporarily occupy a position. The holders are those who enter the system, through a public and open tender, and obtain their appointment by accrediting compliance with the requirements.
- Public servants of free designation: personnel that render their services in the Presidency of the Republic, in the ranks of secretaries of office, heads of administrative department, undersecretaries, senior officers, head or head of unit and homologous positions; members of the armed forces and the security system, the Mexican foreign service and the like; teaching staff and medical, paramedical, support cabinets, and those who provide their services by contract, subject to payment for fees in the dependencies. (Rivas , Trujillo, Lámbarry, Chávez, & Chávez, 2013, pág. 429).

The managers of the Product System, can be assimilated to this last category of public servants of free designation in which their fees will be paid through the figure of a regulatory and intermediary agency of federal and / or state resources. In the Guidelines for the Operation of the Product System Committees of the State of Aguascalientes Supported through the State Government, where their background, legal framework, objectives, participants, as well as integration and operation strategies are indicated, it is established that the Systems Product must be integrated by the sectors that participate in the chain and are the ones who must appropriate the process of integration and strengthening of the Committee.

This integration also includes the government sector that must be represented by the Ministry of Rural and Agribusiness Development, a non-governmental representative elected by majority vote, a state facilitator who reports directly to the government representative and a Product Systems Manager. Of these guidelines, the section where the profile of the Product Systems Managers is established as a reference to identify the variables of the study is also taken, which is presented below.

Profile of Product Systems Managers	
Performance capabilities	1. Coordination of meetings and assemblies. 2. Ability to speak in public. 3. Taste for public relations. 4. Analytical and order ability.
Desirable knowledge:	1. Guidelines and strategy to strengthen the Product Systems. 2. Administrative and operational skills 3. Capacity for negotiation and teamwork 4. Institutional programs to support the sector
Desirable attitude	1. Initiative 2. Cooperation 3. Tolerance 4. Perseverance
Specific functions	Support the representatives of the Product System Committee in: Manage and monitor the correct use of resources. Find the means to develop the programmed activities. Conform and evaluate the work team. Act as an intermediary between the members of the chain. Make decisions for problem solving. Plan and schedule the activities required by the Committee to improve the competitiveness of the chain and achieve the sustainability of the Committee. Make the call to the plenary meetings, as well as ordinary and extraordinary sessions and assemblies of the Committee. Propose to the full Committee the creation of vocal commissions or specific working groups. Support in the definition of the strategic lines that will solve the problem of the Product System. The preparation, implementation and monitoring of project actions. Identify the training needs of the Product System and execute training programs and technical assistance. Coordinate activities to convene public and private organizations to establish agreements and support commitments. Manage resources for the execution of projects. Collaborate and coordinate the organization of the group of participants of each link, with special emphasis on attending the Producers Council, since the Committee must have the ability to identify, locate and execute the logistics necessary to mobilize the majority of affiliated producers to the Producers Council. Ensure that the guidelines and statutes of the Product Systems Committees are fully complied with.

Table 2 Profile of Product Systems Managers
Source: (SEDRAE, 2017)

Methodology

The research process was developed under a mixed research approach (qualitative and quantitative, descriptive in scope, as a case study, with the application of tools for job and performance analysis. For Hermida and collaborators (Hermida, 1991) Case studies are directed to the investigation of a unit or “case” of a population universe, and whose purpose is to make a specific analysis in order to show a description of real problems, situations or events in the unit under analysis (organization), a diagnosis of the situation under study and present the most appropriate recommendations, supported by theoretical support.

For this case study referred to the managers of the Product System in Aguascalientes, we worked with a non-probabilistic sample and for convenience conformed by 50% of the sixteen existing systems. In this way the sample was made up of the managers of the following Product Systems: Chile, Strawberries, Vegetables, Vine, Guava, Peach, Apiculture and Garlic. It is worth mentioning that the first four are considered as strategic crops with market potential, because Mexico, in general, and Aguascalientes, in particular, “has comparative advantages for its production with high quality and competitive price” (SAGARPA, 2017, p. 33).

The study begins with a qualitative stage carried out through open interviews with representatives of the State Agricultural Council, as well as through documentary analysis for the establishment of agreements on the objectives of the diagnostic stage and the establishment of the sample.

In the selection of the techniques and design of instruments for the study, those suggested in the job analysis were taken as a reference, which constitutes an exercise in assessing the functions and activities that should be carried out in a particular position and allows to establish their requirements (Valenzuela & Ortiz, 2004). In this way and as a result of the initial actions, the scope and location of the relevant variables of the study were established, as well as the determination of the instruments to be designed and applied, as shown in the following table.

Study Variables	Instrument
Specific functions Support the representatives of the Product System Committee in administrative activities related to administration, planning, organization and control. (see table 2)	Semi-structured Interview Guide (Qualitative Information) Rating scale (Quantitative information)
Desirable knowledge 1. Guidelines and strategy to strengthen the Product Systems. 2. Administrative and operational skills 3. Capacity for negotiation and teamwork 4. Institutional programs to support the sector	Knowledge Evaluation Questionnaire (Quantitative Information)

Table 3 Variables and instruments for the study
Source: own Creation

Continuing with the qualitative phase, the instrument applied was an interview for which a semi-structured guide with 18 open questions was designed with the intention of finding out about the experience in the sector, the processes for performing the functions, as well as the role and the projects with the sectors that participate in the chain, as well as in the integration and operation of the Product System Committee.

Based on this interview, two more instruments were designed and applied that provided quantitative information, an appreciative scale around the domain of specific functions and a questionnaire for the evaluation of desirable knowledge.

For the construction of the appreciative scale, the variable related to specific functions was operationalized by classifying them into seven administrative and six operational functions, as shown in the following table.

Specific functions by classifying them into seven administrative and six operational functions, as shown in the following table.

No	Key	Specific functions
1	OC2	Manage and monitor the correct use of the Committee's resources
2	AO2	Find the means to develop the programmed activities.
3	AO3	Act as an intermediary between the members of the chain.
4	AD1	Make decisions for problem solving.
5	AP2	Plan and program the activities required by the committee to meet the objective of improving the competitiveness of the chain and achieving the sustainability of the committee.
6	OO1	Make the call to the plenary meetings as well as ordinary and extraordinary sessions and assemblies of the committee.
7	AO1	Propose to the full committee the creation of vocal commissions or specific working groups.
8	AP1	Support the definition of strategic lines that will solve the problem of the product system.
9	OC1	The preparation, implementation and monitoring of project actions
10	OO3	Identify the training needs of the product system and develop and execute training programs and technical assistance.
11	OO2	Coordinate activities to convene public and private organizations to establish agreements and support commitments.
12	AP3	Manage resources for the execution of committee projects.
13	OO4	Collaborate and coordinate the organization of the group of participants of each link, with emphasis on attention to the producer council. The product system committee must have the ability to identify, locate and execute the logistics necessary to mobilize or inform the producers affiliated with the council.

Table 4 Classification of Administrative and Operational Functions of the Manager Profile
Source: own creation

The scale for assessing the performance of these functions is of the Lickert type with five levels that range from not knowing or executing the function, to knowing and fully executing the function on a regular and permanent basis and having the evidences that demonstrate it.

For its part, the instrument for measuring the mastery of desirable knowledge was constructed with ten closed questions with four possible response options.

The data obtained with these last two instruments were processed with the application of descriptive statistics and the generation of graphics that made possible their analysis and diagnosis generation.

Results

From the analysis of the information obtained through the semi-structured interview, a series of data were obtained that allow the initial characterization of the managerial profile presented by the managers of the Product Systems in Aguascalientes, among them we can highlight the following:

Previous experience in the agricultural sector of managers is in the range of 6 to 10 years and they were integrated into the product system mainly at the invitation of the Chairman of the Committee or at the suggestion of the producers.

In reference to the experience in the formation of vocalities, commissions or work groups, most of the managers have more than a decade of experience. This skill was acquired in different governmental instances, both federal and state. For the managers interviewed, the areas of opportunity in the product-systems focus mainly on two aspects: the organization of the producers and the commercialization of the products. For this, they mainly locate two strategic lines: the training to improve the knowledge and expertise of the producer and the organization of the producers.

Both to determine priority activities and / or projects and to detect areas of opportunity, dialogue with producers emerged as the main source of agreements, because it allows the opinions to be presented in an alternative way.

In most of the Product Systems, the coordination process with the Product-System Committee, the agenda and the joint work is constructed based on the instructions issued by the board of directors or the orders emanating from the President. The process to develop the programmed activities is based on the use of electronic and / or printed agendas and on the construction and use of a work schedule. Regarding the resolution of problems, most managers apply the following process: problem evaluation, selection of alternatives, application and evaluation of the alternative. Regarding the realization and implementation of the projects, the managers considered equally the functions of coordinator, liaison, manager and supervisor. Most managers perceive that their main role in the Product-System is that of liaison between the producer, the Committee and the Federal and State Government instances.

Finally, the generality of the managers assigned the greatest importance to the management of resources before federal and state instances. Next, and in a next degree of priority they place the administration of financial resources, the provision of technical advice to the producers, and the liaison function between the producers and the Board of Directors of the Committee. Regarding the scale of appreciation and according to the results presented, the average affinity of the Product System Managers analyzed is 91%, with the Product System A showing the lowest percentage 77% and the Product System E the highest with 98%.

Graphic 1 Percentage of affinity to the position profile of Product System Manager
Source: own creation

The greatest area of opportunity is represented by the Administrative functions where the average grade obtained is 89% with respect to the operational functions where 93% was obtained. In this sense, the function that corresponds to Planning and programming the activities required by the committee to fulfill the objective of improving the competitiveness of the chain and achieving the sustainability of the committee is the one that shows a lower grade with 75%. This function is classified as an administrative function that requires broad mastery and application of the desirable knowledge established in the profile.

Graphic 2 Results by profile attachment function
Source: own creation

Although all those evaluated showed evidence of the execution and understanding of this activity, the element of achieving sustainability becomes the main area of opportunity in the development of the Product Systems, and this shows a clear relationship between the functions related to Support the definition of strategic lines (85%), resource management (88%) and intermediation between chain members (88%) that also show a lower percentage with respect to operational functions.

Graphic 3 Level of knowledge regarding the Regulatory Framework of Product Systems
Source: own creation

Another area of opportunity is in the knowledge test whose focus was on measuring the level of mastery of the Guidelines and strategy of strengthening the Product Systems as well as the analytical and order capacity, the average performance was only 33%. However, these elements do not have a high impact on the functions, so they were weighted with a minor impact, but they represent the fundamental bases of the operation and the good management of the systems, so immediate attention is required in this regard.

Conclusions

The study allowed to measure the level of affinity of the current Product Systems Managers with the established profile, it should be noted that although all the functions proved to be carried out by the evaluated ones, the gap between the maturity of each one of the systems thus As the time in the position of each of the managers also contributes to the findings of a low level of efficiency of the activity, however, as mentioned above the average affinity to the profile is high so that with training actions and An improvement work plan is possible to increase the level of efficiency considerably.

The diagnosis was presented in a disaggregated manner allowing the identification of the areas of opportunity by the Product System, although here and for purposes of protecting the confidentiality of the results, they are only presented jointly. From this diagnosis, a series of recommendations for improvement were outlined to raise the level of affinity and efficiency in the performance of managers towards the consolidation of Strategic Product Systems, among which the following stand out:

Training and Skills Development Actions.

To carry out a program of Reinduction to the Managers of the Product System to be able to attend the domain of the Guidelines and strategy of strengthening to the Product Systems with emphasis on the integration of the master plan and the stages for the consolidation of the system.

Strengthen the capacities and attitudes established in the profile through a diploma of Management Skills (Strategic Thinking, Negotiation and Decision Making, Teamwork, Time Management, Management of High Performance Teams, Leadership and Effective Communication).

Certification of desirable knowledge essential for the development of Administrative functions with emphasis on two specific areas: Project Management and Development of Productive Chains.

Continuous improvement in the management profile of the Product System.

Exchange of experiences of success stories in each system in order to standardize and reproduce successful processes in newly created systems. Redesign of the Product System Managers profile in order to establish qualitative and quantitative indicators for performance evaluation and establish differentiated measurement processes according to the consolidation stage of each of these.

Establishment of a process of Selection and Induction of Product Systems Managers that include the application of technical and psychometric tests to establish a personalized support program for each of the Systems.

Establishment of a 360-degree performance evaluation system so that all agents related to the Product Systems participate and establish the annual training and development plan. Specialized advice according to the needs of each system regarding the integration of the production chain, the development of strategic lines and definition of the master plan.

References

- Castro, A. F., & Marchant, R. L. (2005). Competencia (o habilidades) Gerenciales: Una herramienta indispensable para el Desarrollo Organizacional. En L. L. Marchant, *Actualizaciones para el Desarrollo Organizacional* (págs. 62-67). Chile: Universidad de Viña del Mar.
- DOF. (Diciembre de 2001). *Ley de Desarrollo Rural Sustentable*. Obtenido de Diario Oficial de la Federación: http://www.diputados.gob.mx/LeyesBiblio/pdf/235_120419.pdf
- GEO. (2010). *GOBIERNO DEL ESTADO DE OAXACA*. Obtenido de Plan Sectorial Agropecuario, Forestal y Pesquero: Subsector Agrícola.: https://www.finanzasoxaca.gob.mx/pdf/planes/est_sectoriales/OaxacaReportes-Agricola.pdf
- Gonzales, A. J., Manriquez, S. O., & González, B. O. (2010). La visión gerencial como factor de Competitividad. *Revista Escuela de Administración de Negocios ISSN: 0120-8160*, 42-59.

Hellriegel, D. J. (2005). *Administración. Un enfoque basado en competencias*. México, D.F.: Thomson.

Wetten, D. A., & Cameron, K. S. (2005). *Desarrollo de Habilidades Directivas*. Pearson Education.

Hermida, J. S. (1991). *Administración y Estrategia*. Buenos Aires: Macchi.

Hernández, D. R. (2005). Epistemología y Formación Gerencial: Un enfoque holístico. *NEGOTIUM*, 3-11.

Rendón, J. G. (2019). Los sistemas de información gerencial en pequeñas y medianas empresas del sector turístico de la provincia los Ríos, Ecuador. *UNIANDES EPISTEME*, 6(3), 369-382.

Rivas, T. L., Trujillo, F. M., Lámbarry, V. F., Chávez, E. A., & Chávez, E. J. (2013). Diagnóstico del sistema profesional de carrera y certificación de competencias gerenciales de los servidores públicos en México. *Estudios Gerenciales* 29, 428-438.

SAGARPA. (Marzo de 2017). Dirección General de Fomento a la Agricultura. Subsecretaría de Agricultura. *Lineamientos para la Integración y Operación de los Comités Sistemas Producto Nivel Estatal, Regional y Nacional*. Ciudad de México, México: SAGARPA.

SAGARPA. (2017). *SECRETARÍA DE AGRICULTURA, GANADERÍA, DESARROLLO RURAL, PESCA Y ALIMENTACIÓN*. Obtenido de [https://www.gob.mx/cms/uploads/attachment/file/255627/Planeación Agrícola 2017-2030-parte uno.pdf](https://www.gob.mx/cms/uploads/attachment/file/255627/Planeación_Agrícola_2017-2030-parte_uno.pdf)

SEDRAE. (Marzo de 2017). SECRETARÍA DE DESARROLLO RURAL Y AGROEMPRESARIAL. *Lineamientos para la operación de los Comités Sistema Producto del Estado de Aguascalientes apoyados a través del Gobierno del Estado*. Aguascalientes, Ags.

Trujillo, S. G. (2019). Valor agregado para las organizaciones del sector agroindustrial del bicocho de achira, desde las decisiones gerenciales y financieras. *Libros Universidad Nacional Abierta y a Distancia*, 217-235.

Valenzuela, B., & Ortiz, P. M. (2004). *Análisis de puestos de trabajo*. Hermosillo, Sonora: Universidad de Sonora.