

Challenges and opportunities for sustainable economic growth in Cachipay, Cundinamarca, based on the characterization of its economic sectors and their impact on the local community

Desafíos y oportunidades para el crecimiento económico sostenible en Cachipay, Cundinamarca, desde la caracterización de sus sectores económicos y su impacto en la comunidad local

Luz Briyid Contreras Salamanca¹

Jonny Mauricio Valderrama Fernández²

Yon Garzón Ávila³

1 Profile and Institution: Public Accountant, Distance Higher Education specialist, Master in Human resources, Management and development

Teacher and researcher Universidad Nacional Abierta y a distancia -UNAD

ORCID: <https://orcid.org/0000-0001-5721-1691>

email. luz.contreras@unad.edu.co

2 Profile and Institution: Bussines management, Master in Human resources Management and development

Teacher and researcher Universidad Nacional Abierta y a distancia -UNAD

ORCID: <https://orcid.org/0000-0002-5353-1329>

email. jonny.valderrama@unad.edu.co

3 Profile and Institution: Economist, project management specialist Teacher and researcher Universidad Nacional Abierta y a distancia -UNAD

ORCID: <https://orcid.org/0000-0003-0689-5821>

email. yon.garzon@unad.edu.co

Abstract

cachipay is a municipality with a vision of progress, located in the heart of Cundinamarca, Colombia, 50 km from Bogota, is home to a rich diversity of economic activities that make up its social fabric. Agriculture and the ornamental sector with its fertile lands are established as a fundamental pillar of the local economy. Tourism, in constant expansion, attracts visitors with its natural and cultural charm, driving the generation of jobs. Mining, with its lying resources, brings dynamism to the economy. The commercial sector, in constant evolution, satisfies the needs of the local population and the growing number of visitors. However, economic diversification as a strategy for development implies a diverse economy, where not one, but several sectors are strengthened, driving growth and prosperity.

Cachipay searches to achieve the transition to a diversified economy from different scenarios such as investment in the development of new sectors with high potential, with a view to innovation, entrepreneurship and human capital formation. The benefits of economic diversification are multiple: greater economic stability, creation of new jobs, increase in per capita income with improvements in the standard of living of the population, reduction of poverty and greater competitiveness for the strengthening of the economy.

Keywords

Economies in transition; modernization; ecotourism; food industry; green economy.

Resumen

Cachipay, un municipio con visión hacia el progreso y encerrado en el corazón de Cundinamarca, Colombia a 50 km de Bogotá, alberga una rica diversidad de actividades económicas que conforman su tejido social. La agricultura y el sector ornamental con sus tierras fértiles se establecen como pilar fundamental de la economía local. El turismo, en constante expansión, atrae visitantes con su encanto natural y cultural, impulsan la generación de empleos. La minería, con sus recursos yacientes, aporta un dinamismo a la economía. El sector comercial, en constante evolución, satisface las necesidades de la población local y del creciente número de visitantes. Sin embargo, la diversificación económica como estrategia para el desarrollo supone una economía diversa, donde no uno, sino varios sectores se fortalecen.

Cachipay puede lograr el tránsito hacia una economía diversificada desde diferentes escenarios como la inversión en el desarrollo de nuevos sectores con alto potencial; con miras a la innovación, el emprendimiento y la formación de capital humano. Son múltiples los beneficios de la diversificación económica: mayor estabilidad económica, creación de nuevos empleos, aumento del ingreso per cápita con mejoras en el nivel de vida de la población, reducción de pobreza y mayor competitividad para el fortalecimiento económico.

Palabras Claves

Economías en transición; modernización; ecoturismo; Industria alimentaria; economía verde.

Introduction

cachipay is in the heart of Colombia. Beyond its rural charm, it is an appropriate setting to explore the possibilities of sustainable economic growth. Its dynamic economy makes it the ideal setting to analyze the challenges and opportunities facing economic development in the local context.

The research focuses on an exploration of the economic sectors that sustain Cachipay. The ornamental sector, agriculture, tourism, livestock, mining, and commerce were fully analyzed to understand their impact on the local community. Both the benefits that each sector brings and the challenges it faces were evaluated, seeking to obtain a comprehensive view of the economic dynamics of the municipality.

Through a detailed analysis, the keys to sustainable economic growth in Cachipay were identified. Viable strategies and recommendations were formulated to strengthen the most prosperous economic sectors, while mitigating negative impacts and promoting the well-being of the local community. It seeks to provide Cachipay with ideas for sustainable economic development and it is hoped that the results will serve as a model for achieving prosperous and lasting economic growth in harmony with the environment and the community.

Theoretical framework

Municipality of Cachipay

According to the municipal mayor's office (2020) Cachipay is a Colombian municipality of Cundinamarca located in the province of Tequendama just 50 km from the Capital, its slogan is: "Tierra de Ensueño de Luz y de Amores", thanks to the lyrics of the pasillo composed in its honor. Cachipay is located on a mountainous zone, its urban center itself is mountainous. The totality of its 56 km² is in steep zones of valleys, hills and mountains, total population of approximately 12,000 inhabitants.

Characterization of Key Economic Sectors in Cachipay, Cundinamarca

The ornamental sector is the main sector of the Cachipayuna economy. Companies in the municipality are mainly engaged in growing and processing foliage for the floriculture companies in the western savanna of Cundinamarca. This sector includes the production, distribution, and sale of plants and flowers for decorating gardens, homes, and other spaces. However, the lack of technification, climate change, and unfair competition prevent the strengthening of the organizations.

Agriculture, with crops such as coffee and fruit trees, impacts the community by generating employment and income, but also faces challenges in terms of low technology, climate change and competition from imported products. From a technical point of view, polyculture and organic coffee cultivation are positive for the physical state of the soil, which favors microorganisms and enzymatic activity, in ways of good sustainable agricultural practices to maintain soil quality and health (Vallejo et al., 2018). However, it is a challenge to deal with monocultures that bring the amplification of the agricultural frontier of the municipality and the replacement of traditional crops.

Tourism in the ecotourism, rural tourism and religious tourism sectors generates employment and income but requires investment in infrastructure and training. In this sense, rural tourism facilitates cultural exchange and environmental awareness with a diversity of activities ranging from promoting the conservation of natural resources, minimizing the impact of human beings on nature, without disturbing the balance of ecosystem development, generating a sustainable financial return. (Valderrama, Et. al. 2023).

Mining with limestone and clay exploitation generates employment and income, but presents environmental and social risks. Fuentes et al. (2021) highlight the relationship between mining and development in Colombia, from the historical process of mining, its significance and its spatial correlation with social variables. To determine the effects of mining activity in Colombia, theories have been developed, such as the human development index, the

GINI coefficient and poverty, caused by municipal performance, and not by variables directly related to mining such as mining GDP. From this perspective, mining has not contributed to improving social conditions in the territories where it is most representative and, contrary to expectations, has increased inequality processes and has not had an effect on poverty.

Commerce is a dynamic sector for supplying the local population and visitors. It faces competition from large supermarkets and informality. The municipality's website (2024) provides information on the retail trade of pharmaceutical and medicinal products, cosmetics, and toiletries in specialized establishments in Cachipay, Cundinamarca.

Challenges for Sustainable Economic Growth

Diversification of the economy reduces dependence on the ornamental and agricultural sectors and develops other sectors such as tourism and industry. It is a strategy that seeks to increase the variety of products or services produced by Cachipay's economy. At the macroeconomic level, diversification implies an expansion of the productive structure, moving away from dependence on a limited number of sectors, products, or markets. Diversification can contribute to sustainable development, as diversified municipalities tend to have more inclusive and sustainable growth, with better employment prospects and greater resilience to sudden economic shocks. Importantly, economic diversification is not an easy task and requires careful planning and effective policies. Factors that can influence economic diversification include the creation of appropriate incentive frameworks, the implementation of investments and policy reforms aimed at reducing trade costs, the implementation of effective policies to support the process of adaptation and reallocation of resources to new activities, and the implementation of public initiatives to address market, policy, and institutional failures.

Technification of the ornamental and agricultural sector involving the adoption of advanced technologies in agricultural and ornamental production. This includes the use of automation, sensors, drones, and geographic information

systems (GIS), as well as the implementation of automated systems for tasks such as irrigation, fertilization, and pest control. Sensors and monitoring to measure variables such as soil moisture, temperature, and air quality. Drones help inspect crops, detect early problems, and optimize management. GIS allow mapping and analyzing geospatial data to make specific decisions in a timely manner. ECLAC (2013).

Climate change is a threat to sustainable economic growth, as it can affect productivity, infrastructure, and public health. It is necessary to take measures to mitigate the environmental impacts of mining, through environmental regulation to control the pollution and environmental degradation caused and to initiate the use of clean and efficient technologies.

The strengthening of tourism specifically in the ecotourism sector in a sustainable manner to protect the environment and local communities with the training of personnel so they can offer quality service through the diversification of the tourism offer, the improvement of the transportation sector, accommodation, attractions, allowing to promote it in the country and abroad to attract different types of tourists.

Methodology

The approach of this research has been mixed, since quantitatively data is collected from the companies in the municipality and the economic business situation of the municipality is described. This approach allows collecting and analyzing data from different sources and types, as well as integrating and contrasting them to obtain more complete and reliable results as Ortega, (2022) states. For the economic characterization of the productive sector of the municipality of Cachipay, quantitative techniques are used in terms of counting the agents of production and provision of services, statistical analysis of economic indicators of the target population. On the other hand, qualitative techniques such as focus group interviews and interviews with the agents involved. This mixed method is intended to describe and explain the

characteristics, factors and effects of the sector's economic activity, as well as to identify growth opportunities.

For the description of the business characteristics, convenience sampling was used, which is based on the availability and accessibility of information from producers and service providers, thus saving time and resources in data collection. The focus groups represent each sector. By examining the results of the sampling, a complete picture of the economy of Cachipay, Cundinamarca can be obtained, including its main economic activities, available services, and sector strengths and weaknesses. The mixed research is carried out in two stages using the sequential technique. First, quantitative data are collected and analyzed, and then qualitative information is collected. Methods used include observation of behaviors or actions in their natural environment, examination of written and visual sources, interviews to obtain opinions and knowledge on the subject, and surveys to measure attitudes and economic preferences.

Discussion and results

opening new paths: Economic diversification as the main actor in the development of the municipality of Cachipay Cundinamarca

By reducing dependence on a single sector or product, the economy becomes more resilient to market fluctuations and changes in the local and global environment. If one sector is affected by a crisis, other sectors can compensate for the downturn, maintaining economic stability. There are multiple ways to move towards a diversified economy in the municipality of Cachipay.

Invest in the development of new sectors: foster the growth of sectors with high potential such as the creative industry, entrepreneurship and renewable energies or technology; the latter sector being affected by the resistance to change on the part of some entrepreneurs in updating their knowledge in

the use of technology, application of equipment and platforms that facilitate communication and the use of digital. The technology acceptance model, known by its acronym TAM (technology acceptance model) is a theory of information systems that models how users come to accept and use a technology, is one of the most widely used as a tool to understand the causes of behavior in the adoption of technology by users (Tavera, J. and Arias, J., 2012). Davis (1989) initially proposed this model, explaining that a stimulus to the use of the new tool plus the user's motivation is necessary, finally provoking a response. (Contreras & Garzón 2021).

The proximity to Bogotá and Facatativá, which is the capital of the province of Sabana Occidente, should be used as a strategic location for the supply of products and services, promoting ecotourism with its natural and cultural wealth, developing the agri-food industry with the transformation of agricultural products into products with higher added value, promoting the circular economy by reducing the consumption of resources and waste generation and strengthening education and technical training with training to Cachipayeans for work in different economic sectors.

The opening of trade is another scenario of discussion within the opportunities for economic growth of the municipality, having as an input one of its main activities such as foliage. As indicated by the Superintendence of Industry and Commerce (2022), foliage used in a variety of floral arrangements, bouquets, and other decorations, is a very important agricultural export product worldwide. This would allow companies in the municipality to sell their products and services in a wider market, being more competitive in terms of price, quality, and innovation, which can increase their sales and profits and attract foreign direct investment to the country, generating new jobs and economic growth. However, it is important that policies be implemented in the process with the necessary accompanying measures to minimize negative effects.

Conclusions

Economic diversification in the municipality of Cachipay, understood as the expansion of products and services that produce and the development of new sectors, brings benefits that make it a fundamental strategy for sustainable development.

Within the projection of the municipal development plan and within the framework of the Sustainable Development Goals -ODS- it contributes from economic stability reducing the impact of the crisis in a specific sector and market fluctuations, diversifying sources of income and job creation that generates job opportunities in various sectors strengthening food security by diversifying food production, promoting social inclusion, poverty reduction, decent work and economic growth, industry innovation and infrastructure.

The generation of new sources of income benefits the standard of living and the cachipayuna economy, becomes more resilient by not relying on a single sector or industry to prosper, and reduces inequality by distributing economic benefits more equitably among different sectors of society, leading to a more stable and cohesive society. Importantly, this is not an easy task; it requires a concerted effort on the part of the municipal administration, businesses, and the community to create an environment conducive to economic growth.

The strengthening of the economy in the local market generates greater competitiveness by offering a greater variety of products and services and proves attractive to investors by offering a more stable economic environment, further promoting sustainable development by protecting the environment by reducing dependence on extractive sectors and fostering innovation by creating new opportunities for the development of technologies and products.

Cachipay has great potential for sustainable economic growth. Challenges must be overcome through economic diversification, technification, infrastructure investment, training, and international openness. Opportunities for development include ecotourism, agribusiness, and the circular economy.

Bibliography

- Afanador, J. (2019). El Observatorio Intersistémico Regional, una apuesta por “OÍR” a la Colombia profunda. UNAD, Noticias. <https://noticias.unad.edu.co/index.php/unad-noticias/todas/2835-el-observatoriointersistemico-regional-una-apuesta-por-oir-a-la-colombia-profunda>.
- Alcaldía municipal de Cachipay (2020). Plan de Desarrollo Municipal de Cachipay 2020-2023
- Alcaldía Municipal de Cachipay (2024). Alcaldía Municipal de Cachipay, Cundinamarca. Gov.co. <https://www.cachipay-cundinamarca.gov.co/>
- Cámara de Comercio de Facatativá (2019b). Oportunidades y retos de Tequendama. <https://ccfacatativa.org.co/media/f1ajgmad/oportunidades-y-retos-de-tequendama.pdf>
- Casas, J., Gil, J., & Forero, M. (2018). Cambio poblacional y dinámica socioeconómica de los municipios de Boyacá. *Revista de Investigación Desarrollo e Innovación*, 8(2), 207–221. <https://doi.org.bibliotecavirtual.unad.edu.co/10.19053/20278306.v8.n2.2018.7960>
- CEPAL (2013). Agricultura y cambio climático: nuevas tecnologías en la mitigación y adaptación de la agricultura al cambio climático Memoria del tercer seminario regional de agricultura y cambio climático, realizado en Santiago, 27 y 28 de septiembre de 2012. Naciones Unidas ISSN 1680-9033 LC/L.3714. Santiago de Chile.
- Contreras, L, & Garzón, A. (2021) Generational Lagging of Dignitaries, Main Cause of Technological Gaps in Community Leaders. Analysis of Generation X and Boomers from the Technology Acceptance Model. Repositorio UNAD. <https://hemeroteca.unad.edu.co/index.php/working/article/view/4709>

- Dorado, D. Lugo, C. Ramírez, M. (2020) Estudios Económicos Sectoriales. Superintendencia de industria y comercio. <https://www.sic.gov.co/sites/default/files/files/2020/ES%20Tejido%20Empresarial%202020.pdf>
- Fuentes López, H. J., Ferrucho-Parra, C. C., & Martínez-González, W. A. (2021). Mining and Its Impact on Economic Development in Colombia. *Apuntes Del Cenes*, 40(71), 189–216. <https://doi.org/10.19053/01203053.v40.n71.2021.12225>
- Garzón, Y., Contreras, L. y Valderrama, J. (2023). [Entrevista a Orlando Garzón, Productor de Frutales en Cachipay, Cundinamarca]. *Sectores de la Producción en Cachipay, Cundinamarca*. UNAD.
- Muñoz-Rodríguez, M. y Avellaneda-Bautista, A. (2020). La economía creativa, una alternativa emprendedora para una paz sostenible. *Revista Estrategia Organizacional*, 9(1) <https://doi.org/10.22490/25392786.3642>
- ONU (2024) Objetivos de desarrollo sostenible. <https://www.un.org/sustainabledevelopment/es/objetivos-de-desarrollo-sostenible/>
- Rivera-Godoy, J. A. (2023). Financial management of the dairy manufacturing SME in Colombia (2014 - 2019) (Universidad Nacional Abierta y a Distancia, Trans.). *Revista Estrategia Organizacional*, 12(1), 77-102. <https://doi.org/10.22490/25392786.6899>
- Valderrama, J, Quesada, N & Garzon Y. (2023) Organizational strengthening of rural tourism projects in Cundinamarca, Colombia. Repositorio UNAD. <https://hemeroteca.unad.edu.co/index.php/working/article/download/6936/6126>
- Vallejo, Victoria Eugenia, Afanador, Laura Natali, Hernández, Mayra Alejandra, & Parra, Diana Carolina. (2018). Efecto de la implementación de diferentes sistemas agrícolas sobre la calidad del suelo en el municipio de Cachipay, Cundinamarca, Colombia. *Bioagro*, 30(1), 27-38. Recuperado en 18 de marzo de 2024, de http://ve.scielo.org/scielo.php?script=sci_arttext&pid=S1316-33612018000100003&lng=es&tlng=es