

BATANGAS ECONOMY: A Historical Overview And Contemporary Transformation

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ABSTRACT:

The province of Batangas, once an agricultural stronghold, transformed into a dynamic economic hub driven by industrialization, commerce, and tourism. This study explored Batangas' economic evolution from its agricultural roots to its more recent industrial and service-oriented landscape. Using qualitative methods, particularly documentary analysis of government archives and reports, the research identified key drivers of development, such as strategic location, infrastructure improvements, and sustained policy support. Findings revealed a diversified economy, with industry contributing significantly to the province's Gross Regional Domestic Product (GRDP). Major sectors included manufacturing, energy production, and tourism. The establishment of industrial parks and the Batangas International Port attracted investments, generated employment, and stimulated local enterprises. Although industry and services dominated, agriculture remained essential. Agribusiness innovations and the revival of high-value crops like coffee supported rural development and food security. Tourism also played a growing role, with eco-friendly initiatives and infrastructure investments positioning Batangas as a top destination for domestic and foreign travelers. Scenic beaches, heritage sites, and nature reserves drew increasing numbers of visitors annually. Despite these advancements, the province faced pressing challenges, such as waste management, climate resilience, and maintaining environmental sustainability amid rapid urbanization. Opportunities for further development included industrial expansion, enhanced transportation networks, and digital economy integration. These offered pathways to foster inclusive growth and improve quality of life across urban and rural communities. However, such progress required coordinated efforts from government, private sector, and local stakeholders. This study underscored the importance of inclusive governance and sustainable practices to ensure that economic growth benefited all sectors of society. It provided insights into the interplay between historical roots and modern strategies, serving as a guide for policymakers and development planners aiming to reinforce Batangas' position in the national economic landscape.

KEYWORDS: Batangas Economy, history, contemporary development

INTRODUCTION:

Batangas, a province nestled in the CALABARZON region of the Philippines, has a rich history deeply intertwined with its economic evolution. It holds a significant place in the nation's history and economy. Known for its rich cultural heritage and geographical diversity, Batangas has evolved from a primarily agricultural province into a dynamic economic powerhouse. A confluence of factors, including strategic geographic advantages, infrastructure development, and progressive policy frameworks, has shaped its transformation.

From its humble beginnings as a trading hub during the pre-colonial era to its present-day status as an industrial and commercial thrust, Batangas has undergone significant transformations over the years. Historically an agricultural stronghold renowned for its fertile lands and high-value crops like coffee, sugarcane, and rice, Batangas now boasts a more diversified economy incorporating industrialization, commerce, and tourism. Its strategic geographic location, infrastructure improvements, and consistent economic policy development facilitated this shift. Today, Batangas is recognized as a critical industrial and energy center, hosting major economic zones and power plants that contribute significantly to the national grid. Simultaneously, its tourism sector, enriched by natural attractions like Taal Volcano and Anilao's diving sites, has positioned the province as a top destination for domestic and international visitors.

Population plays a vital role in the economy, influencing Growth, labor markets, and overall economic potential. A growing population can expand the labor force, increasing the pool of workers available for various sectors, which boosts productivity and drives innovation. From 2015 to 2024, Batangas Province's population grew from 2,694,335 to 3,046,996, influenced by natural population growth, in-migration, and its proximity to Metro Manila, which supports urban expansion. With this population rate, Batangas Province earned a total revenue of Php18,563,658,230.54 [1]. Infrastructure projects like the Batangas International Port, SLEX, and ACTEX have enhanced connectivity and economic opportunities, attracting people to the area. The Metro Lipa and Metro Batangas Urban Growth Corridors, accessible across the province, support ongoing urbanization and migration. Lipa City, Sto Tomas City, and other large centers house 43.8% of the provincial population, while smaller municipalities cover the rest. From these years, 12 cities and municipalities saw population increases, especially Sto. Tomas, Lipa, and Tanauan attributed this to their industrial developments and strategic location [2].

This research aimed to comprehensively explore the Batangas economy, tracing its historical roots and examining its contemporary landscape. By delving into the key factors that have shaped the province's economic development, this study sought to uncover the forces driving growth, innovation, and change in Batangas. Through a comparative analysis of past and present economic indicators, industries, and policies, the researchers aimed to shed light on the challenges Batangas faces and the opportunities ahead. Whether it is the rise of manufacturing, the resilience of agriculture, or the impact of government initiatives, this research intends to offer valuable insights into the dynamic nature of the Batangas economy.

The main objective of this study was to discover the vibrant tapestry of Batangas' economic history and explore its path towards a promising future. Specifically, it aimed to:

1. Identify the key factors that influenced the development of the Batangas economy in the past.
2. Determine how the economic landscape of Batangas evolved over the years;
3. Distinguish the major industries that have contributed to the growth and transformation of the Batangas economy.
4. Recognize the current economic challenges faced by Batangas in comparison with the historical challenges.
5. Identify the opportunities and potential growth areas for future development of Batangas economy.
6. Develop a coffee table book focusing on the significant growth and development that signified pivotal moments where its economic landscape underwent notable transformations.

METHODS AND METHODOLOGY:

This research employed a qualitative approach to explore Batangas's economic history and transformation. A qualitative method allows for an in-depth analysis of how various factors have shaped the region's economic landscape, emphasizing the underlying narratives and historical contexts. Through qualitative inquiry, the study aims to provide a nuanced understanding of Batangas' economic evolution, identifying trends, key developments, and pivotal moments influencing its current economic status.

The primary method for data collection was documentary analysis, focusing on archived records, government documents, and reports available in key government offices across Batangas. This included the Batangas Provincial Capitol Office and several Local Government Units (LGUs) within the cities of Batangas City, Lipa City, Calaca City, Tanauan City, and Sto Tomas City. These documents offered valuable insights into historical policies, economic programs, demographic changes, and infrastructure development initiatives that have contributed to the transformation of the Batangas economy.

Documentary analysis allows the study to systematically examine official records that reflect economic policy priorities, decisions, and outcomes over time (Bhandari, 2024). By analyzing documents from multiple LGUs, the researchers compared and contrasted economic strategies across different areas within Batangas, identifying common themes and unique approaches. This method also supported a critical examination of how local governance and policy-making have adapted to shifting economic demands, helping to draw a comprehensive picture of the province's economic journey. The qualitative approach and documentary analysis provided a rich and layered perspective on Batangas' economic history and its pathway toward contemporary development.

RESULTS

Batangas has evolved from an agricultural economy to a diversified regional hub, shaped by its historical foundations and new economic sectors [2][3].

Key Factors that Influenced Economic Development Agriculture Sector

Agriculture once dominated Batangas, accounting for more than 70% of the land and producing crops such as rice, corn, sugarcane, and coffee [3]. Lipa, recognized as the "coffee capital" since the 18th century, played an important role in this expansion [7]. However, recent declines have been ascribed to high input costs, irrigation limitations, and decreased farmer engagement [12]. Despite this, municipalities like Tanauan and Sto. Tomas and Calaca produce corn, coconuts, poultry, and animals [3][4].

Industrial Sector

Batangas City had a rise in industry in the 1990s, owing to the expansion of manufacturing zones and industrial parks [4]. Lipa, Sto. Tomas and Calaca followed suit, attracting global companies in petrochemicals, shipbuilding, and food processing [6]. These initiatives boosted employment and cemented Batangas' status as a CALABARZON industrial hub [5][11].

Infrastructure

Infrastructure development has aided economic growth, with Batangas City maintaining over 466 kilometers of roads and efficient transportation systems [13]. Lipa and Tanauan continue to experience congestion and flooding as a result of population increase and inadequate drainage [21]. Calaca, although being rural, has increased barangay accessibility through targeted road developments [17].

Socio-Economic Profile

Urbanization has increased local revenues and services. Batangas City's income increased by 10.45% between 2004 and 2005 [13], whereas Lipa's poverty rate fell from 17% to 11% between 1997 and 2000, thanks to business expansion in retail and services [13]. From 1995 to 2003, Tanauan saw a 177% increase in business establishments, primarily in Poblacion 7 [3].

Political Profile

Political stability serves as the foundation for Batangas' development. The province, established in 1534, has been led by important figures like Apolinario Mabini and Jose Laurel, whose legacies continue to affect present governance [3]. Consistent leadership in Batangas City, Lipa, and Tanauan has promoted continuity in planning and economic resiliency [3][4].

Economic Landscape of Batangas Evolution Over the Years

An agricultural province known for its fertile lands and abundant coastal resources, Batangas' economy has changed dramatically over the years. It was a major producer of rice, corn, sugarcane, and coconut, and its fishing industry, particularly in coastal towns

like Nasugbu and Lian, supported local livelihoods through seaweed farming and aquaculture [3]. By the middle of the 20th century, small-scale industries like furniture making, pottery, and salt production started to appear, but they were still small in comparison to the province's dominant agricultural sector [4].

There was a change toward industrialization in the early 2000s. With the creation of industrial zones like the First Philippine Industrial Park and Lima Technology Center, which attracted both domestic and foreign investors, Batangas developed into a center for manufacturing and energy production [5]. Some of the biggest power facilities in the nation, which supply electricity to the national grid, are located in the province [4]. With industry accounting for 56.2% of the GDP in 2021, followed by services at 35.8% and agriculture at 7.9%, Batangas recorded the greatest growth rate in the CALABARZON area, at 12.5%, as shown in Table 1 [6].

Table 1

Sectoral Contributions to Batangas' Gross Regional Domestic Product (GRDP) (2021)

Sector	Contribution to GRDP (%)	Description
Industry	56.2	Manufacturing: Electronics, automotive parts, food processing, and chemical production. - Energy Production: Gas-powered plants and other energy sources/ - Petrochemical Industry: Oil refineries - Construction & Real Estate: Rapid development of industrial, commercial, and residential infrastructure.
Services	35.8	Includes tourism, retail, finance, and other service industries such as banking, healthcare, and education.
Agriculture, Forestry, Fishing	7.9	Agricultural products include high-value crops like pineapple and coffee (Barako), poultry farming, livestock, and aquaculture

Table 1 demonstrates that Batangas has not given up on agriculture in spite of industrial growth. By emphasizing high-value products like pineapple and Barako coffee in addition to raising cattle and poultry, the industry has broadened its focus. With the help of initiatives like the "Barako Hour," which promotes Batangas' coffee legacy in both domestic and foreign markets, Barako coffee has experienced a cultural and economic renaissance [7].

Today, a significant part of the local economy is tourism. Anilao's diving sites, the Taal Volcano, and the beaches of Nasugbu and Laiya are among the natural features that draw millions of visitors annually. Batangas saw over 10 million visitors in 2023, a 20% increase in visitor numbers [8].

In Batangas, tourism has grown to be a significant economic pillar. Each year, millions of tourists from both domestic and foreign countries are drawn to the province by its natural beauty and rich cultural legacy. The provincial administration has made the construction of infrastructure, especially lodging, a top priority in response to the increase in demand for tourists. As seen in Table 2, the growing number of tourism-related establishments that have received official regulatory body recognition is a reflection of these efforts (PTCAO, 2022).

Table 2 2022 Tourism Accommodations in Batangas

Type of Accommodation	Number of Establishment	Percentage
PTCAO – Registered	246	14%
DOT – Registered	260	15%
Total Recognized	1,757	100%

The province's strong institutional support for tourism and readiness to accommodate the steadily increasing number of visitors is reflected in the 1,757 recognized lodging establishments in 2022 that were registered under both the PTCAO and the Department of Tourism (DOT), as shown in Table 2. The increase in formal registrations underscores efforts to standardize services, ensure quality, and sustain tourism as a dependable source of economic support for the province.

Trade and commerce have also increased. Banks, cooperatives, and retail stores have increased in urban areas like Batangas City and Lipa City. Increased consumer spending and purchasing power are indicated by this expansion, which is particularly bolstered by Batangas' advantageous freeway connectivity to Metro Manila [9].

A key factor in this expansion has been infrastructure. Today, the Batangas International Port is a major maritime hub for both domestic and foreign shipping. Accessibility has been greatly improved for locals, visitors, and enterprises via road networks like the Southern Tagalog Arterial Road (STAR). Due to these advancements, Batangas is now not just CALABARZON's economic hub but also a key hub for the country's energy and logistics industries [10].

Major Industries Contributory to the Growth and Transformation of the Batangas Economy

The economy of Batangas Province has grown steadily in recent years. The province's Gross Domestic Product (GDP) climbed from ₱615.72 billion in 2022 to ₱645.78 billion in 2023—a 4.9% rise from the year before. The performance of its three main sectors—industry, services, and agriculture—which together create Batangas' dynamic economic landscape, is principally responsible for this expansion [11]. The GDP contributions of these three sectors from 2021 to 2023 are shown in the following table.

Table 3 Major Industries that Account for the Largest Share in the Batangas Economy from 2021 to 2023 (in thousand Philippine Pesos)

Industry	2021	2022	2023
Agriculture, forestry, and fishing	45,441,464	47,814,713	50,933,588
Industry	321,636,331	343,380,623	353,397,938
Services	204,898,437	224,523,386	241,443,485

Table 3 demonstrates that the industry sector continuously made up the largest portion of Batangas' GDP, followed by the services sector. Agriculture continued to be an important, but decreasing, part of the economy. The industries subsector was dominated by manufacturing, while the services sector was dominated by wholesale and retail commerce. The province's steady and growing industrial and commercial activity is reflected in the rising GDP estimates in all sectors [11].

Despite the expansion of industry, Batangas' agricultural sector remains vital. The province grows a variety of crops, including corn, sugarcane, coffee, coconut, and palay (rice). Table 4 below shows the production volume for these important crops during a three-year period.

Table 4 Changes in the Volume of Production of the Major Crops Produced in the Province

Major Crops	2018	2019	2020
Play	47,309.79	14,308.29	33,001.50
Corn	12,725.00	13,876.85	10,456.00
sugarcane	1,562,057.34	1,075,726.83	1,055,580.21

Production variations are seen in Table 4, with a notable decline in palay in 2019 and a rebound in 2020. While sugarcane production steadily decreased, corn production stayed almost unchanged. These numbers highlight the difficulties and seasonal fluctuations that Batangas' agriculture industry faces [12].

As a major provider of hogs, cattle, goats, and carabaos to Metro Manila and nearby provinces, Batangas is a big player in the livestock business in addition to crops. Volumes of livestock production over a three-year period are shown in the data below in Table 5.

Table 5. Livestock: Volume of Production by Animal Type

Animal Type	2018	2019	2020
Hog	174,072	189,169	161,190
Cattle	14,490	13,322	12,682
Goat	2,256	2,246	2,142
Carabao	1,147	1,115	835

The most prevalent crop was hog production, which peaked in 2019 and then declined in 2020 as a result of the ASF outbreak, as Table 5 illustrates. As a result of disease, rising feed prices, and changing consumer demand, the quantities of cattle, goats, and carabaos also showed a minor decrease trend [12].

Beyond farming and raising cattle, Batangas boasts a thriving business climate, particularly in Batangas City, the province's capital. The city's agricultural land utilization, business establishments, and industry scale have all steadily increased over time, as shown in Table 6

Table 6 Comparison of Agricultural Factors, Number of Business Establishments, and Number of Industries in Batangas City from 2005-2023

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agriculture									
Actual total land area planted (it has)	7,286	7,454.50	6,541	6,309.50	6,309.50	6,309.50	6,309.50	6,239.10	6,309.50
Business Establishments	4,574	2,267	1,998	2,703	2,703	3,023	3,023	5,768	6,555
Industry									
Large (60M and Above capitalization)	15	12	14	14	14	13	15	15	15
medium (15M-60 M)	2	5	2	2	2	2	2	2	2
small (less than 15 M)	3	3	3	4	4	4	3	3	3

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Agriculture										
actual total land area planted (in has)	6,247.75	5,857	8,230.05	8,226.96	8,230.05	5,335	7,219.41	7,219.41	7,219.41	7,219.41
Business Establishments	7,089	7,144	8,153	9,052	8,213	8,975	10,977	11,218	12,204	13,706
Industry										
Large (60M and above capitalization)	19	19	21	19	12	18	16	16	16	16
Medium (15M-60 M)	2	2	2	2	2	2	4	4	4	4
Small (less than 15 M)	3	2	2	2	2	2	3	3	3	3

Table 6 shows how agricultural land area decreased between 2005 and 2014 before increasing again in 2023. Business establishments more than tripled at the same time, demonstrating strong commercial expansion. While medium and small

industries stayed mostly unchanged, large industries saw a tiny uptick. These patterns demonstrate how Batangas City has developed into the province's commercial and industrial center [13].

Industry, services, and agriculture have all influenced Batangas' economic growth. Every industry keeps developing, which helps the province remain resilient and competitive in the CALABARZON.

Current Economic Challenges Faced by Batangas in Comparison with the Historical Challenges

Batangas Province is still dealing with long-term economic issues, many of which have been constant throughout time and are changing as the province develops. Waste management and pollution are two of the most urgent problems. According to a research by Cuaresma et al. (2016), Batangas City contributes over 7,951.95 kg of garbage per day to the Calumpang River, which gets roughly 16,991 kg, mostly from the city's swine and human populations [14]. The study underlined the necessity of working with neighboring municipalities including Ibaan, San Jose, and Lipa City as well as implementing a restoration and management program. The Pacific Disaster Center (PDC) (2021) acknowledged that this historical connection still exists today, stating that Batangas has the second-highest population of cattle in the Philippines, necessitating extensive areas for animal maintenance and making a substantial contribution to waste issues [15].

The issue of garbage generation is not limited to Batangas City. According to Villanueva et al. (2021), Lipa City is the province's second-largest waste generator, producing over 167 kg of garbage every day [16]. The need of upholding waste management regulations was also underlined in Tanauan City's Executive Legislative Agenda (ELA) 2022–2025. Similar to this, the city's population and economic expansion were linked to three major difficulties in Calaca City's 2023 planning report: inadequate waste segregation, rising waste volumes, and business establishments' disregard for the environment [17].

Climate change and the danger of disasters provide Batangas with yet another major obstacle. Climate and disaster risk assessment (CDRA) training was incorporated into Calaca and Lipa City's 2023 development plans in order to increase preparedness and resilience. Batangas is one of the Philippines' seismically active provinces, according to the DOST Primer (2017), which makes disaster preparedness even more urgent [18]. PDC (2021) also noted that although the province's population and economic activity are increasing, its ability to cope is still lacking, especially when it comes to emergency services and economic resilience. The center suggested increasing emergency response training, fortifying stakeholder alliances, and obtaining sufficient financing and equipment for readiness [15].

Economic capacity is another persistent problem. Batangas scored 0.459, placing it 59th out of 84 territories in terms of economic capability, according to the PDC (2021) [15]. In the CALABARZON Regional Development Research Agenda (RDRA) 2018–2022, Governor Hermilando Mandanas underlined this challenge by emphasizing the importance of maintaining economic growth. Modernizing sectors, resolving job-skills mismatches, securing reasonably priced electricity sources, and promoting business continuity following calamities are some of the major obstacles [19]. According to The Inquirer (2023), adjusting to the quickly changing requirements of the populace and striking a balance between local and national governance continue to be significant obstacles to sustained progress [20].

Furthermore, the delivery of services and infrastructure are still impacted by population stress. With a per capita income of ₱993.64, which is among the lowest in the country, and a ranking of 59th in terms of economic potential, Batangas further restricts investments in vital services like healthcare, transportation, communication, and energy [15]. The RDRA has also identified traffic congestion as a hindrance to the growth of tourism, especially in Batangas City, the province's most populated district. The city's built-up areas expanded by 9%, mostly in the northern zones, while its population grew by 2% annually on average between 1990 and 2015 (Delos Reyes et al., 2020) [21].

The challenges are still being worked on. While Calaca City incorporates occupational safety and health programs into its planning to encourage compliance, readiness, and risk avoidance, Lipa City's 2023 budget allocations focus on health-related issues such renal disease [17]. Many of these problems have remained throughout time and still pose a threat to the province's sustainable growth in spite of these efforts. Plans from the past and present recognize these issues, but their recurring nature indicates that more efficient execution and concerted effort are required.

Opportunities and Potential Areas of Growth for the Future Development

The province of Batangas is still working to improve everyone's quality of life and achieve inclusive growth. The province's dedication to addressing underprivileged populations has been underlined by Governor Hermilando "Dodo" Mandanas. Batangas continues to be robust and to grow steadily in spite of environmental and economic difficulties. It serves as the de facto energy center of the Philippines and is home to 5,375 MW of power plants, which is more than Metro Manila can use. Energy security for Luzon and the nation is anticipated to improve with the completion of First Gen Corporation's LNG terminal [22]. The 100-hectare ASEAN Batangas Access Zone (ABA Zone) intends to increase trade with Southeast Asia, and Batangas, which is positioned as the Agri-Industrial Gateway, is building a food terminal and port [23]. This goal is supported by infrastructure initiatives like expressway construction, the revitalization of the Philippine National Railway, and improvements to power and fiber optics [22]. Healthcare and education investments have also increased. With a ₱300 million increase to the fund, more over 70,000 students have been awarded scholarships, while the "Libreng Pagamot" program has seen a ₱500 million increase [23]. With developments concentrated on Batangas City and the Metro Batangas Cluster, Batangas is well-positioned for more industrial growth, especially in the areas of shipbuilding, heavy manufacturing, and petrochemicals [24]. The province leads in the production of livestock and poultry, demonstrating the continued importance of agriculture, which is bolstered by updated infrastructure and easy access to important markets [24].

Ecotourism and cultural heritage destinations like Anilao, Mabini, and Taal are the main drivers of the tourism industry's continued success. The government's dedication to this industry is demonstrated by Nasugbu's designation as a Special Tourism Zone [25].

In order to establish Batangas as a major logistical hub, ongoing infrastructure developments include ports, road networks, and the projected CALABARZON International Airport [24]. Batangas is also becoming a hub for BPO and digital sectors, bolstering a robust, future-ready economy with its highly qualified workforce and technological innovations [25].

DISCUSSION

Batangas Province is located in the southern part of Luzon in the Philippines. It has a rich historical and economic landscape that has significantly evolved over the years. The province has a diverse geography comprising coastal areas, mountains, and fertile agricultural lands. It is one of five belonging to the Region IV-A administrative region, the CALABARZON. The province has 34 administrative divisions. Of these, five cities are Batangas, Lipa, Tanauan, and Sto. Tomas and Calaca. The economic development of Batangas is shaped by several key factors, including its agriculture, industrial, infrastructure, socioeconomic, and political.

Agriculture has historically been the backbone of Batangas' economy, providing livelihoods for a significant portion of the population. The fertile lands and a favorable climate have made it conducive for various agricultural activities. Batangas Province is dominantly Agricultural, with 71.53 percent of its total land area devoted to agricultural activities such as planting crops, growing fruit trees, and raising livestock, poultry, and fish or aquaculture production. [3], agriculture was Batangas most important industry and praised the volcanic soil as exceedingly fertile because of the minerals it contains. It was perfect for cultivating sugarcane, rice, oranges, abaca and tobacco. Sugarcane was planted in both upland and lowland agricultural fields. The top producers and exporters of pilon sugar are Batangas, Sto. Tomas and Lipa while granulated sugar are from Batangas and Lipa.

Furthermore, rice was Batangas second most important agricultural produce at the time. It was also grown in upland and lowland agricultural fields. The third most agricultural produce of Batangas was corn. Corn was grown in all province municipalities, but only a few towns grew it significantly. The top producers of corn are Batangas and Tanauan. [3], oranges were among Batangas' agricultural exports. They named the town of Tanauan as having "the best groves of oranges" and the "most significant producer of the whole province. Batangas, Santo Tomas and Tanauan are the top producers of oranges. Cotton was grown in Calaca, sufficient to meet the needs of the entire province. Batangas also produced other vegetables and fruits such as the bean, pea, squash, cucumber, lanzones (lanseh), santol (sandor or cottonfruit), atis (sugar apple), jackfruit and breadfruit.

The first coffee tree was introduced in Lipa, Batangas in 1740 by a Spanish Franciscan monk. From there, coffee spread to other parts of Batangas, allowing the province to grow in wealth over the decades. Lipa eventually became the coffee capital of the Philippines. Additionally, Lipa City is an agricultural city with more than 70 percent of agricultural land. However, Lipenos do not engage much in agricultural activities nowadays due to their growing interest in commerce and trade. It is evident in its shrinking agricultural land. The waning interest in doing farm work resulted in deficient agricultural production, particularly rice and vegetable production. The diminishing interest of farmers in agricultural activities resulted in deficient production, particularly rice and vegetable production. It should be noted, however, that the slowdown in agricultural production could also be attributed to other factors such as high cost of production inputs; inefficient marketing system; attitude of farms towards modern farming practices; unstable prices of agricultural products; prevalence of calamities, pests and diseases; and insufficient water supply or irrigation [3].

Nevertheless, the slowdown can also be attributed to other factors, such as the cost of production inputs and the prevalence of calamities. Agri-industrial activities such as poultry and livestock, on the other hand, have helped boost the economy. The advent of commercial establishments in the 1980s signalled the city's leaning towards urbanization.

The city is predominantly agricultural in terms of land utilization. Due to its strategic location, Tanauan City is the traditional trading hub for vegetables, fruits and livestock from Southern Tagalog and Bicol regions. While it is primarily agricultural in orientation, the city's commerce, trade and industry have been steadily growing in recent years. Different crops and fruit-bearing trees are planted in the City of Tanauan. Among the top crop produced last 2014 are corn, rambutan, sitaw, amplaya. Moreover, sugarcane and coconut are among the top crops based on data from the 2012 [3]. Coconut production significantly decreased from 2012 to 2014. The decrease in production of coconut is mainly due to coconut pest infestations.

In addition, Sto. Tomas agricultural lands constitute 65.71% (6,154.53 has.) of the total land area. Soil and climatic conditions are suitable for growing many crops and fruit trees. The major coconut intercrops are fruit trees, banana, coffee and pineapple. Coconut, fruit trees, bananas, and coffee products are the primary source of revenue from the agriculture sector. Green corn and fruit vegetables are major cash crops that generate significant agricultural revenue. There are few commercial poultry and livestock farms. Poultry and livestock are generally backyard types of production.

Moreover, agriculture is the significant economic activity in Calaca. Farming is a subsistence type of livelihood among Calaqueños. Thus, some of their agricultural activities are still undocumented. Many are engaged in small-scale farming and fishing and cater to the demand of the local markets. Given these, the local government through its City Agricultural Office (CAO) enhances its agriculture sector by creating priority projects in farming and encouraging them to be organized as cooperatives or associations to facilitate better agricultural extension. The main crops in the municipality are rice and corn. Livestock and poultry production are an important part of the farming households of the municipality. The local government provides alternative livelihood to farmers through livestock and poultry production. One of the government's priority projects through CAO is animal disposal. Fishing is an everyday livelihood at the coastal barangays of Calaca.

Historically, agriculture has been the backbone of Batangas' economy. The province is well-suited for farming due to its fertile soil and favorable climate. Traditional crops such as rice, coffee, and various fruits and vegetables have sustained local livelihoods and contributed to the economy through regional trade. Additionally, the province is known for its livestock and dairy industry, with local products like cow's milk gaining popularity. Over the years, agricultural advancements have significantly enhanced

productivity, including modern farming techniques and introducing high-yield crop varieties. The government's support through agricultural programs has also played a pivotal role in bolstering the agricultural sector, making it a key factor in the province's economic development.

The 1990s marked a significant turning point for Batangas City, transforming it into a vital and emerging economic center in the Philippines. One of the most critical drivers of economic development in Batangas City during the 1990s was the rise of industrialization. The city became an attractive destination for both local and foreign investors, leading to the establishment of various manufacturing and processing firms. The key industries that emerged included food processing, textiles, and furniture manufacturing. The influx of industries created numerous job opportunities and stimulated the local economy by increasing demand for local goods and services. Establishing industrial parks in and around the city further accelerated this trend, providing a conducive environment for businesses to thrive and expand.

In 2005, the identification of Batangas City as an industrial growth center in the CALABARZON region resulted in increasing business establishments in the city Central Business District (CBD) and the Pallocan Gulod areas. Several four- to five-story commercial buildings are already constructed in the city. Several of the existing business establishments in the city have already been improved and renovated or were demolished for reconstruction and redevelopment.

Tanauan is a second-class city and one of the oldest towns in Batangas. Tanauan City's industrial sector comprises four (4) sub sectors, mainly the agri-based, manufacturing, food processing and garments industry. By type of industry, 22% of the industrial establishments are in manufacturing, 16% in food processing, 30% in agri-based, and 31% in the garments industry. On the other hand, one of the significant problems of Tanauan is the public market. Its lack of parking space is inconvenient for both sellers and buyers. This may discourage consumers from patronizing the existing public market. It is very likely also that vegetable traders will locate and transfer to Sto. Tomas, Malvar or Lipa City to avoid the congestion. There is a need for a well-planned and organized public market with ample parking area and easy access to the Star TollWay where commuters and travelers will be enticed to stop and buy farm products such as fresh vegetables, high-quality meat, and poultry products for which Tanauan City is noted for.

Lipa City's strategic location proves to be an economic bonus as it can obtain the spillover effects of the development in Metro Manila and Batangas City. Similarly, its centralized location makes Lipa City the commercial center and the region's financial center. The increasing number of financial institutions, particularly banks, indicates a conducive business environment in the city. Other financial institutions that can be found in the place include lending investors, pawnshops, and credit cooperatives. These financial institutions play an important role in the Growth of the business sector, especially the small- and medium-scale industries. In addition, the presence of LIMA Industrial Estate (economic zone), PKI, Nestle Philippines and other multinational companies (MNCs) has fuelled the economic development in Lipa City.

Along with economic development comes other aspects of urbanization. Owing to the city's geographic location, the city is now a haven for government institutions. Regional and provincial offices can be found in the area. The city is also considered an education center because of the various educational institutions in all levels of education. Also, the city is a site for several health facilities such as well-equipped hospitals, private medical and dental clinics, and diagnostic laboratories.

In addition, the advent of commercial establishments in the 1980's signalled the city's leaning towards urbanization. Since then, the commercial sector has become increasingly important in the city's economic development. Commercial area is now a lot bigger. From 30 hectares in 1995, it now occupies 105 hectares. Other economic activities are industry- and actual estate-related activities. The industry sector primarily involves feed mills and agribusiness [13]. Further, the city's local industries include garment manufacturing, jewelry making, handicrafts manufacturing, metalcraft, and woodcraft.

Sto. Tomas has become an important host for 15 manufacturing companies and 2 industrial parks (with 47 locators). Their products are varied and intended for both local and export markets. Factories are located near the major highways, concentrating in barangays San Antonio and San Felix. The industrial parks are located in barangays Santa Anastacia and San Rafael.

Calaca, Batangas is home to several large industrial plants that are major contributors to the local economy. Some key businesses in Calaca include Balayan Distillery Inc., which manufactures industrial chemicals, and Registered TAO Commodity Trader, Inc., the largest molasses trader in the Philippines. Calaca Industrial Seaport Corp. owns and manages the Calaca Industrial Park and port facilities, which can accommodate large vessels. The port and industrial park provide infrastructure to support industries reliant on water transport and are located for access to domestic and international shipping lanes.

The industrial profile of Batangas Province reflects a dynamic transformation from its agricultural roots to a versatile industrial hub. Various industries' historical evolution, significant infrastructural developments, and government initiatives have shaped Batangas into a key player in the Philippine economy. As the province evolves, its industrial landscape will undoubtedly adapt to changing economic trends and global challenges, ensuring its relevance and competitiveness in the regional and global marketplace. The rich history of Batangas serves as a testament to the resilience and adaptability of its industries, promising continued Growth and development for future generations.

Infrastructure improvements were pivotal in Batangas City's economic Growth during the 1990s. The government invested significantly in enhancing transportation systems, including roads, bridges, and public transport facilities, to support the growing industrial base. The development of the Batangas International Port in the late 1980s and its subsequent expansion in the 1990s enhanced the city's connectivity to domestic and international markets. This port became a critical gateway for trade, facilitating the export of goods produced in the region and enabling the import of essential raw materials for local industries. Improved infrastructure boosted business operations and enhanced residents' overall quality of life.

The total length of all roads in Batangas City are approximately 466.99826 kms. comprised 73.89200 kms. of national road, 23.17800 kms. of city roads, and 369.92826 kms. of barangay roads. The inventory showed that the total length of asphalt paved roads were 66.91630 kms. Concrete paved roads were 279.85845 kms, gravel roads were 55.94576 kms, and the unpaved road

totaled 64,283.75 kms. The record indicated an increase in the length of concrete paved roads compared to last year, 229,901 kilometers. Land transportation services in the city are readily available by bus, public utility jeepneys, privately owned cars, vans, jeeps, and tricycles. For trips to Metro Manila and neighboring provinces, commuters can avail of the public utility bus system, the largest of which is the Alps, The Bus Inc., which has 55 units, followed by Jam Transit Inc., which has 30 bus units.

In Lipa City, the increasing economic activity and the limited road capacity in the area cause traffic congestion in the city particularly in areas near commercial establishments and schools are some of the issues. On the other hand, various industries operating in the city pose environmental hazards. Keeping the balance between the city's environment, natural resources, and economic development is a significant concern. As of 2011, the city has a total road length of 340,590.6 kilometers. This translates to a ratio of 1.86 kilometers of roads for every square kilometer of land area. Seven national roads connect the city to Manila and others of the province. The City lies along the route of many public utility buses and jeepneys. Buses going to and from Manila and other municipalities in Batangas, Quezon and Bicol pass through the City via the STAR or Manila-Batangas Road. [10].

The City of Tanauan is a gateway to Batangas City and other southern towns, cities and provinces. As such, the quality and condition of roads, drainage systems and other transportation facilities play a vital role. Moreover, those infrastructures are excellent indicators of economic development and progress. The communities have identified in the public consultation several problems and issues related to the condition of the transportation facilities in Tanauan. One of these is the inadequacy of roads, especially in the rural areas. This may be due to the high cost of private land acquisition, making road expansion projects challenging to pursue. Moreover, owners of these lands are hesitant to give, donate, or even sell portions of their properties for this purpose. Another related issue is the lack of farm-to-market roads. This condition makes it difficult and expensive to transport goods and provide services to the Poblacion area and other neighboring towns. This presents a major disadvantage for Tanauan because the agriculture sector provides the population's major livelihood source.

Furthermore, the major reason for the inadequacy is that the transport infrastructures cannot keep up with the rapid population growth requirements because of uncontrolled immigration and the natural population increase. Poor planning of building construction aggravates this. Therefore, the congestion of the roads has led to more road accidents especially in the evening. Adding to these problems is the inadequate drainage system. The roads are flooded during the rainy months due to the clogged drainage systems, further slowing down the traffic. The main reason the urban road-arable land ratio standard was not met was the rapid growth of population and immigration.

Sto. Tomas has a relatively good transportation network. It also provides the entry point for the Southern Tagalog Arterial Road (STAR) going to Batangas City. The opening of the Alabang-Calamba-Sto. Tomas Expressway (ACTEX) gives more convenient time for commuters/tourists in going to Manila and Batangas Province and vice versa. Moreover, it is also a big help in reducing the traffic scheme in the municipality. Tricycles are the major mode of transportation for intra-travel while jeepneys and buses for inter-city travel. Like any other municipality, the familiar road-related problems of Sto. Tomas are traffic congestion in the major roads and flooding in the low-lying areas. Many of the major roads are operating near their capacity.

Calaca is located in the South-west area of Batangas. The municipality is very accessible in many ways. It is 38.75 kilometers away from Batangas City, the provincial capital. Calaca has 244,607 kilometers total road networks, which are classified into four (4) categories: National, Provincial, Municipal and Barangay roads. The barangay roads constitute the majority of the total kilometers of road having an approximate length of 209,656 kilometers. Not all barangays have paved roads, so the LGU has constructed additional road networks to increase access across barangays.

A sound transportation system is considered the economy's bloodline and has a significant consideration in the industrial location decision. The economic growth and development of every city/municipalities and the ability to move people and goods freely depends on good and efficient transportation networks. The primary land-based mode of transportation used by the residents of Calaca is bus, jeepney, tricycle and single motorcycle. Jeepneys are the most prolific mode of transportation within Calaca. In addition, tricycles also abound in the town proper of Calaca. The designated tricycle terminal is located in the vicinity of the public market.

The infrastructure profile of Batangas Province in the past reflects a steady trajectory of development and modernization that has transformed the region from a primarily agrarian society into a vibrant economic hub. Significant advancements in transportation, utilities, and telecommunications have improved the residents' quality of life and positioned Batangas as a crucial player in the national economy.

The socio-economic environment in Batangas has also significantly influenced its economic trajectory. The local government has worked towards poverty alleviation and employment generation through various programs, such as skill development initiatives and microfinance support for small businesses. The rise of the middle class in cities like Lipa and Tanauan has increased consumer spending, promoting local businesses and attracting more investments. Educational institutions in the province have also enhanced human capital, ensuring that the workforce meets the demands of a rapidly industrializing economy.

The total income of Batangas City Government for Calendar Year 2005 amounted to P820,798,321.71 which is 10.45% higher than that of CY 2004 which amounted to P743,077,149.53 ([13]). There were also numerous other business enterprises in the City with less than Php5 million capitalization. These enterprises comprise more than 90% of the total number of business enterprises in the area. They mostly engage in retail, trading, and services (e.g., food, health and wellness, pension, and lodging enterprises). Batangas City is one of the educational centers, not only in the province of Batangas, but also in the whole CALABARZON area. In 2011, 127 institutions offered pre-school education, 118 offered elementary education, 35 offered secondary education, and eight offered tertiary education. However, only nine institutions provided vocational and technical education, including the Technical Education and Skills Development Authority. The city's four big hospitals and nine major clinics properly provide health services. 35 banks are operating primarily in the city's poblacion and urbanizing barangays. Aside

from banks, there are also 10 credit cooperatives and 21 non-agriculture based multi-purpose cooperatives that provide savings and credit services to its members. The City also has several lending investors, pawnshops, and remittance centers [13].

The socio-economic development in Lipa City should translate into improved living conditions for its populace. Otherwise, the city fails to grab economic Growth and development opportunities and benefits. The average family income improved from PhP181, 303 in 1997 to PhP191, 478. On the other hand, the average family expenditure likewise increased from PhP120, 641 in 1997 to PhP165, 720. Regarding the poverty status of Lipeños, the poverty incidence in 1997, 17 percent, declined to 11 percent in 2000. Thus, while economic activities in the city flourish, Lipeños become better off. Statistics show that the city has 6,178 registered business establishments for 2011. Of this total, 5,291 or 85% are old businesses, while 897 or 15% are newly registered businesses. The most significant number of businesses belongs to retail trade. That belonging to the retail numbered 3,364 or 54% of the total. This is followed by those engaged in services at 1,642 or 27%. [13]

Tanauan school children reflect the transformative period when formal education became widely accessible under both Spanish and American colonial administrations to establish a national education system which introduced English as the medium of instruction and emphasized universal education. Schools like those in Tanauan became pivotal in promoting literacy, civic values, and a shared national identity. This serves as a heartwarming reminder of the aspirations of Filipino families and communities during this era, reflecting their hope for a brighter future through education. It also underscores the enduring significance of Tanauan as a town known for its contributions to Philippine culture and intellectual life.

Additionally, the commercial sector comprises the retail trade, wholesale trade, service, banking, finance, and real estate [3]. Over eight years (1995-2003), there has been a substantial increase in the number of commercial establishments in Tanauan City. From 672 commercial establishments in 1995, there are now 1,866. Most commercial establishments and activities are located in the Poblacion area, particularly in Poblacion 7, where 682 or 36.32% of the total establishments are located. Retail trading in the municipality includes retailing agricultural supplies, construction supplies, household products, furniture, jewelry, school and office supplies, and essential goods. Political stability and governance have substantially shaped Batangas' economic landscape. Local government initiatives to enhance the business climate and transparent policies have built investor confidence. Strategic partnerships between the government and private sectors have led to collaborative projects stimulating economic Growth. Additionally, the political will to promote Batangas as a key area for investment has resulted in the establishment of favorable zoning laws and regulations that encourage business development.

Batangas was one of the earliest economies the Spaniards made in the country. Martin de Goiti headed it and since then it became one of the most important centres of the Philippines, not only the Tagalogs. Batangas first came to be known as Bonbon. It was named after the mystical and fascinating Taal Lake, which was also called initially Bonbon. Some of the earliest settlements in Batangas were established near Taal Lake. In 1534, Batangas became the first practically organized province in Luzon. It was in 1889 that the capital was moved to the present Batangas City.

Batangas is also known in Philippine History as the Cradle of Noble Heroes, giving homage to the heroes it produced and the statesmen that came to lead the country. Among the luminaries of Batangas politics are Teodoro M. Kalaw, Apolinario Mabini, Jose Laurel, Claro M. Recto, Felipe Agoncillo and Don Apolinario Apacible. The succeeding city mayors are Mayor Macario M. Mendoza, 1974-1979; Alfredo M. Borbon, 1979-1980, Conrado C. Berberabe, 1980-1986; Jose M. Atienza, 1986-1987; Mario M. Perez, 1987, Eduardo B. Dimacuha, 1988-1998, Angelito A. Dimacuha, 1998-2001 and again Eduardo B. Dimacuha, 2001-2010, Vilma A. Dimacuha, 2010-2013 and again Eduardo B. Dimacuha, 2013-2016, Beverley Rose A. Dimacuha, 2016 to present.

In Lipa City, during the American colonial period, Don Esteban Mayo returned briefly during the early days of World War II. He played a significant role in shaping the history and development of Lipa City during the American colonial period. The succeeding mayors are Esteban Mayo 1947-1951, Jose Kalaw 1952-1953, Baldomero Reyes 1954-1959, Miguel Lina 1960-1969, Reynaldo Reyes 1970-1971, Carlos Solis 1972-1986, Ruben Umali 1986-1998, Vilma Santos-Recto 1998-2007, Oscar Gozos 2007-2010, Meynardo Sabili 2010-2019 and Eric Africa 2019 to present. These leaders played crucial roles in maintaining order and governance in Lipa from history to present.

The former mayors of Tanauan are Alfredo Magpantay 1937-1942, Nicolas Gonzales 1942-1943, Jose M. Corona 1943-1945, George Collantes 1946-1951, Pedro B. Gonzales 1951-1967, Jaime Banjo Laurel 1968-1970, Sebastian Carandang 1970-1971, and Francisco E. Lirio 1971-1980, Sotero Olfato 1980-1987, Pedro Tipa 1987-1988, Sotero Olfato, 1988-1992, Cesar V. Platon 1991-2001, Alfredo Corona 2001-2006, Sonia Torres-Aquino 2006-2013, Antonio Halili 2013-2018, Jhoanna Corona-Villamor 2018-2019, Mary Angeline Halili 2019-2022 and Nelson "Sonny" Collantes 2022 to present.

Economic Landscape of Batangas Evolution Over the Years

Batangas Province's economic history is deeply rooted in its agricultural sector. Fertile volcanic soil and a favorable climate enabled the cultivation of high-value crops including sugarcane, rice, coconut, and the once globally recognized Barako coffee [3]; [7]. The province also led in livestock, poultry, and dairy production, especially in rural municipalities such as Sto. Tomas and Calaca, which historically sustained local economies through backyard farming and small-scale fisheries [3]. However, the province has seen a shift in land use over recent decades, particularly in Lipa City and Tanauan, where the pressure of urbanization and the lure of commercial development have reduced arable lands and discouraged younger generations from pursuing traditional farming practices [4]; [17]. This transition has led to declining yields in rice and vegetables, exacerbated by issues such as limited irrigation infrastructure, pest infestations, and the high cost of production inputs [3].

To address these concerns and revitalize the agricultural sector, the provincial government has implemented modernization efforts, including the development of farm-to-market roads and support for agri-cooperatives and agro-industrial processing facilities [2]. These strategies aim to increase productivity, strengthen food security, and improve rural incomes, positioning Batangas not only as a food producer but also as a leader in agri-industrial integration.

Industrialization and Regional Competitiveness

Since the 1990s, Batangas has undergone significant industrial transformation. The establishment of the First Philippine Industrial Park in Tanauan and the Lima Technology Center in Malvar catalyzed the province's shift from an agriculture-based to an industry-driven economy [6]. Batangas City, Calaca, and Sto. Tomas have become industrial hotspots, hosting facilities in heavy manufacturing, petrochemicals, energy production, and shipbuilding [11]. With a GRDP industry share of over 56.2%, the province now outpaces most other provinces in CALABARZON in terms of industrial output [5].

The presence of the Batangas International Port has been a cornerstone of this development, serving as a vital logistics node that facilitates both domestic and international trade [10]; [9]. The port, coupled with improved land connectivity via the STAR Tollway and the ongoing Nasugbu-Bauan Expressway, enhances Batangas' regional competitiveness and positions it as a central economic corridor south of Metro Manila.

Tourism as a Sustainable Growth Pillar

In addition to its industrial rise, Batangas has made significant advances in the tourism sector. Anilao and Mabini are globally recognized dive sites located within the Verde Island Passage—considered the center of marine biodiversity [8]. Cultural and religious landmarks such as the Basilica of St. Martin of Tours in Taal further enrich the province's appeal [25]. The provincial government has adopted sustainable tourism strategies, including community-based programs and eco-tourism initiatives aimed at minimizing environmental impact while maximizing economic benefits for local residents [2].

Nasugbu's designation as a Special Tourism Zone has accelerated investment in hospitality infrastructure, exemplifying Batangas' strategy to elevate tourism as a core pillar of its diversified economy [25]. These developments have led to significant growth in visitor numbers and tourism-related income, supporting a broader provincial objective of inclusive growth and regional branding.

Digital Economy and Service Sector Expansion

Batangas is also embracing the digital economy and expanding its service sector. The province has seen increased investment in telecommunications, with the installation of fiber optic infrastructure and telecommunications towers across major urban centers [4]; [22]. These advancements have enabled Batangas to attract business process outsourcing (BPO) firms, which are increasingly seeking operations outside Metro Manila due to rising urban costs and talent saturation.

The local labor force, supported by a network of educational institutions, is a key asset for this sector. With over 70,000 scholarship beneficiaries in the past five years and a ₱300 million scholarship fund, Batangas is investing in its human capital to ensure alignment between workforce skills and industry demands [23]. This transition to a knowledge-driven economy enhances resilience and supports long-term sustainability.

Governance, Social Equity, and Inclusive Development

The political leadership in Batangas, particularly under Governor Hermilando "Dodo" Mandanas, has emphasized inclusive and sustainable development. Programs such as the "Libreng Pagamot" healthcare initiative—recently allocated an additional ₱500 million—highlight the government's commitment to health equity [23]. Moreover, strategic infrastructure projects such as the ASEAN Batangas Access Zone (ABA Zone), a 100-hectare logistics and commercial corridor, aim to integrate Batangas with Southeast Asian economic networks and attract public-private partnerships [24].

The revitalization of the 58-kilometer Philippine National Railways line to connect the Batangas International Port with the South Luzon Railway line is another landmark development expected to ease congestion, reduce logistical costs, and improve intermodal transportation [22]. These initiatives reflect the province's commitment to reducing regional inequalities and enabling long-term prosperity.

Sustainability and Future Directions

Despite its accomplishments, Batangas continues to grapple with environmental and socio-economic challenges. Waste management, particularly in urban centers like Batangas City and Lipa, remains a pressing issue, as highlighted by the volume of solid waste and lack of proper segregation practices [14]; [16]. The Pacific Disaster Center [15] also identifies Batangas as one of the most seismically active regions in the country, necessitating robust disaster preparedness and climate adaptation measures. Moreover, infrastructure development must contend with the pressures of population growth, traffic congestion, and resource strain, especially in high-density urban corridors like Batangas City and Lipa [21]; [19]. The proposed CALABARZON International Airport, extensions to port facilities, and road network improvements are promising solutions aimed at decongesting Metro Manila and redistributing economic activity across the region [25]. Batangas Province exemplifies a balanced model of regional development—integrating its historical agricultural base with modern industrial, digital, and tourism sectors. Its ability to maintain growth while addressing inclusivity, infrastructure, and sustainability issues sets a benchmark for other provinces in the Philippines. As Batangas continues to evolve, its success will hinge on forward-thinking governance, continued investment in human and physical capital, and collaborative regional planning.

Major Industries Contributory to the Growth and Transformation of the Batangas Economy

The province of Batangas is richly endowed with natural and human resources, which have significantly contributed to its sustained development over the years. As a first-class province, it has consistently proven its resilience and strength, adapting to the evolving market dynamics. This adaptability is evident in the economic growth and progress witnessed across various sectors, reinforcing Batangas' reputation as a key driver of regional development. The Philippine Statistics Office reported that the economy of Batangas grew by 4.9 percent in 2023 compared to 2022, with an increase in the Gross Domestic Product (GDP) from ₱615.72 billion in 2022 to ₱645.78 billion in 2023 [11]. This can be attributed to the performance of diverse industries contributing to employment, income generation, and overall economic growth.

The industry sector consistently accounted for the highest GDP share over three consecutive years. Manufacturing recorded the highest GDP among its sub-industries, with ₱243.41 billion, ₱261.30 billion, and ₱264.32 billion from 2021 to 2023, respectively [11]. The service sector ranked second, with Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles

emerging as the top contributor, posting GDP figures of ₱46.24 billion, ₱55.98 billion, and ₱63.51 billion for 2021, 2022, and 2023, respectively. Real Estate and Ownership of Dwellings followed closely, contributing ₱36.56 billion, ₱40.55 billion, and ₱45.34 billion over the same period [11].

In 2020, the top five sub-industries based on gross receipts were: Manufacture and transport equipment (₱33.20B), Storage Companies (₱20.41B), Other Manufacturing (₱16.51B), Manufacture of food products (₱10.83B), and Manufacture of coke and refined petroleum product (₱8.34B) [13]. Honda Philippines, located in Tanauan City, ranked first among these, contributing significantly to the overall receipts.

Batangas also boasts a strong commercial sector, with 98 malls and supermarkets recorded as of 2020. These are primarily concentrated in Districts 5 and 6, followed by the Third and First Districts [13]. Among LGUs, Batangas City dominated the top 10 commercial taxpayers, including major firms like Unioil Petroleum Philippines, Inc., JG Summit Olefins Corporation, and Pilipinas Shell Petroleum Corporation. Combined gross receipts from the top 50 establishments in Batangas, Lipa, Sto. Tomas, and Tanauan reached ₱79.33 billion—representing 62.90% of the province's total [13].

The province is home to 443 banks, with the highest number located in Lipa City (85), followed by Batangas City (66), Sto. Tomas City (30), and Tanauan City (29) [13]. Additionally, there are 496 registered cooperatives across the province, with the most concentrated in Lipa, Batangas, and Tanauan [13].

Real estate activity is also prominent, with the top 50 taxpayers spanning 22 LGUs. The Municipality of Calaca contributed the highest assessed value at ₱41.43 billion, making up 43.91% of the province's top assessed real estate values [13]. The presence of major energy corporations such as Southwest Luzon Power Generation Corp. and South Luzon Thermal Energy Corporation demonstrates the province's strategic role in the energy sector [13].

Batangas is home to 47 ecozones and industrial parks, including 14 operating zones such as Lima Technology Center and First Philippine Industrial Park, as well as proclaimed areas like Batangas State University's KIST Park and the RLC Special Economic Zone [13]. These zones reinforce the province's appeal for both domestic and international investment.

The entrepreneurial ecosystem continues to grow, with 11,775 new business permits approved in 2018 alone. Batangas City, Malvar, Lipa, Mabini, and Sto. Tomas led in business permit issuance [13]. These businesses generated 39,141 new jobs in 2019, with renewals contributing 181,858 jobs [13]. Agriculture remains a vital sector. From 2018 to 2020, coconut was the most cultivated crop, occupying nearly 40% of total agricultural land in 2020. Sugarcane ranked second in plantation area, showing a slight dip in 2019 but recovering in 2020. The province accounted for more than 93% of CALABARZON's total sugarcane harvested area in each of those years [12].

Batangas is also a major player in livestock and poultry. Despite the ASF outbreak, swine slaughter numbers remained high in 2018 and 2019 before dipping in 2020. Chicken egg production steadily increased during the period, while chicken meat production showed fluctuating trends [12]. The Municipality of San Jose remains the largest egg producer, followed by Rosario, Ibaan, Cuenca, and others [12]. City-specific economic contributions are also notable. Batangas City, known as the "Industrial Port City," maintains the highest concentration of industries. Tanauan City, traditionally agricultural, has diversified into manufacturing and commercial ventures [13]. Meanwhile, Lipa City has developed a robust economic base centered around real estate, BPOs, and industrial estates like Lima Technology Center [13].

Batangas Province's economic landscape is driven by the synergistic performance of its industrial, service, and agricultural sectors. With ongoing investments in ecozones, infrastructure, and enterprise development, it is poised to maintain its economic momentum while fostering inclusivity and sustainability [2][3][11][13][24].

Current Economic Challenges Faced by Batangas in Comparison with the Historical Challenges

The current economic challenges that Batangas faces, in comparison to its historical issues, include pollution and waste management. A study conducted by Cuaresma et al. revealed that the Calumpang River in Batangas City receives approximately 16,991 kg of waste daily, with the city itself contributing around 7,951.95 kg, mainly due to the human and swine population [14]. The study emphasized the necessity of implementing a restoration and management program to realize the ecotourism potential of the area. It also recommended collaborative efforts among other cities and municipalities such as Ibaan, San Jose, and Lipa City. This issue continues to persist today, as highlighted in the Pacific Disaster Center (PDC) report, which ranked Batangas second in the Philippines for livestock density, requiring vast land areas to support animal farming [15].

Additionally, Villanueva et al. found that in Lipa City alone, over 167 kg of garbage is generated daily, making it the second highest waste-producing locality in the province [16]. The Executive-Legislative Agenda (2022–2025) of Tanauan City also underscores the need to strengthen the enforcement of waste management ordinances [17]. Similarly, Calaca City's 2023 planning documents noted increasing waste generation as a persistent challenge caused by population growth and economic expansion. The reports indicate that residents do not consistently practice waste segregation or diversion, while many business establishments lack concern for their immediate environment [17].

Another pressing challenge is climate change and disaster risk. The 2023 planning documents of both Calaca City and Lipa City included the implementation of training programs on Climate and Disaster Risk Assessment (CDRA), aimed at equipping stakeholders with the knowledge and skills needed to assess and manage risks effectively [17]. Batangas, being among the seismically active areas in the Philippines, requires this proactive approach. As noted in the Department of Science and Technology (DOST) primer, the region is particularly vulnerable to natural hazards, necessitating enhanced preparedness measures [18]. The PDC also noted that with a growing population, demands on emergency services and public programs are increasing, yet Batangas has relatively weak coping capacities in areas such as emergency services and economic resilience [15]. The report recommends stakeholder collaboration, capacity-building training for communities, and improved access to emergency equipment and resources.

Closely linked to this is the province's economic capacity. Batangas ranked 59th out of 84 territories nationwide in terms of economic resilience, with a score of 0.459 [15]. Governor Hermilando Mandanas, in his message in the CALABARZON Regional Development Research Agenda (RDRA) 2018–2022, acknowledged the challenge of sustaining economic growth amidst issues such as power reliability, industry modernization, competitive product development, business continuity post-disaster, and the persistent mismatch between job opportunities and workforce skills [19]. A 2023 feature by the Inquirer further highlighted the province's difficulty in navigating the complex balance between national policies and local governance, especially in responding to evolving socio-economic demands [20].

Population pressure is another long-standing issue affecting the province's infrastructure and sustainability. The PDC reported that Batangas has one of the lowest annual per capita regular incomes among local governments in the Philippines, amounting to only ₱993.64—ranking ninth from the bottom [15]. This financial constraint has adverse implications for the development and maintenance of essential infrastructure, including healthcare, transportation, energy, and emergency services. Traffic congestion, in particular, continues to be a major issue in Batangas City, limiting its potential for tourism growth. Despite only a 2% annual increase in population from 1990 to 2015, built-up areas in the city—particularly in the northern section—expanded by 9% during the same period, resulting in significant urban stress [21]. Meanwhile, Lipa City's 2023 planning report addressed the rising incidence of kidney disease and other illnesses by allocating additional healthcare funding [17]. Calaca City's local development plan also acknowledged the importance of occupational safety and health initiatives to ensure compliance with safety standards and boost emergency preparedness [17].

While Batangas Province has made significant economic strides, the persistence of these longstanding issues—waste management, disaster risk, limited economic capacity, and population pressure—suggests that more robust, inclusive, and sustainable policies are needed. Although these challenges have appeared historically, their continued presence in contemporary development plans underscores the importance of coordinated interventions to minimize their impact and support long-term economic sustainability [14][15][16][17][18][19][20][21].

Opportunities and Potential Areas of Growth for the Future Development

The province is committed to fostering inclusive progress and enhancing residents' quality of life. Governor Hermilando "Dodo" Mandanas emphasizes efforts to ensure that development reaches all Batangueños, especially at the grassroots level. Batangas has demonstrated resilience despite recent environmental challenges and is poised to thrive. The province is the Philippines' de facto energy center, with power plants generating 5,375 MW—exceeding Metro Manila's combined energy needs. The upcoming completion of a liquefied natural gas (LNG) terminal by First Gen Corporation is expected to bolster energy security for Luzon and the entire country [22].

As the Agri-Industrial Gateway, Batangas is constructing a Food Terminal and Food Port to strengthen the nation's food supply chain. The ASEAN Batangas Access Zone (ABA Zone), a 100-hectare development, aims to connect Southeast Asian superports, promoting economic growth through public-private partnerships [23]. The province also enhances connectivity by expanding fiber optics, building telecommunications towers, and improving power transmission infrastructure. The revival of the Philippine National Railroad's 58-kilometer line will link the Batangas International Port to the South Luzon Line, facilitating transportation and trade [22].

Investments in education and healthcare are evident, with over 70,000 students benefiting from scholarship programs in the past five years and an additional PHP 300 million allocated to the scholarship fund. The "Libreng Pagamot" program, supported by a PHP 500 million budget increase, underscores the province's dedication to citizens' well-being [23].

Industrial Expansion

Batangas is positioned as an industrial growth hub within the CALABARZON region, hosting significant industries such as petrochemical, shipbuilding, and heavy manufacturing, particularly in areas like Batangas City and the Metro Batangas Cluster. The presence of the Batangas International Port and ongoing infrastructure projects, such as the development of the Nasugbu-Bauan Expressway and planned expansions of local industrial zones, enhance the potential for Batangas to attract local and foreign investments. This industrial expansion supports job creation and aligns with the province's goal to diversify its economic base [24].

Agricultural Growth

Agriculture remains a cornerstone of Batangas' economy, with the province recognized as a leading producer of livestock, poultry, and eggs. This reputation supports opportunities for agricultural expansion, particularly in improving yields through modern technologies, which the provincial government is actively promoting. Additionally, Batangas' strategic location provides access to key markets, facilitating the transport of agricultural products to the surrounding regions and beyond. The government has initiated infrastructure projects such as farm-to-market roads and support for agro-industrial processing facilities to further strengthen this sector [24].

Tourism Development

Batangas' tourism sector is driven by its natural attractions, including world-renowned dive sites in Anilao and Mabini, and heritage destinations like the Basilica of St. Martin of Tours in Taal. The government promotes community-based and eco-tourism initiatives, encouraging sustainable practices that protect the environment while fostering local economic growth. The declaration of Nasugbu as a Special Tourism Zone exemplifies the province's commitment to enhancing tourism infrastructure and supporting local businesses in related industries [25].

Infrastructure Improvements

Comprehensive infrastructure development is critical to Batangas' growth strategy. Projects like the Southern Tagalog Arterial Road and the Batangas-Ternate Road Tunnel are designed to improve connectivity within the province and neighboring regions. Plans for the CALABARZON International Airport and expansions of port facilities aim to increase Batangas' logistical capacity,

attract investment, and reduce congestion at Metro Manila ports. Additionally, water, power, and communication infrastructure improvements are being prioritized to support both urban and rural development, enhancing overall quality of life and economic opportunities across the province [24].

Digital Economy and BPO Growth

The service sector, particularly Business Process Outsourcing (BPO), is one of the fastest-growing industries in Batangas. With a strong workforce and ongoing efforts to improve digital infrastructure, the province is well-positioned to attract BPO companies. These digital opportunities are expected to provide local employment and contribute to Batangas' economic resilience and diversification. Through targeted investments and development strategies, the province aims to build a diversified, future-ready economy that leverages its natural resources, strategic location, and growing industrial base [25].

Image 1. Cover of the Coffee Table Book



Batangas is a land of rich history, vibrant culture, and remarkable progress. From its storied past to its dynamic present, this province has continuously evolved while preserving the traditions and values that define its people. This coffee table book takes readers on a visual and historical journey through five dynamic cities—Batangas City, Lipa City, Sto. Tomas City, Tanauan City, and Calaca City.

CONCLUSION

Batangas Province's economic development, particularly in the cities of Batangas, Lipa, Calaca, Sto. Tomas and Tanauan—is the outcome of a complex interaction between industrial, agricultural, infrastructure, socioeconomic, and political factors. This multidimensional evolution highlights the critical role of integrated regional planning in attaining long-term growth. As the province progresses, targeted investment in these crucial industries will be required to ensure that Batangas remains a vital engine of regional and national growth.

Notably, Batangas has effectively transformed into a thriving economic hub, with the industrial sector accounting for 56.2% of its Gross Regional Domestic Product (GRDP) and tourism expecting over 10 million visitors in 2023. These successes are the result of strategic economic zone growth, large-scale infrastructural initiatives, and purposeful attempts to preserve heritage and tourism. Despite rising industrialization, agriculture remains an important contributor to the province economy, particularly through high-value products like pineapple and the resurgence of Barako coffee, displaying a unique balance of modernization and cultural continuity.

The province's strong economic performance is further evidenced by the industrial sector's constant dominance, particularly in manufacturing and energy generation, followed by a resilient service sector that comprises retail, real estate, and financial services. The variety of Batangas' economic base has allowed it to adjust to changing market needs and weather external shocks with relative ease. Nonetheless, continuing obstacles exist, particularly in waste management, low economic capability in some places, and population growth that stresses infrastructure and public services. Despite these challenges, Batangas is prepared for a future of inclusive progress, strategic innovation, and people-centered governance. The province government's commitment to the vision of "better, more, and sooner" displays its determination to transformative leadership based on historical awareness and forward-thinking policies.

Finally, the coffee-table book produced as part of this project demonstrates Batangas' rich socioeconomic narrative and adaptive resilience. It depicts the province's amazing transformation from an agricultural hub to an industrial and tourism powerhouse. More than a historical repository, the volume is intended to serve as a development communication tool—a symbolic and practical resource that may inspire civic pride, promote policy consistency, and lead sustainable regional development.

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