

“BUILD-BUILD-BUILD” VERSUS SUSTAINABLE DEVELOPMENT: A CRITICAL EVALUATION ON THE COMPLIANCE OF TAGUM CITY FLYOVER PROJECT WITH THE PHILIPPINE ENVIRONMENTAL IMPACT**STATEMENT SYSTEM**

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ABSTRACT

The study was conducted to determine the status of compliance of the Tagum City Flyover Project with the conditions stated in the environmental compliance certificate (ECC). In order to generate meaningful discussions, desk review was done to perform the SWOC analysis. A survey was also administered to sixty respondents who are local residents, commuters, and drivers in the city.

The results of the study revealed that some of the conditions covered in the ECC are not complied yet while others seem to be not applicable yet due to the nature of the project that is terminal. On the level of perceptions of the respondents about the project, social impact and economic impact generated extreme agreement with a mean score of 4.64 and 4.52 respectively. On the other hand, the respondents demonstrated moderate agreement only on the environmental impact with a mean score of 4.33. When grouped according to type of respondent, the study found out that among three aspects of assessment, only the social impact illustrated a significant difference of perceptions among the respondents with a P-value of 0.019 which is lesser than 0.05 level of significance. Finally, the study was able to generate literature on the strengths, weaknesses, opportunities, and challenges that can be attributed to the Tagum City Flyover Project.

KEYWORDS:

Build-build-build, Sustainable development, Environment, Environmental Compliance, Social, Economic, Environmental Impacts

INTRODUCTION

Good infrastructure has been an important indicator of development especially among developing countries. It enables a fast-tracked economic prosperity in any region where roads, bridges, ports, and traffic management are first-rate. But realistically, infrastructure is one of major concerns that have been elapsd and set aside by many governments in a growing country. The Philippines, for one, suffers from unemployment and poverty due to poor infrastructure (Mawis, 2018). But not only that. According to Heydarian (2018), infrastructure has been a major source of concern for foreign investors, who have been discouraged by the country's weak infrastructure and heavy utility costs. Thus, the President of the Philippines, Rodrigo R. Duterte initiated the Build Build Build Program which seeks to accelerate infrastructure spending and develop industries that will yield robust growth, create jobs, and improve the lives of the Filipinos, he added.

It is by this sense that the Philippines today is in the forefront of many investors because of a positive perception in infrastructure development that has been neglected in the past. In Mindanao, alone, a number of infrastructure projects have taken place that have never been seen in the past. This is a major break for the regions in the island. As defined in the Mindanao Strategic Development Framework, in the overall scheme of national development, Mindanao is seen as the country's agri-industrial center because of its many potentials in both agriculture and industry. According to NEDA (2010), the framework highlights the island's economic and human development aspirations that are expected to be achieved and buttressed by the island's rich natural resources, competitive human resources, and strong public and private cooperation. In a report by Agcaoli (2018), the Duterte administration is focusing on a massive infrastructure build up in Mindanao after a study conducted by World Bank which showed that further economic growth would be futile unless the region is also developed alongside other regions.

It is for this very reason why a number of construction are visible throughout the island. One of the most notable ones is the Tagum City Flyover Project that started in 2017. It is a 4-lane flyover being constructed above the

Davao-Agusan national highway, particularly on a 1.07-kilometer portion which cuts across the central business district of the city or along Daang Maharlika passing through strategic intersections in the city as it is a convergence point of all vehicular traffic coming from neighboring cities and municipalities (Ajero, 2019). With its budget amounting to 3.2 billion, the project is hoped to be finished by December, 2019 and may be used by the public in February, 2020. By this project, many opportunities await for Tagum City especially in business sector.

The LGU plays a vital role in ensuring the expeditious and efficient implementation and completion of the flyover project so that the public may immediately enjoy its social and economic benefits. While the project being constructed may aggravate the traffic condition, it is a necessary burden that Tagum City residents must bear temporarily in exchange for the long-term benefits. With political will among officials and cooperation among stakeholders, the flyover project will be soon a reality. The DPWH meanwhile is committed to do whatever it can under the law to help in the full realization of the flyover project. Indeed, Tagum's traffic woes will finally be lessened by allowing the construction of the flyover (Manalo, 2019).

But despite the economic benefits that the project will generate, there are certain environmental policies that need to be considered. To address the negative impacts that the project can bring to the surrounding environment, the project needs to comply with the environmental impact assessment and eventually secure an ECC or Environmental Compliance Certificate. According to DENR-EIAMD (2007), the PD 1586 and DAO 03-30 provides the threshold by which construction of roads and bridges or any development projects should be subjected to environmental impact assessment. Fortunately, the Department of Public Works and Highways (DPWH) XI, which is the main proponent of the project, was able to secure the ECC (ECC-OL-R11-2018-0004) on January 10, 2018. This document was issued by the Environmental Management Bureau with the expectation that the proponent will implement the measures presented in the Initial Environmental Examination Checklist (IEEC) intended to protect and mitigate the project's adverse impacts on community health, welfare and the environment.

It is therefore necessary to evaluate the status of compliance of DPWH on the conditions stated in the ECC with the end in mind that the Tagum City Flyover Project is inherently an environmentally critical project. This critical analysis and evaluation covered the economic, social, and environmental dimensions of the project.

OBJECTIVES

This study was conducted to evaluate the status of Tagum City Flyover Project in terms of compliance to the conditions of Environmental Clearance Certificate (ECC) issued to them. Particularly, it answered the following questions:

1. What is the status of the project's compliance to the ECC conditions?
2. What are the strengths, weaknesses, opportunities, and challenges attributed to the project?
3. What is the perception of the respondents on the impact of the construction of the project in terms of social, economic, and environmental dimensions?
4. Is there a significant difference on the perception of these dimensions according to the type of respondents?

METHODOLOGY

The study utilized descriptive method which involved collecting information through data review, surveys, interviews, or observation. This type of research best describes the way things are (Gay, 1987). Likewise, a causal-comparative design was used to find relationships between independent and dependent variables after an action or event has already occurred (Salkind, 2010). In this study, this was used to test the significant difference of variables when grouped according to the profile of respondents. Mean, percentages, and analysis of variance (ANOVA) were applied in the statistical analysis for objectives three and four while comprehensive desk review and SWOC Analysis were performed to answer the objective number two. A total of 60 respondents were chosen through convenient sampling to answer the survey instrument which contained 4 sections namely; profile of respondents, level of social impact, level of economic impact, and level of environmental impact and compliance. To interpret the responses, the following Likert type scaling (Vagias, 2006) was used:

Table 1: The scale, range, level, and interpretation of responses

| Scale | Range | Level | Interpretation |
|-------|-----------|---------------------------|---|
| 5 | 4.51-5.00 | Strongly agree | If the item stated depicts extreme agreement |
| 4 | 3.51-4.50 | Agree | If the item stated depicts moderate agreement |
| 3 | 2.51-3.50 | Neither agree or disagree | If the item stated depicts average agreement |
| 2 | 1.51-2.50 | Disagree | If the item stated depicts slight agreement |
| 1 | 1.0-1.50 | Strongly disagree | If the item stated depicts no agreement |

On the other hand, to answer the objective number 1, key informant interview via telephone was conducted. The informant came from the pollution control officer / design and planning officer of the Department of Public Works and Highways (DPWH) who is the proponent of the project.

RESULTS AND DISCUSSION

The following is the discussion of the results of the study. The analysis is presented in chronological order according to how they are presented in the statement of the problem.

Status of compliance of Tagum City Flyover Project to the conditions of the ECC. The project was eventually issued with Environmental Compliance Certificate. This is an indication there is a high probability that it would have impact towards the environment. But to mitigate or reduce the impact of the project, certain conditions were set which need to be complied. These conditions are a product of research and public consultations. The following table shows the matrix of conditions versus status of compliance.

Table 2. The Project's Status of Compliance to the ECC Conditions

| ECC Condition | Status of Compliance (Yes or No) |
|--|----------------------------------|
| That the proponent shall conduct an effective Information, Education and Communication (IEC) Program to inform and educate all stakeholders, especially its contractors, workers, and local residents about mitigating measures embodied in its IEEC, the conditions stipulated in this Certificate and the environmental and human safety features of the project for greater awareness, understanding and sustained acceptance of the project; | No |
| That all applicable permits and clearances shall be secured from this Office, other concerned national and local government offices prior to project implementation | Yes |
| That the operation of the project shall conform with the applicable provisions of EMB mandated laws and their corresponding Implementing Rules and Regulations to include but not limited to the following, to wit: RA 6969, RA 9003, RA 8745, RA 9275 | Yes |
| That hauling trucks should be covered with canvass to prevent debris from falling and prevent any untoward accident | Yes |
| That any damage arising out from the project implementation shall be the responsibility of the Proponent or contractor to pay just and reasonable compensation to the aggrieved parties | NA |
| That as much as possible all road-related activities should be done during daytime in order not to disturb people in the neighbourhood | No |
| That the Road Right of Way shall be secured prior to the project implementation | Yes |
| That the Proponent shall see to it that copy of this ECC shall be furnished to all agencies/offices concerned and Local Government Unit (LGU) concerned within one (1) month from receipt thereof. A certification shall be submitted by the Proponent to EMB XI that said copy has been delivered and duly stamped as received by the concerned agencies/offices | Yes |
| That this Certificate shall be automatically expires if the project ceases to operate for more than five (5) years or fails to start within (5) years from the issuance thereof | NA |
| That three (3) months prior to the abandonment, the Project Proponent shall notify this Office of such action and shall submit therewith their abandonment mitigation plan | NA |
| No activities shall be undertaken other than what were stipulated in the IEEC. Should there be any expansion of the project beyond the project description or any change in the activity or transfer of location shall be subject to a new Environmental Impact Assessment | NA |
| In case of transfer of ownership of this project, these same conditions and restrictions shall apply, and the transferee shall be required to notify the EMB XI within fifteen (15) days from the transfer of ownership to allow the necessary changes brought about by such transfer. | NA |

The conditions stated in the Environmental Compliance Certificate are part of the Environmental Management Plan that need to be complied before, during, and after the completion of the project. The compliance to these conditions are reported and monitored by the proponent (DPWH XI) through biennial submission of Compliance Monitoring Report to the Environmental Management Bureau XI (EMB). In the case of Tagum City Flyover Project, the project is currently on construction phase. Hence, the conditions need to be complied and reported accordingly.

As per key informant interview with the Pollution Control Officer and Planning and Design In-charge of DPWH XI, no Compliance Monitoring Report was prepared or submitted yet to the EMB XI. Hence, the assessment of compliance is purely based on the response of the key informant.

As shown in table 2, some conditions are not yet complied, while others are not yet applicable due to the nature of the project. At this point, the agency or the proponent of the project is still completing its reports in order to show compliance to the PD 1586 or the Philippine Environmental Impact Statement System.

The Strengths, Weaknesses, Opportunities, and Challenges Attributed to the Project

By looking into the internal and external forces that shape the overall attribute of the Tagum City Flyover Project, one can immediately understand the profile of the project. Hence, an assessment of the strengths, weaknesses, opportunities, and challenges was conducted with the following results:

Strengths. Tagum City is a fast growing city in the Philippines and progressive city among the southern cities of Mindanao. According to Gerochi and Villacorta (2004), it is now identified as the center for trade and commerce in Davao del Norte. The Tagum City Flyover Project will be the longest flyover among Visayas and Mindanao Regions. The location of the flyover is also very strategic as it is passing through intersections of the city which will become a convergence point of all vehicular traffic coming from the neighboring cities and municipalities. Since Tagum is a very strategic location, it is fast becoming a vital economic player in Southern Mindanao. Hence, it needs to widen roads or add road that would make it an efficient city and become a major choice for investors. The project would be able to address solutions to the growing vehicular traffic that Tagum City is currently experiencing. Implementing flyover is one of the best way to minimize the traffic since Tagum city is quite populated in Davao Region. It could be easy to the pedestrians to pass through fly over, since most of the time, people are fan to go in different malls in Tagum city where the fly over is nearly situated. It is also big advantage to the business industry, because there will be more customers that could do shopping in different malls. Finally, Ulticon is the contractor of the Tagum Flyover project who won the bidding. It is categorized by the Philippine Contractors Accreditation Board as a Triple A or "AAA" contractor and prides itself as an ISO accredited company.

Weaknesses. According to Llemit (2019), the flyover project was strongly opposed as it will destroy the aesthetic view of the city. Many businessmen opposed the project, saying that the profitability of their businesses will be adversely affected. Business establishments near the vicinity of the construction site criticize the dust haze building up in the area among other complaints. A lot of people/motorist suffer due to the said construction. Delivering of transported goods may have a result to a delay in delivery due to the inconvenience road and plenty of vehicles passing through the said project. Tagum city is suffering from terrible traffic and sometimes a muddy place by the construction of flyover.

Opportunities. Achieving industrialization and being recognized as one of the top cities in the Philippines is not an easy thing to do. Tagum City aimed to be one of those recognized region. Opportunities from this project mostly occur in the long run. The following are the opportunities occur by having the Tagum City Flyover Project. The flyover project would provide more work in the city. More investors will be interested in Tagum's economy. Thus it will provide growth to the Philippines. The Flyover will provide better inter-regional linkage between neighboring regions (Regions X, XI, and XIII). This will surely benefit not only Tagum, but also the neighboring municipalities and cities. Vehicles from neighboring municipalities and cities can go to their destinations without crossing the busiest intersection in the city. Investments will improve access and facilitate the growth of enterprises. Davao City's strategic location within the East ASEAN Growth Area will further boost its prospects for economic expansion given that it sits right at the nexus of blossoming trade routes and tourism centers linking the rapidly growing areas of Brunei, Indonesia, and Malaysia. The 'Build, Build, Build' program's massive investments in infrastructure in this region anticipates the long growth phase. Duterte administration's tax reform program and its efforts to improve the ease of doing business will further reduce red tape and simplify business registration, the government will also carry out various e-governance initiatives to improve trading procedures and support micro, small and medium enterprises in Tagum City. It will provide meaningful employment opportunities and create the goods for the people in Tagum City and people from the Province won't need to go to Davao City just to find job. Tagum City is also eyed to be the site of the new airport that will be constructed in the region. A well-developed road network makes it possible to transport goods at a lower cost. . Traders will eventually exploit transportation scale economies by locating themselves at places convenient for them to collect, transport and distribute goods at a lower cost. A lot of businessman wants to invest in Tagum City for the reasons that they see the place in Tagum City have a lot of people living and the economy is developing well. According to the 2015 census, it has a population of 259,444 people. It is the most populous component city in Mindanao. Thus, it helps other people to have their job on the said flyover project.

Challenges. Alvarez loss the House speakership might affect the operation of the project. Speaker Alvarez allegedly corruption in the said project might affect the operation of the project. Many businessmen are affected by the construction of the Flyover. Businessman has contributed significantly to the economy through the tax they pay to the government. It will affect the business or shall we say the source of income to finish the government and DPWH project which is the Tagum City flyover. Private geologist confirms the fault line under

the Daang Maharlika Highway where the project is built. Lastly, the end of term of Duterte administration might pose a huge threat to the said project.

The Tagum City Flyover Project involves diverse challenges, especially because of the project's different issues which include environmental, social, governmental and political forces. The construction of flyover faces issues such as Tagum city is suffering from terrible traffic and sometimes a muddy place by the construction of flyover. Delivering of transported goods may have a result to a delay in delivery due to the inconvenience road and plenty of vehicles passing through the said project. If businesses would divert into other way, by this time it would be costly for the reason that gasoline consumption and the distribution would timely increase. Many businessmen opposed the project, saying that the profitability of their businesses will be adversely affected. The flyover controversy is often discussed in traditional and social media, with residents, motorists, and operators of business establishments near the vicinity of the construction site criticizing the dust haze building up in the area among other complaints. A lot of people/motorist suffer due to the said construction. Furthermore, the flyover project was strongly opposed by former Tagum City Mayor Rey T. Uy, as it will destroy the aesthetic view of the city (Llemit, 2019). Based on the current condition of the Tagum Flyover Project, some of the most concerns enumerated in this SWOC analysis of the project are the corresponding threat of alleged corruption of the House Speaker Alvarez, the threat of fault line under the Daang Maharlika Highway where the project is built. Lastly, the end of term of Duterte administration might pose a huge threat to the said project.

Despite many issues facing the project, to positive thinkers the project will be a big break to the city. It will not only boost the economy but it will also help other people to have their job on the said flyover project. And because of this project, there's a lot of investors want to invest in the City and it will help the economy in the City. The flyover will improve the transportation of both public and private vehicles in the connecting Municipalities and it will help to avoid heavy traffic in the future. For now, there's a lot of people/motorist suffer due to the said construction. But at the end of that, it will be all worth it to build that flyover in the city (Fayejaye, 2019).

Perception of the stakeholders on the impact of the construction of the project in terms of social, economic, and environmental dimensions

The following shows the results and discussion of survey that was conducted in Tagum City. Analysis was divided into the type of respondents, perceptions on social, economic, and environmental impacts of the construction project.

Type of Respondents. Table 3 shows the total number and types of respondents who participated in the survey. It can be inferred that among the sixty respondents, most are commuters who are private employees or persons with 40 per cent share. It was followed by student commuters and tricycle drivers with 9 per cent share. The lowest number however is PUV driver with only one participant or 1.7 per cent share.

Table 3. Distribution of Types of Respondents of the Survey

| Transport | Frequency | Percentage |
|----------------------------------|------------------|-------------------|
| None | 2 | 3.3 |
| student commuter | 9 | 15 |
| employee private person commuter | 24 | 40 |
| ambulant vendors/store owner | 3 | 5 |
| tricycle driver | 9 | 15 |
| PUJ driver | 2 | 3.3 |
| bus driver | 3 | 5 |
| PUV driver | 1 | 1.7 |
| private vehicle | 4 | 6.7 |
| Others | 3 | 5 |
| Total | 60 | 100 |

Social Impact. Shown in Table 4 is the distribution of respondents' perception in the social impact of the project. Social impact means the extent by which the project has affected the daily personal activities of the respondents in the area. For (Wang, et, al. (2016), social impacts of construction projects refer to certain social consequences to human populations of construction projects that change the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as members of the society. The survey revealed that on the overall analysis, there is a strong agreement on the perception of the respondents in terms of the social impact with the overall mean score of 4.607 and a standard deviation of 0.52. It can therefore be explained that respondents in Tagum City have a strong belief that the project will transform their daily living into more convenient, free from traffic jams, having more time to connect with friends and relatives, and improved access to service delivery of the local government unit like 911, emergency response, and the like.

Table 4. Distribution of the Respondents' Perception on the Social Impact of the Project

| Item | Mean | Std. Deviation | Description |
|--|---------------|----------------|-----------------------|
| The project is highly appreciated by Tagumeno's. | 4.7627 | .53624 | Strongly agree |
| The project will make day-to-day activities more convenient for drivers and commuters. | 4.5254 | .87801 | Strongly agree |
| The project will ease the traffic jam in the city. | 4.5763 | .77021 | Strongly agree |
| The project will allow me to connect with family and friends easily. | 4.5085 | .77399 | Strongly agree |
| The project will improve the service delivery of the local government unit | 4.8305 | .42151 | Strongly agree |
| Overall | 4.6407 | .52098 | Strongly agree |

Economic Impact. New roads also boost a community's economy (Burger, 2016). Improving transportation networks provides economic benefits to nearby properties. By reducing the time it takes to travel, people in local communities can reduce fuel costs and vehicle depreciation. Using basic urban economic theory (Fujita, 1989), these cost savings benefit local property values. In other words, property values increase when you build up the surrounding infrastructure. The perception of the respondents demonstrate analogous description about the economic impact of the Tagum Flyover Project. As shown in Table 5, the respondents strongly agree on the economic benefits and opportunities that the project will bring about the city and its citizens with an overall mean score of 4.52 and a standard deviation of 0.64. This perception can be translated into attracting more investors in the city, creation of jobs for the local residents, increased income of the city, and more business opportunities for ambulant vendors and other informal business sectors.

Table 5. Distribution of the Respondents' Perception on the Economic Impact of the Project

| Item | Mean | Std. Deviation | Description |
|---|---------------|----------------|-----------------------|
| The project will uplift the economic status of Tagum City. | 4.5763 | .62155 | Strongly agree |
| The project will invite more investors in Tagum City. | 4.5763 | .69984 | Strongly agree |
| The project will create more jobs in the city. | 4.5833 | .74314 | Strongly agree |
| The project will increase the income of the city. | 4.5593 | .74905 | Strongly agree |
| The project will provide opportunities for ambulant vendors and informal business sector. | 4.4237 | 1.02054 | Agree |
| Overall | 4.5233 | .63789 | Strongly agree |

Environmental Impact. According to Tsunokawa and Hoban (1997), roads often bring significant economic and social benefits, but they can also have substantial negative impacts on communities and natural calamities. A huge amount of consideration should be made in the issue of pollution. Marzuok, et al. (2017) mentioned that environmental pollution is considered to be one of the main concerns in the construction industry. They added that environmental pollution has become a major challenge to construction projects due to the huge amount of pollution caused by construction projects. As a matter of fact, there are different types of environmental impact indicators, such as the greenhouse gas (GHG) footprint, eutrophication potential (EP),

acidification potential (AP), human health (HH) particulate, ozone depletion, and smog. Each of these environmental impact indicators can be linked to different phases of the construction projects. As to the perception of respondents, Table 6 reveals the deliberate observation of the respondents in which environment is seen as at stake even by the construction of the flyover. The overall mean score of 4.39 and a standard deviation of 0.80 only shows that the respondents have a minimum agreement on the environmental aspects of the project. This can be translated to observations that the project may somehow pose yet minimal impact towards the environment.

Table 6. Distribution of the Respondents' Perception on the Environmental Impact of the Project

| Item | Mean | Std. Deviation | Description |
|--|-------------|-----------------------|--------------------|
| The project shows the Environmental Clearance Certificate from DENR. | 4.2712 | 1.17195 | Agree |
| The project will not introduce floods in the future. | 4.4576 | .89678 | Agree |
| The project will not harm the environment in Tagum City. | 4.4833 | .83345 | Agree |
| The project complies with the solid waste management. | 4.3559 | .86628 | Agree |
| The project did not cause air and water pollution. | 4.339 | .99326 | Agree |
| Overall | 4.39 | .80290 | Agree |

Test of Difference on the Perception of According to Types of Respondents

Table 7 indicates that among the three aspects of assessment namely social impact, economic impact, and environmental impact, only the social impact has a significant difference of perceptions among the respondents with a P-value of 0.019 which is lesser than 0.05 level of significance. This means that among the respondents, private persons or employee commuters, tricycle drivers, bus drivers, and private vehicle owners displayed a high level of perception on the social impacts of the flyover project compared to student commuters, ambulant vendors and store owners, PUJ drivers, and others. This somehow shows that in terms of social benefits, the respondents have varied perceptions compared to the economic and environmental impacts. This finding is somehow supported by the study of Cascajo (2005) when she concluded that in many cities rail urban projects (tram, metros and light rail systems) seem the optimal option in getting a sustainable mobility for the growing urban population. These kind of projects provide a modern image of the city, among other benefits. She added that social utility is higher than the economic and environmental benefits in most cases.

Table 7. Test of Significant Difference of Perception According to the Type of Respondents

| | Type of Respondents | Mean | F Value | P value |
|----------------------|----------------------------------|--------|---------------------|---------|
| Social impact | None | 4.1 | 2.602* | 0.019 |
| | student commuter | 4.4 | | |
| | private person employee commuter | 4.7043 | | |
| | ambulant vendors/store owner | 4.2 | | |
| | tricycle driver | 4.93 | | |
| | PUJ driver | 5 | | |
| | bus driver | 4.8 | | |
| | private vehicle owners | 4.9 | | |
| | others | 3.9333 | | |
| Economic impact | none | 4.4 | 0.79 ^{ns} | 0.614 |
| | student commuter | 4.2889 | | |
| | private person employee commuter | 4.5083 | | |
| | ambulant vendors/store owner | 4 | | |
| | tricycle driver | 4.6222 | | |
| | PUJ driver | 5 | | |
| | bus driver | 4.8667 | | |
| | private vehicle owner | 4.85 | | |
| | Others | 4.6 | | |
| Environmental Impact | none | 2.8 | 1.848 ^{ns} | 0.09 |
| | student commuter | 4.4444 | | |
| | private person employee commuter | 4.5667 | | |
| | ambulant vendors/store owner | 3.8667 | | |
| | tricycle driver | 4.1556 | | |
| | PUJ driver | 3.9 | | |
| | bus driver | 4.8 | | |
| | private vehicle owner | 4.75 | | |
| | Others | 4.4667 | | |

*-significant at 5% level

ns - not significant

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CONCLUSION

Sustainable development is always a measure of balance between development and environment. Infrastructure projects like roads and bridges may uplift the economic valuation of a certain place but it has to take into consideration the primacy of environment. With the foregoing discussions, it can be concluded that the Tagum City Flyover Project has a probability to have a negative impacts towards the environment. It is therefore necessary to comply with the conditions stated in the environmental plan of the Environmental Compliance Certificate. These conditions should seriously complied in order to mitigate the adverse impact of the project towards the environment. Meanwhile, it is also important to take into account the perceptions of the stakeholders of the city in terms of social, economic, and environmental aspects. Although the project can

generate higher social benefits, the economic and environmental dimensions should also be given due attention if sustainable development is to be achieved.

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