Current Science Research Bulletin
Volume 02 (12), December 2025, pp. 373-380
CrossRef DOI: 10.55677/csrb/02-V02I12Y2025
Available on: https://csrbjournal.org/
e-ISSN: 3050-7103
p-ISSN: 3050-709X

Gross Domestic Product in Relation to the Region of Zamboanga's Sustainable Development

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ABSTRACT: This study examined the relationship between the Zamboanga Peninsula Region's sustainable development and GDP from 2011 to 2015. To determine the relationship between the gross domestic product and the sustainable development of the Zamboanga Peninsula region, the study used the quantitative method of research, specifically descriptive correlation research, with the assistance of documentary evidence from various regional government agencies and offices. The percentage and the Pearson-r Product-Moment Coefficient of Correlation were the statistical tools utilized. According to the study, the GDP of the Zamboanga Peninsula Region (ZPR) has been increasing steadily in terms of GDP growth rate, but it has very little to no correlation with the indicators of sustainable development, particularly those related to the economic, social, and ecological facets. As one of the variables under the economic component, the GDP growth rate only showed a significant link with the unemployment rate. Economic managers such as NEDA and DOF may examine the sectors and industries that contribute less to the GDP of the region and take the necessary action to promote additional job possibilities. To further improve their performance, which is based on sustainable development metrics, local government units are urged to work more closely with other government departments.

KEYWORDS: Economic Growth, Employment, Government Agencies, Gross Domestic Product, Sustainable Development

1.0 INTRODUCTION

The modern view of development transcends beyond an upward climb of economic figures. It is no longer commonsensical that while a certain country progresses, the gaps between the rich and the poor widen the delivery of social services still inadequate and unemployment surging.

On the other perspective, the proportion of population is increasing. This unprecedented reality results to climate change, biodiversity loss, and environmental pollution. Thus, economists and progressivists are leading the call for the urgent need to increase sustainable development of countries, down to the local government level. Concerned sectors as well encourage enabling sustainable lifestyles of inhabitants which can be fostered by developing sustainable communities as the nuclei of cities.

The focus on basic needs and equity in development has been represented by the United Nations Development Programme's series of Human Development Reports. In addition to calculating the Human Development Index (HDI) which offers a different measure of development success from per capita Gross National Product (GNP) or Gross Domestic Product (GDP), the Human Development Reports focus each year on a different aspect of social and economic development, such as democratic governance, gender inequity, and poverty (UNDP, 2015). The HDI combines life expectancy, adult literacy, and school enrolment ratios with per capita GDP in a weighted average to get an index between 0 and 1. Previous results clearly showed that development is a multidimensional process, and that higher GDP does not necessarily mean higher overall welfare. However, the HDI is an inter-2 country ranking. It is applicable to local setting as some of indicators lack sufficient data. It is therefore the contention of the researcher to have the study done locally using available measures and status.

On a different perspective, thought the Philippine Economy is vibrantly tagged in the business halls as the "Rising Star of Asia" due to its steady GDP growth. Ibon Research (2016) claimed that the Philippines have the "worst" unemployment rate in Asia despite posting a 6.9-percent growth in GDP. To site the latest labor force survey data, that registered unemployment rate in the country at 5.8 percent in January 2016. Evidently, the figures are higher than slower- growing economies like China at four percent, Vietnam at two point three percent, Indonesia at five point five percent, Malaysia at three point five percent, and Thailand at one percent. To some group of economists said growth can be a "convenient" but "misleading" indicator of development (ADB, 2010). The situation like this is making GDP an inconvenient truth. The data however reflect economic policies that have stunned

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Filipino industry and kept local agriculture backward. Thus, some sectors advocate for growth which is equitable that can be felt by the masses (ADB, 2010).

Along this light, it is significant to study the Zamboanga Peninsula Region being considered as one of the lowest contributors to country's GDP. A region in the middle of the potentially-viable but untapped or under-utilized resources in addition to lingering conflicts and security threats within the region. The region though if fully supported can be a promising prime tourist and investor destination in Mindanao and in the Philippines (ZPMTRDP, 2011-2016).

Amidst the economic, social and ecological challenges that are faced by the Zamboanga Peninsula region, there has not been concrete and independent study has been made to correlate the GDP rates of the region to the status of the region's sustainable development. Thus, in the context of inclusive growth and sustainable development, the researcher was prompted to examine the trends of GDP among the provinces within Zamboanga Peninsula Region and relate it to sustainable development

2.0 METHODOLOGY

This chapter discusses the method employed, research environment, sources of data, research instrument used, data gathering procedure, and the statistical tools used by the researchers in the study.

2.1 Method Used

The study employed the quantitative method of research particularly the descriptive-correlational research with the aid of documentary evidence from various regional government agencies.

2.2 Research Environment

This study was conducted in Zamboanga Penininsula Region. Three provinces comprised the region, to wit: Zamboanga del Sur, Zamboanga Sibugay and Zamboanga del Norte. It also included Isabela City of the island of Basilan.

2.3 Sources of Data

Considering that the present investigation involved data-retrieval works and desk review, the study employed statistics figures from various regional agencies like Philippine Statistics Authority (PSA), National Economic Development Authority (NEDA), Department of Education (DepEd), Department of Environment and Natural (DENR), Department of Health (DOH), Philippine National Police (PNP), Department of Social Work and Development (DSWD) and Department of Interior and Local Government (DILG).

2.4 Research Instrument

The study utilized documentary evidence from Philippine Statistical Authority to the GDP growth rates and the status of sustainable development of Zamboanga Peninsula Region. Supplementary data were obtained from the relevant regional offices like NEDA, DILG, DepEd, DENR, DPWH, DOH, PNP, DSWD and PSA. For the measures of sustainable development, the researcher adopted the 16 indicators of sustainable development proposed by Michael Arieh Medina (2015).

2.5 Data Gathering

The researcher sought an endorsement letter from the Dean of the Graduate School to proceed to data gathering. After, the transmittal letters were sent to the different agencies from which relevant data can be obtained. Once the go-signal is given, the researcher proceeded to data retrieval from the respective agencies.

2.6 Statistical Treatment

The collected data were subjected to statistical treatment. The following statistical tools were used in the study. Considering that data are in numeric, year-on-year comparisons were made in terms of tables and bar graphs.

Pearson-r product- moment Coefficient of Correlation. This was used to test the relationship between the GDP growth rates and development status of Zamboanga Peninsula Region. The formula found below was utilized:

Where:
Coefficient of correlation = r
Number of samples = n
GDP growth rate = x
Development rate = y

3.0 RESULTS AND DISCUSSION

This chapter presents the data in tables and graphs followed by their corresponding analysis and interpretation.

Problem No. 1. What has been the trend of the Gross Domestic Product growth of Zamboanga Peninsula Region for the Fiscal Years 2011-2015?

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An economically sustainable system must be able to produce goods and services on continuing bases. Primarily to be able to maintain levels of government and external debt and to avoid extreme sectoral imbalances which may cause damage to agriculture or industrial production? Indicators of economic sustainability are discussed below.

Table 1. Gross Domestic Product During the Year 2011-2015

Year	Gross Domestic Product(in Pesos)	Growth Rate (%)
2011	117,182,723,000.00	0.10
2012	131,695,644,000.00	12.40
2013	137,214,139,000.00	4.10
2014	146,322,231,000.00	6.50
2015	156,924,131,000.00	7.20

Presented in Table 1, is the gross domestic product of the Zamboanga Peninsula Region for the fiscal years 2011 to 2015. The table shows that in 2011, the GDP grew by just 0.10% from 2010. Despite performance in 2010 and 2011, the region's economy fuelled by a remarkable upsurge in the Industry which sector came out strong amidst a slump in the agriculture, hunting, fishery and forestry (AHFF), (PSA, 2013).

For the year 2012, the economy grew to leaps and bounds of 12.40% from a mere 0.10% of 2011. The Philippine Star (2013, July 26) heralded that Zamboanga Peninsula registered a strong 12.4% economic growth enabling it to post the fastest growth among the country's 17 regions. The impressive economic performance of the region was due to the accelerated growth of the industry and services sector whereby the region is one of the major contributors of the Philippines GDP. It grew to 6.6% as reported by the National Statistical Coordination Board (NSCB). However the GDP does not necessarily mean higher overall welfare as revealed by the HDI (UNDP, 2015).

In the year 2013, the region's GDP growth dropped to 4.10% from an impressive 2012 growth rate of 12.4% which was lesser than the national GDP growth rate of 7.1% and contributed 0.1% to the country's GDP. An economic slowdown in AHFF that contributed to only a 21.7% share as well as in the industry sector with 34.6%, and the service sector maintained its position with 43.7% in the regional economy.

On the other hand, the region's GDP growth rate bounced back in 2014 and grew to 6.50% from 4.10% of 2013 thereby contributed to 0.1% of the country's GDP of 6.1% growth rate. These gains were propelled by a mixture of industrial expansion, agricultural recovery, and sustained contribution from the service sector (Business World, 2015 August 5). Meanwhile, Zamboanga Peninsula Region (ZPR) which was beset by power and water problems as well as disruptions to law and order like the Zamboanga Seige in September of 2013 still grew in 2014 (Business World, 2015 August 5).

The GDP growth rate in the year 2015 climbed higher to 7.20% compared to 6.5% of 2014. This is attributed to an expansion even more of the industrial sector from 10.3% growth rate of 2014 to 12.1% in 2015, 5.6% to 5.7% in service sector, although a decrease from 2.9% to 2.0% in agriculture, hunting, forestry, and fishing (PSA, 2015). A close examination of the industries contributing to the region's gross domestic product shows that the service sector contributed to the growth heavily leaving the manufacturing and agriculture lagging behind. As an agricultural region and that growth is inclusive, the agricultural sector must be maximized considering that the bulk of the region's population belong to it. Support in the forms of training, capital and technology may be provided to the farmers in order to adept them with current trends and emerging challenges. Additionally, in order to achieve inclusive growth, the government needs to 58 play an active role in creating jobs by offering support to industry, since a stronger industrial sector would create job opportunities for the growing labor force.

Palvorosa, Jr. (2014), explained that there is no guarantee that the current good performance of the Philippine economy will continue and refers to a sense of déjà vu due to the fact that economy had already experienced periods of rapid growth before which went down. Among the factors which contributed to the decline included corruption, non- payment of taxes, bribery of officials for the creation of ghost projects, bureaucratic red tape, bribery, lack of financing and unsatisfactory infrastructure. The reason why in spite of the country's rapid growth, poverty rates as well as unemployment and underemployment rates are very high. Navarro and Llanto (2014) identified a number of positive features leading to economic growth in the Philippines that included anti-corruption initiatives may have permeated consciousness and have effectively influenced policymaking. They recommended heightened infrastructural investments, expanding the industrial base to create productive jobs, introducing a competition policy framework and reforming regulatory institutions.

The Global Competitiveness Report in 2014-2015, with inputs relating to the perceptions of Philippine experts, identified positive and negative features of the Philippine economy. The Philippines ranked of 33rd place since 2010 in the Global Competitiveness

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Index, which is the highest improvement among all countries included in the Index. The report claimed that this came about because of the reforms during the 2010 2014 period. The reforms bolstered the country's economic fundamentals. However the report referred to a number of major economic shortcomings including poor infrastructure facilities and severe rigidities and inefficiencies in labor market.

As identified in the Philippine Development Plan 2017-2022, growth in gross domestic product (GDP) is expected to strengthen at 7 to 8 percent in the medium term. Growth is also expected to be more inclusive, where the overall poverty rate is targeted to decline from 21.6 percent to 14 percent, and poverty incidence in rural areas to decrease from 30 percent in 2015 to 20 percent in 2022 (NEDA, 2017).

The country's environment and natural resources (ENR) are means and end in achieving inclusive growth. As a means, they provide the needed inputs and ecosystem services to sustain resource dependent communities, agriculture, industries, water supply and the energy sector, among others. As an end, the ENR sector bears both the positive and negative impacts of activities intended to accelerate economic growth. Thus, focused interventions are geared towards (a) increasing adaptive capacities of communities, (b) effectively managing ENR for sustainability and (c) improving environmental quality. These are keys towards achieving a sustainable and climate-resilient environment, which is the sector's contribution to inclusive growth.

The relationship between the GDP growth rate and solid waste generation rate exhibit a very low negligible correlation (r = 0.118). When there is minimal or even zero change at one time or another between two sets of data being correlated, there is little or no correlation at all (Zulueta & Costales, 2003). The solid waste generated by the region has no implications with the GDP growth rate status. However, the regional government made mitigations of the solid waste accumulation of the region through the Environmental Management Bureau (EMB) IX which is mandated in the implementation of the Ecological Solid Waste Management (ESWM) Act provided technical assistance to the LGUs for the open dump closure, conversion of open dump to controlled dump and identification of sanitary landfill (SLF) areas; conducted seminars/trainings about solid waste management to the LGU's; identified Material Recovery Facility (MRF) that caters to the garbage problem under the "Iwas Basura Iwas Crisis" and assisted in the cleaning of identified clogged esteros/creeks and water bodies in barangays (ZPMTRDP 2011- 2016).

4.0 SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATION

4.1 Summary

This study looked into the relationship of Gross Domestic Product (GDP) on the sustainable development of Zamboanga Peninsula Region for Fiscal Years of 2011 to 2015.

Specifically, it sought answers to the following questions;

1. What has been the trend of the GDP growth of Zamboanga Peninsula Region for the Fiscal Years 2011-2015?
2. What is the development status of Zamboanga Peninsula Region for Fiscal Years 2011-2015 in terms of:
    - 2.1 Economic
        - 2.1.1 Unemployment Rate;
        - 2.1.2 Poverty Incidence;
        - 2.1.3 Proportion of households with Electricity;
        - 2.1.4 Percentage of Pave Road Length
    - 2.2 Social
        - 2.2.1 Prevalence Rate of Underweight Children under Five Years Old;
        - 2.2.2 Under 5 Mortality;
        - 2.2.3 Contraceptive Prevalence Rate;
        - 2.2.4 Percent of Population with Access to Sanitary Toilet Facility;
        - 2.2.5 Proportion of Households with Access to Safe Drinking 2.2.6 Maternal Mortality Rate;
        - 2.2.7 Completion Rate;
        - 2.2.8 Literacy Rate;
        - 2.2.9 Cohort Survival Rate;
        - 2.2.10 Crime Solution Efficiency;
    - 2.3 Ecological
    - 2.3.1 Percentage of Forest Cover; and
    - 2.3.2 Solid Waste Generation Rate?
3. Is there a significant relationship between the GDP growth rates of Zamboanga Peninsula Region and the status of its sustainable development?

The study utilized the descriptive-correlational method of research and the use of data mining technique utilizing data gathered from various regional government agencies concerned to investigate the relationship of gross domestic product (GDP) and status

of the sustainable development of the Zamboanga Peninsula Region. Data were treated using percentage and Pearson-r coefficient of correlation.

4.2 Findings

The study revealed the following:

1. The GDP growth rates of Zamboanga Peninsula Region for the Fiscal Years 2011-2015, registered a poor performance in 2011 was 0.10% strong in 2012 at 12.40%. It fluctuated in 2013 at 4.10%. In 2014(6.50%) it was higher again even higher in 2015 at 7.20%. The slowest registered 0.10%. The highest growth was in 2012 when it reached 12.40%.
2. The unemployment rate of the Region from the year 2011at 3.20% to 2015 at 3.50% more or less was steady.
3. The poverty incidence rate of the Region from the year 2011 was 45.8% to 2015 (33.9%) decreased.
4. The proportion of households with electricity of the Region from the year 2011 at 65.40% to 2015 at 71.0% was slightly increased.
5. The percentage of paved road length of the region from the year 2011 at 70.64% to year 2015 was 73.16% was consistent in implementation.
6. The prevalence rate of underweight children under five years old of the region in the year 2011 was 25.20%, to the year 2015 was 21.50% was decreased as well as the mortality rate of children but contraceptive prevalence rate increased. On access of sanitary toilet and access to safe drinking water, maternal mortality rate indicate a downward pattern.
7. Along the completion rate of the region in the elementary level from the year 2011 at 58.28% to the year 2014 at 60.78%. It was rising and surge in the year 2015(92.86%). While the literacy rate of the Region from the year 2011 at 94.0% to the year 2015 (96.0%) exhibited a superior and increasing. On the other hand the cohort survival rate of the Region from the year 2011 was 60.93% to the year 2014 was 62.53% was rising high in the year 2015(92.86%).
8. The crime solution efficiency of the Region from the year 2011 was 33.53% to the year 2015 was 29.20% was unpredictable.
9. The percentage of forest cover of the Region from the year 2011 was 12.10% to the year 2015 was 12.10%. This is under DENR protection and conservation.
10. The percentage of solid waste generation rate of the region from the year 2011 1.75% to the year 2015 at 1.69% exhibit a slight decrease.
11. There was a significant relationship between GDP and unemployment rate. But only moderate correlations with the poverty incidence rate. There se no significant relationship between GDP with percentage of households with electricity and percentage of paved road length. As well as in the social sustainable development indicators like GDP and percentage of underweight children under five years old, under five mortality rate, contraceptive prevalence rate, percentage of population with access to sanitary toilet facility; proportion of households with access to safe drinking water maternal mortality rate, completion rate, literacy rate, cohort survival rate and crime solution efficiency. There was also no significant relationship along ecological sustainable development indicators namely, percentage of forest cover and solid waste generation rate.

4.3 Conclusions

The following conclusions are hereby drawn:

Generally, the trend in GDP growth rate is promising tracing it from 2011 until the present.

This is evident as sustainable development indicators show a stable status in the unemployment rate, decreasing poverty incidence, increasing household with electricity, more roads are available for people, decreasing rate of underweight children too. There is widespread decrease of mortality rate under five years old, and awareness to family planning as well as improvement of maternal mortality rate being minimized or lowered and drive on solid waste reduction and recycling are quite satisfactory. However, there is much to be desired in terms of potable water, toilet facility, and crime solution efficiency.

These three are until today pressing problems.

Finally with the implementation of the 4P's program by the government which influenced the increase in completion rate, literacy rate and cohort survival rate, quality of life of people in this part of Mindanao and the young generation are secured. By keeping young people in school, education unarguably can shape their future as education equip individual, society with skill perspective, knowledge values to live and work in a sustainable manner.

4.4 Recommendations

In light of the findings and conclusion of the study, the following recommendations are hereby offered:

1. Policymakers and Planners are encourage and challenge to craft policies and strategies that would generate high GDP growth, would take high GDP growth sustained for several years to have positive impact on unemployment and poverty reduction situation and how to sustain such growth, for high GDP growth do not immediately translate to poverty reduction.

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2.Economic managers like NEDA and DOF may review the sub-sectors in industry, service, and agriculture, forestry, and fishery sectors contributing less to the region's GDP and make appropriate intervention for its further development.
3. Department of Labor and Employment- Region 9 are encouraged to craft more employment opportunities like job fair in every provinces annually to further lessen the unemployment rate.
4. The DSWD are encourage to continue and enhanced more the 4P's as a flagship in eradicating extreme poverty and hunger, in achieving universal primary education, in promoting gender equality, in reducing child mortality, and in improving maternal health.
5. The Department of Energy (DOE) and National Electrification Program (NEA) are encouraged to continue perpetually with its program of electrification to more bouseholds and far flung areas of the region.
6. Various regional agencies that caters to the sanitation of the populace environment specifically access to sanitary toilet are encouraged to look into this dilemma and initiate programs that would increase its usage.
7. Water utility providers are encouraged to build more infrastructures and expand their water supply projects and improvement of water system so as to address decreasing access to safe drinking water of the region.
8. The Philippine National Police are encouraged to improve its visibility and intelligence service to lessen crime statistics and enhance its investigative capability to increase its crime solution efficiency.
9. Local government units are encouraged to work more in partnership with other government agencies to improve farther their performance in governance and the rule of law which is anchored on sustainable development indicators. Furthermore, the Ecological Solid Waste Management Act should be fully implemented in order to decrease solid waste generation rate and decrease the volume of solid waste.
10. DENR officials in partnership with the LGUs and Non Government Organizations (NGO's) are encouraged to enhance more in the co-management of forest lands and proposed watersheds, undertake forest renewal activities through establishment of new plantations in identified priority watershed areas and its tree-planting program and more protected areas should be established so as to improve more the percentage of forest cover in the region.
11. Researchers are encouraged to replicate this study in a wider perspective.

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