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Enero - Abril 2023 Tercera Época Maracaibo-Venezuela Innovative Strategies in agricultural production units: Knowledge in development of new services and value chains

Reynier Israel Ramírez Molina* Manuela Valentina Pinzón Acosta** Keren Daniela Viloria De la Hoz*** Juan David Ríos Pérez**** Nelson David Lay Raby****

ABSTRACT

The world faces unavoidable challenges that force organizations to undertake actions that solve, mitigate and reverse problems arising from the lack of social, economic and environmental sustainability, with climate change being one of the most pressing. The implementation of new technologies would mean a costly transition, but fundamental and necessary to trace paths that help preserve the planet and the institutions of all kinds that exist in it. The research seeks to describe innovative strategies in agricultural production units as part of the knowledge in the development of new services and value chains. The innovation and adoption of new technologies in processes and consumption patterns will only be possible if companies manage to develop markets that provide in their value offer, the component of environmental sustainability in a transversal way in all their activities. The findings show that the adoption of innovative strategies in agricultural production companies has been slow, so the accompaniment of government entities, civil society organizations, academia, research centers and others is crucial to address these problems and generate strategies to solve them.

KEY WORDS: Agribusiness prospective, business sustainability, innovative strategies, value added.

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* Full Time Professor and Researcher of the Universidad de la Costa, Atlántico – Colombia. Senior Researcher. Business Studies Department. ORCID: <u>https://orcid.org/0000-0002-5073-5158</u>. E-mail: rramirez13@cuc.edu.co

**Student of the Business Management program and Member of the Human Talent Management Research Seedbed (SIGTH) of the Universidad de la Costa, Atlántico – Colombia. Business Studies Department. ORCID: <u>https://orcid.org/0000-0002-3626-461X</u>. E-mail: mpinzonl@cuc.edu.co

*** Student of the Business Management program and Member of the Human Talent Management Research Seedbed (SIGTH) of the Universidad de la Costa, Atlántico – Colombia. Business Studies Department. ORCID: <u>https://orcid.org/0000-0001-6788-9999X</u>. E-mail: kviloria@cuc.edu.co

****Professional in Finance and International Affairs and Member of the Administración Social Research Group and Human Talent Management Research Seedbed (SIGTH) of the Universidad de la Costa, Atlántico – Colombia. Business Studies Department. ORCID: <u>https://orcid.org/0000-0001-9520-9808</u>. E-mail: jrios8@cuc.edu.co.

***** Full Time Professor, Faculty of Education and Social Sciences, Universidad Andrés Bello, Viña del Mar - Chile. ORCID: <u>https://orcid.org/0000-0001-8501-7570</u>. E-mail: nelson.lay@unab.cl

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Estrategias innovadoras en unidades productivas agropecuarias: Conocimiento en desarrollo de nuevos servicios y cadenas de valor

RESUMEN

El mundo enfrenta desafíos ineludibles que obligan a las organizaciones a emprender acciones que resuelvan, mitiguen y reviertan los problemas derivados de la falta de sostenibilidad social, económica y ambiental, siendo el cambio climático uno de los más apremiantes. La implementación de nuevas tecnologías significaría una transición costosa, pero fundamental y necesaria para trazar caminos que ayuden a preservar el planeta y las instituciones de todo tipo que en él existen. La investigación busca describir estrategias innovadoras en unidades productivas agropecuarias como parte del conocimiento en el desarrollo de nuevos servicios y cadenas de valor. La innovación y adopción de nuevas tecnologías en procesos y patrones de consumo solo será posible si las empresas logran desarrollar mercados que aporten en su oferta de valor, el componente de sostenibilidad ambiental de manera transversal en todas sus actividades. Los hallazgos muestran que la adopción de estrategias innovadoras en las empresas productoras agropecuarias ha sido lenta, por lo que el acompañamiento de entidades gubernamentales, organizaciones de la sociedad civil, academia, centros de investigación y otros es crucial para abordar estos problemas y generar estrategias para solucionarlos.

PALABRAS CLAVE: Prospectiva agroindustrial, sustentabilidad empresarial, estrategias innovadoras, valor agregado.

Introduction

In recent decades, catastrophic climate events have increased because of intensifying global warming, putting at risk the sustainability of the current economic system (Fabris, 2020). According to some authors (Ramírez et al., 2021; Kalkuhl and Wenz, 2020; Ríos et al., 2019), productivity losses originated by this phenomenon would oscillate between 7% to 14%, mainly affecting developing countries, as their economies are mostly depending on extractive activities such as agriculture. In agreement with this, The World Bank (2020) (Fig. 1) estimates that the proportion of agriculture in the gross domestic product (GDP) has been decreasing since 1995. Agriculture has a greater participation in the GDP of developing countries (Hilmawan and Clark, 2021) (Fig. 2), but this has not allowed them to eradicate problems such as hunger, poverty, or violence (Sánchez-Villegas et al., 2021; Perez-Ruiz et al., 2020). This results from the

low industrialization levels of these countries that restricts them to mere raw material producers. As developing countries lack investment to innovate with new processes, services, or products (Rohov et al., 2021), their raw materials are transformed in products of greater added value in middle to high income countries.

Therefore, the introduction of innovative strategies and technological improvements aimed towards economic and environmental sustainability become necessary for adapting to new scenarios and overcome structural problems (Antequera et al., 2021; Ramírez et al., 2019). From the academy and the government entities is necessary to promote training and education spaces in green techniques of agricultural production (Melander and Arvidsson, 2022; Melamed-Varela et al., 2019). Innovation capacity of agricultural companies will determine which phases will be needed to develop new products and services. Innovation is understood as the means necessary to identify dynamic capabilities, allowing to develop competitive advantages useful to surpass industry rivals and achieve growth, better financial performance, and develop new markets, among others.



Fig. 1: Agriculture, value added (% Gross Domestic Product) since 1991 (World Bank, 2022).

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Fig. 2: Agriculture, value added in 2020 (% GDP) (World Bank, 2020).

According to Prahalad and Hamel (1994), Barney and Zajac (1994) and Drucker (2002), in every organization or company there are areas of opportunity, which may be either unexpected events, incongruences, process needs, changes in market or industry trends, demographic changes, perception changes, or the appearance of new knowledge. These areas of opportunity must be faced through serious analyses, starting from assessing the events and trends of the external environment, the dynamic capacities of the company, and the resources available for it, as a mean for obtaining competitive advantages necessary to compete with industry rivals and surpass them. This innovation process comes from methodical, deep studies on the opportunity areas of the company, addressing socioeconomic issues and trends, resulting in ideas that may answer to those challenges faced by the organization.

Once the imagination and creativity leap are made, it is necessary to get the right answers, what Drucker (2002) calls functional inspiration. In order to achieve it, the author suggests that those answers must be simple and focused on solving the existing opportunity to improve. As results require expressions such as "this is very obvious", "why I did not have this idea before?", "it's so simple", among others, it will be closer to reaching a solution. These solutions should be –preferably- small, not flamboyant, and comprised of elemental ideas, so that they determinate the direction of a new technology or industry. On the other side, if the desired result is the

development of a new entrepreneurship or business, a complete package of products and associated services will be required to provide a complete offer value, leading from the beginning.

According to Markides (2003), strategies must not be restricted to finding ways to attend market changes but must be also proactive for the creation and discovery of novel ways to carry out the social object of organizations, being imperious to invest in industries and technologies of the future. Leyva et al., (2018) and Pang et al., (2019) point in this direction, conceiving the degree of technological incorporation and strategic planning in corporate management as primordial competitiveness factors. Technology and strategy start-u must be defined by the object traced by high managers, being a key factor the knowledge on the superior performance that is intended to reach, and the competitive advantages needed for that end (Hill and Jones, 2009). Newly proposed innovations, goods and services must aim to deliver the highest possible value for the stakeholders involved in each organization (Antequera et al., 2019; De la Fuente-Mella et al., 2022). An idea long rooted in successful businesses is that these must transmit value in all stages of the economic business cycle starting at the high management level, reaching up to the final consumer, and vice versa. Rios et al., (2020) and Ramirez and Rios (2020) claim that companies must present an offer value attractive to the final consumers. Otherwise, other organizations will find ways to become attractive to them and will lure most consumers (Einsenmann et al., 2006; Hamel and Välikangas, 2003). This is also tangible regarding interest groups such as collaborators and investors, which will tend to participate in an organization that is committed to provide a more complete value offer (Klewitz and Hansen, 2014; Hitt et al., 1996).

Consequently, agricultural production units will try to work in a joint way, establishing cooperative relationships with industry members, being able to reach higher degrees of economical, corporate, and environmental sustainability. Those business alliances will serve to make all members of agricultural value chains to innovate in new processes, goods, and services, and therefore, in a better value offer, benefiting all actors involved. Otherwise, it would expand the inequality gap between different actors in developing country societies. Given the above, the following question is made: how are innovative strategies in agricultural production units as part of the knowledge in the development of new services and value chains?

1. Business strategy in the development of new processes, products, and services

In several countries, the agricultural production units have implemented strategies, which have helped them to survive. To achieve this process, agribusiness have generated and adopted actions to create and preserve value. In a few cases, these strategies have also contributed to consolidate a value proposition that attracts customers and consumers (Rambe and Khaola, 2022; Zhang and Berghäll, 2021). In another cases, the lack of capital and technical knowledge specific to each agricultural production unit, has hindered the introduction of new technologies (Nyam et al., 2022). This lack of capital and knowledge has hindered the economic exercise of production units, preventing them from evolving beyond mere raw material producers to providers of processed agricultural goods and related services.

According to Donner et al. (2020), agricultural production models are influenced by politico-legal (laws, regulations, public policies) and economic (markets, subsidies) environments in in which they carry out their activity. Also, factors inherent to each unit, such as historical (origin and development of the business initiative), technological (type, quality, and maturity of the tools employed), organizational (governance, cooperation, coordination, logistics), financial (investments, cost-benefit structure), environmental, and social ones, have impacts on them. Such as innovation findings, Donner et al. (2020) and Cherednichenko et al. (2022) recognize cooperative production system, in which a group of people decide to associate to produce specific food goods (cereals, wine, fruit, among others).

In the process, they generate residues that are being used by the pharmaceutical industry in different research projects, as well as other agricultural producers, who acquire compost used as fertilizer in their crop areas. On the other hand, Finco et al. (2018) reveal that innovations in the agricultural sector are slowly assimilated. Innovation in agroindustry is seen as a low relative to that of other sectors or activities. Therefore, it requires a proper political and economic environment that encourages the apprehension of technological improvements useful to increase food production. The alliance established by agricultural production units must be sustainable and innovative to enable value chain that bring together their resources and capabilities in joint efforts. These relationships will be beneficial in favor of solving social and economic problems and circumstances. For this reason, the aim of the current study is to structure the interdependence of tasks and knowledge in development processes of new services and value chains in agricultural units that allow access to new markets. The knowledge gathered provides organizational tools for the preservation of critical resources, such as water, fertile land and biodiversity. This study has been carried out in Atlántico Department (Colombia), during 2019 to 2021.

In the process of generating and adopting strategies that help building value, agricultural production units in several countries have implemented some strategies that have helped them to survive. In a few cases, these strategies have also helped to consolidate a value proposition that attracts customers and consumers. On other hand, in most agricultural production units, the lack of capital and technical knowledge specific to each agricultural production unit, has hindered the introduction of new technologies. This lack of capital and knowledge has hindered the economic exercise of production units, preventing them from evolving beyond mere raw material producers to providers of manufactured agricultural goods and related services. A study developed between 2015 and 2019 by Donner et al., (2020), examined production models and innovation strategies for the generation of new products and services in 39 agricultural production units of fifteen (15) countries such as Germany (5 cases), France (5), the Netherlands (4), Switzerland (3), Italy (2), Denmark (2), Norway (1), Poland (1), Hungary (1), Austria (1), the European Union as a whole (2), Taiwan (8), United States (2), Vietnam (1), and Brazil (1). In those cases, a semi-structured interview was applied to enquire on features of the politicolegal (laws, regulations, public policies) and economic (markets, subsidies) environments; as well as those qualities inherent to each unit, such as historical (origin and development of the business initiative), technological (type, quality, and maturity of the tools employed), organizational (governance, cooperation, coordination, logistics), financial (investments, costbenefit structure), environmental, and social ones.

Following the findings obtained by Donner et al. (2020), Cherednichenko et al. (2022) conducted a study focused on collaborative and cooperative relationships, where only 15.3% of the companies studied developed innovations aimed to improve their agricultural production models. The first is a cooperative production system, in which a group of people decide to associate to produce specific food goods (cereals, wine, fruit, among others). In the process, they

generate residues that are being used by the pharmaceutical industry in different research projects, as well as other agricultural producers, who acquire compost used as fertilizer in their crop areas. The employed strategies comprise the association with entities external to the food industry, and process innovation. This generated new products and services that in the past would have been considered as worthless residues. In other cases, agricultural parks were created, in which founding families implemented scale economies and encompassed elements of the value chain external to food production. One of these external elements is energy generation, employed in the transformation or heating processes, specialized logistics for vegetable production and transport, and associations with other producers. It could be said that implemented innovations were of the organizational kind, supporting the companies to manage processes different from those of the production unit social object, in addition to networks and agreements that benefit other producers.

Research on small and medium businesses, developed by Finco et al., (2018) reveal that innovations in the agricultural sector are slowly assimilated. Innovation in agroindustry is seen as a low relative to that of other sectors or activities. Therefore, it requires a proper political and economic environment that encourages the apprehension of technological improvements useful to increase food production. The study encompassed a sample of 23 companies for an exploratory study, of which only 21% found new markets to commercialize their products, 18% developed functional foods, and 19% optimized their production processes. To achieve this, companies destined only 0.7% of their billing volume for change assimilation or generation in their organization.

2. Strategies for the creation of value chains in agricultural production units

For those who research strategies for the creation value chains, care must be taken in their conception, to keep the connection between the value intended for the interest groups and the competitive advantages that must be maintained through time. To achieve this, it is expected to count with one or more elements that are attractive to the members of the value chain. Managers must implement actions and provide resources necessary to direct company activities towards the satisfaction of consumers, investors, or those providing funds. The perspectives of being a

winning company increase as strategy and execution are strengthened. In agreement with this, the strategy of the company to incorporate, or being incorporated into, a value chain must be supported on the value provided to investors and customers through their activities. Proceeding otherwise would risk the company to be surpassed by competitors that find ways to become attractive. At the same time, the strategy must be renewed and evolve according to existing market trends. Due to this, it is necessary to obtain competitive advantages in the current economic environment, characterized by being hypercompetitive and hyper-connected, to avoid the company to be left behind with an impoverished economic performance.

To achieve the former goals, companies must evaluate the activities that their different units and departments develop together, questioning if they add or take away value to the product or service delivered to consumers and buyers. To maintain a unit that does not contribute with a significant value to the company, implies wasting funds in bureaucracy, burdening the competitiveness and profitability of the company. Senior managers should eradicate those elements that contribute less, link them to those handling similar tasks, and add elements that contribute to corporate success. In this regard, it is recommended to use strategies allowing to create value chains, such as:

(a) Identification opportunities and threats: in anticipation of events that represent a future advantage originating greater financial and economical profits and forecasting risks for the survival of the organization. Regardless of how far away in the future they look, external environmental events may imply real risks for the company, and every business must be prepared for them. Given those agricultural businesses are susceptible to be affected by changed in socioeconomic, market, legal, political, climatological, and environmental changes occurring at the local and global levels

(b) Knowledge of elements, resources, and capabilities: the inside of the organization must be observed, recognizing what resources the production unit possesses, aiming to those strengths and weaknesses that are unique and unrepeatable by competitor. In this way, strengths and weaknesses may be employed to take advantage of opportunities or strengthening those elements burdening the competitiveness and organization processes, at the same time facing those threats that may appear in the external environment. (c) Strengthening abilities. The evolution of abilities towards an exceptional nature will generate competitive advantages. At the same time, it is necessary to find the way in which they are not imitated by industry competitors, strengthening the organization competitiveness.

(d) Characterization of interest groups: strengthening strategic ties with organizations and interest groups (stakeholders), generating complementarity relationships and progress for all parts.

(e) Establishment of strategic alliances: relationships with providers and buyers insert the production unit into value chains, which will gradually generate clusters, interdependence relationships, and mutual benefits. In the same way, it is necessary to find ways to achieve common benefits.

(f) Search for agreements with competitors and companies in the sector: convene with those businesses with economic activities related to those of the company is useful to resolve problems, strengthening the industry and generating economic growth and social progress. Complementarity relationships contribute to solve problems of resource supply, logistic, and communications.

(g) Human talent teaching in strategic management processes: training collaborators in formation programs raises awareness on the direction in which the company is heading, taking advantage of elements, resources, and organization capabilities in more efficient ways. Therefore, strategic management knowledge raises awareness on the goals, the organizations pursuing them, and the role of organizations in achieving those goals.

3. Materials and methods

Atlántico is one of the 32 departments in which Colombia is politically divided. It is located on the northern Caribbean region of the country. To the north and northwest, the Atlántico department limits with the Caribbean Sea, to the east with the Magdalena River and the Magdalena Department, and to the south, southwest and west with the Bolivar Department (Fig 3). The Atlántico department comprises 22 municipalities and a Special, Commercial and Port District, Barranquilla, which is also the capital city. The area of the department is 3,386 km2 in area and the population is of 2,771,139 (Departamento Administrativo Nacional de Estadística [DANE], 2020; Gobernación del Atlántico, 2014). According to the latest agriculture and livestock census of DANE (2014), there are 1590 agricultural production units in the Atlántico Department. Snowball sampling was employed for sample selection, as it takes advantage of individual contact networks of the initial sample to attract more subjects to participate in the research, considering the access to study subjects.

In this regard, Agricultural Production Units (APU) are the observation and analysis units, comprising fifty-six (56) study subjects of the agriculture and livestock production organizations. These may be formed by part of a land property, a complete property, a set of properties or parts of contiguous properties, or separated in one or more municipalities, independently of size, land ownership and the number of properties comprising it. These organizations fulfill the following conditions: they produce agricultural, forestry, livestock, or aquacultural or fishery goods. They have a unique natural or legal producer that assumes the responsibility and risk of the productive activity, and they use at least one mean of production such as buildings, machinery, equipment, and/or workforce in the properties that comprise them.



Fig. 3: Location of the Cumaco hamlet, in the department of Atlántico, Colombia and South America.

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In agreement with these selection criteria, APU population in two municipalities, Sabanalarga and Ponedera was used, choosing the Cumaco hamlet for this study. This place is located at the confluence of territorial units of both municipalities, with these producing units being destined supply chain catering and personal consumption. Regarding exclusion criteria, these were specifically based on management and functional structure of agricultural production units, limiting research to those APUs owned by only one natural or legal person, employing workforce or machinery in their activities, and producing agricultural, forestry, livestock, aquaculture and fishery goods. In the same way, to respond to the research objective, an arithmetic mean scale of interpretation was conceived for indicators of external environment, internal environment, organization linked components, components that proves entry of elements to the system, organization conditions, organization qualities or aptitudes, opportunity and threat identification, knowledge of elements, resources and capabilities, capability strengthening, interest group characterization, strategic alliance establishment, search of agreements with competitors and companies in the same sector, and human talent training in strategic management processes (see Table 1).

Score rank	Categorization
1-1.79	Does not know
1.80-2.59	Knows little
2.6-3.39	Knows partially
3.4-4.19	knows
4.2-5	Totally knows

Table 1: Categorization scale of the arithmetic mean establishing the behavior of the variable's interdependence of tasks and knowledge in development processes of new services and value chains.

Source: Hernández et al. (2014).

Regarding the validity of the instrument, the content was subjected to judgement by ten (10) experts in the study variables. These experts verified the relevance of items, objectives, dimensions, and indicators, as well as sample collection. In the analysis of results, the researcher analyses processed data, inspecting the original material compiled for its analysis. Survey

answers were contrasted in order to carefully observe information, studying the moment, conditions, and aptitudes shown as the information was provided. In this stage, the information is coded and tabulated. The software IBM SPSS Statistics, version 22 was used to calculate descriptive statistics. These calculations were in turn used to make inferences on some aspects of the population, hypothesis confirmation, hypothesis tests, or estimates of the arithmetic mean or other characteristics of the population (Cruz et al., 2014). In this way, the procedure to be followed is established, detailing those activities that lead to obtaining the desired results in each stage of process development. Thus, five stages were recognized: topic selection, literature review, methodology selection, instrument application and analysis, and discussion of results.

4. Results and discussion

In this section, results obtained from compiled information are analyzed, in agreement with the research, responding to the assessed objective through dimensions and indicators. The objective is to interpret the totality of answers obtained from the survey, comprised by presentation of results, analyses, and discussion. Therefore, in the following table the results obtained by the instrument application are presented. The results are posterior to the interpretation of answers obtained through a questionary directed to the (56) subjects, including: management staff and owners of agricultural production units, either property of a single natural or legal person, employing workforce and/or machinery in their activities, and practicing forestry, livestock, agricultural, aquacultural and fishery exploitation in the municipalities of Sabanalarga, Ponedera and Palmar de Varela of the Atlántico department.

Table 2 evidence that 19 informants, that is. 33.33% of survey respondents, partially knows strategies lead to identifying opportunities and threats. The second indicator shows that the greatest part of the surveyed population (32 survey respondents, 38.69% of the total) have a partial knowledge of the elements, resources, and capabilities of their agricultural production units. The study also demonstrates that 15 survey respondents (26.79% of study subjects) has obtained partial knowledge on strategies that allow to strengthen the capacities of their productive units.

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Answer Options		S		CS		AV		CN		Ν		Total		Average
Indicators	Items	Fa	Fr	Fa	Fr	Fa	Fr	Fa	Fr	Fa	Fr	Fa	Fr	Twerage
Identification of opportunities and threats.	19 - 21	13	22.62	12	21.43	19	33.33	11	19.05	2	3.57	56	100	3.40
Knowledge of the elements, resources and capacities.	22 - 24	17	30.95	12	22.02	22	38.69	5	8.33	0	0.00	56	100	3.76
Capacity building.	25 - 27	12	20.83	14	25.60	15	26.79	11	19.64	4	7.14	56	100	3.33
Characterization of interest groups.	28 - 30	15	27.38	12	22.02	13	23.81	8	14.88	7	11.90	56	100	3.38
Establishment of strategic alliances.	31 - 30	12	21.43	18	32.74	13	23.81	8	14.29	4	7.74	56	100	3.46
Searchforagreementswithcompetitorsandcompaniesinsector.	34 - 36	12	22.02	16	29.17	17	30.36	9	16.67	1	1.79	56	100	3.53
Training of human talent in strategic management processes.	37 - 39	24	42.26	10	17.26	11	20.24	9	16.67	2	3.57	56	100	3.78
Mean		15	26.79	14	24.32	16	28.15	9	15.65	3	5.10	56	100	3.52
Scales of the interpre-	etation o	f the	mean.			•				•				•
Categories	Ranks			Alternatives			Total average of the dimension.							
Does not know	1 - 1.79		(l) Never											
Knows little	1.8 - 2.59 2.6 - 3.39		(2) Rarely(3) occasionally		3.52									
Knows partially														
knows	3.4 - 4.1	.9												
Totally knows	4.2 - 5 (5) always						Category "knows"							

Table 2: Innovative strategies for the incorporation of value chains in agricultural production units. Source: Own elaboration (2022).

Regarding the characterization of groups of interest, table 2 shows that 15 (27.38%) survey respondents claim to have a complete knowledge of actions that agree with this strategy. On the other side, 18 (32.74%) survey respondents claim that knows oh and has established strategic

alliances with companies in the sector, providers, and buyers. However, agreements with industry competitors have been only partially made, represented by 17 (30.36%) survey respondents. Lastly, 24 (42.26%) study subjects have claimed to have implemented human talent training in processes related to the strategic management of agricultural production units.

In the same way, it is inferred that the strategy is a fundamental tool of business success. Strategy allows to establish a series of actions that help preserve organizations, as objectives are fixed, actions are established, resources are provided, and a permanent review is performed to evaluate the status of proposed goals, in addition to action relevance and effectiveness. Those strategies that are properly aligned to organizational goals generate synergies and capacities that, as they are improved, result in unique qualities, therefore, in competitive advantages. For those researchers studying strategy in companies, this comprises a set of management tools intended to reach corporative objectives, surpassing market rivals, correcting weaknesses identified within companies, implementing new technologies, foresee market events, among others. Strategy is born from high management, and requires proactive, generous executives with its attainment, providing resources and elements necessary to be carried out. At the same time, strategy must be communicated to collaborators and organization elements. This must go beyond a declaration of intent for the mission, communicating in order to generate commitment by the human resource and establish permanent evaluation processes to successfully fulfill the strategies.

In turn, the strategy must be conceived at different dimensions and directions, considering the need to address event that may happen within business units and their elements (for which, depending on the case, it will be also necessary to design strategies to reach objectives), as well as outside them. The former can be supported by considering that there are events (that is, external occurrences) that appear as threats or opportunities, affecting company functioning it the tools necessary to confront these events are absent. An adverse event, such as the appearance of a new market competitor or the introduction of a new technology, may positively or negatively affect the company according to its condition. The degree of affectation will depend on the strategies previously set up by the company. Therefore, strengthening the inner workings of the company, either reinforcing competitive advantages or taking corrective measures in those processes that are not carried out as expected, will be crucial for facing the future in a positive way; on the contrary, the company runs the risk of failing or disappearing. The scope of the strategy is not defined, as it can be applied to any context in which a goal is defined, and actions can be outlined to reach this goal.

Conclusion

According to the bibliographic reviews, analysis, presentation and discussion of the results, it is concluded that the strategy in companies has been in constant evolution since its appearance in the 20th century, going from being exclusively actions to achieve goals, to becoming a valuable tool that serves to deal with events in the environment, obtain useful competitive advantages to lead markets, deliver a value offer to stakeholders, the development of skills and capabilities, among others. In the context of business strategy, currents have been strengthened that affirm that it serves to potentiate strengths to make them unique and difficult to match and then turn them into competitive advantages. In addition to that, it is taken for granted that the strategies must be unique and adapted to the context of the organizations, avoiding falling into universal formulas that can lead to failure.

In recent years, new aspects of business strategy advocate the implementation of strategies that are sustainable and environmentally sustainable, considering aspects such as social responsibility and the development of new markets. The company's management is strengthened to the extent that it manages to design strategies that combine management tools relevant to the context and goals to be achieved, focused on the meticulous study of strengths, weaknesses, opportunities, and threats, in addition to the implementation of the vision based on resources. Being clear about these concepts helps to know the external and internal reality of the company, a key matter for designing and implementing the appropriate strategies.

The studies carried out on innovation in the agricultural sector have been carried out mostly in developed countries, which represents an opportunity for improvement for the progress of science, technology, and socioeconomic development in developing countries. Agricultural producers who have established strategic approaches and continuous improvement have been able to lead industry sectors and market segments, generating economic growth and social progress. In this sense, studies carried out in different regions of the world show that agricultural production units have had a slow process of adopting innovations, limiting their economic growth, and delaying attention to the urgent problems of economic, social and environmental sustainability.

Likewise, there is a lack of knowledge of new tools and technologies that can be implemented to improve managerial and productive practices in these organizations. Regarding the establishment of alliances with companies in the sector or related to the corporate purpose of these companies, such as their suppliers and clients, relationships must be strengthened that allow the construction of reliable value chains that generate closer links.

Thus, it will be essential to persevere in promoting and strengthening the strategic development of economic and business management, regardless of the productive nature of the companies. The intervention of the educational sector, public and companies with diverse economic vocation is crucial and, in this way, promote a business culture, where the vision is placed on the prosperity of the regions and thus benefit the entire society.

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