

Development of a Government Center Site Selection Model: Spatial Transformation in Abra De Ilog, Occidental Mindoro

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ABSTRACT

In the Philippines, where the country is susceptible to poverty due to various risks, there is a shift in urban development that presents investment possibilities. However, due to the inevitable rapid and poorly planned urban design, many cities face this problem, especially in areas with extensive poverty. Urban design plays a significant role in proper planning to address poor urban development. In connection to this, improper site selection can create a lot of issues in the city in the future. This may result in higher population density and unplanned expansion, increasing the risk of poverty and disasters.

Abra De Ilog in Occidental Mindoro is one of the municipalities that is facing these challenges. The city is working to address these issues to enhance its urban environment due to existing risks that include accessibility problems, insufficient space, and mobility issues stemming from congestion and improper planning. To address this problem, site selection criteria will play a pivotal role in planning the city, resulting in effective planning and optimizing resources of the city.

Moreover, the municipality plans to build a new government center to ease the challenges faced by the citizens due to poor and rapid urbanization. Abra De Ilog will adapt the Spatial Transformation Strategies to carefully plan the new government center. The city aims to become top in sustainable development. This involves growth that prioritizes eco-friendly solutions and sustainability to enhance the environment, economy, and quality of life in the municipality of Abra De Ilog.

Keywords: Abra De Ilog, urban design, urban development, site selection criteria, spatial transformation strategies

INTRODUCTION

Urban transformation presents challenges in the societal, economic, physical, institutional, and environmental aspects of the transformed space. With this trend of urbanization, it is rapidly materializing globally, particularly in Asia. By 2050 the expected urban growth of Asia is 64%, contributing significantly to the economic growth and GDP. According to the statistics, the gradual conversion of rural areas to urban sites and urbanized populations shows a consistent increase in the Philippines. Moreover, with the help of Site Selection Criteria and Spatial Transformation Strategies, it may resolve the problem of poor urban planning of the Municipality.

In connection with the poor planning and rapid urbanization. The Municipality of Abra De Ilog, in the province of Occidental Mindoro plans to urbanize and establish a new government center due to poor urban planning of the city. The current government complex is situated in the town center, where the space is limited, and traffic congestion, and inadequate infrastructure pose problems. Moreover, the existing center is located in a hazardous area, jeopardizing the safety of the users during typhoons and heavy rains, reducing the physical utility of the complex. Concerning the public service delivery in the municipality, it may also impact the economic well-being of the district closely connected to its services. In addition, the

existing government complex is in a deteriorating state due to ineffective comprehensive spatial planning.

The new government complex aims to tackle the aforementioned issues concerning the economic, physical, and environmental aspects of the existing government complex. The study aims to produce criteria for the creation of a new government in Abra De Ilog, Occidental Mindoro. The proposed new government center also seeks to provide an improved working environment for the users. The site will be selected through site selection criteria employing spatial transformation strategies that may resolve the problem that the municipality of Abra De Ilog is facing.

LITERATURE REVIEW

Urban Transformation

Urban transformation is the sum of integrated and comprehensive approaches, actions, and strategies implemented to improve the social, economic, environmental, and physical conditions of urban space that experienced collapse and degradation. This is the result of prominent changes in structures, cultures, and practices of urban systems which alter the manner through which the system delivers service and operates. (Holscher & Frantzeskaki, 2021).

Urbanization

Urbanization is the alteration of the environment to maintain or establish urban spaces (Elvidge et al., 2004). There are numerous theories and definitions regarding urbanization. According to Tisdale (1941), it is defined through two ways:

- 1) It is the wide spread of urban ideas in surrounding areas
- 2) It is the increase in urban-related issues

Moreover, urbanization is defined by Seto et al. (2013) as a multifaceted process that can show itself as people populations and quickly shifting land cover.

Site Selection

The process of choosing an appropriate site as stated by Kabir (2020) emerges as a fundamental and critical decision that demands comprehensive consideration in the initial phases of the project. The concept of site selection criteria includes measures meticulously or a set of standards employed to ultimately decide and evaluate a fitting location for the project development. The diverse range of criteria can include factors such as accessibility, geographical considerations, environmental impact, and infrastructural compatibility.

Site Criteria

Location

One of the crucial criteria in selecting a site is the geographical location, it impacts the practicality and contextual relevance of the research. The location is defined as the position or place of something. This concept includes factors such as site survey, geographic location, site boundary, aerial photographs, and dimensions. There are various considerations, including whether traffic levels are tolerable, whether the location or site is accessible to the target audience, and whether the location is visible to the public (Archimash, 2021).

Accessibility

Accessibility has the potential to prevent possible conflicts related to the equipment and make easy transportation throughout the entire project. Furthermore, it guarantees the availability and safe operation of all on-site equipment, including cranes, excavators, and trucks. The assessment of accessibility is managed manually, relying on the expertise of the

planners. Nevertheless, the evaluation must address spatial and temporal information, therefore making manual assessments is exceptionally challenging to the planner (Lin et. al., 2013).

Socio-economic needs

Socioeconomic needs are crucial in understanding the principles in planning a government center. The interconnection between economic activity and social behavior informs decisions on services, infrastructure, facilities, and services. It can provide quality education for the citizens, ensure access to healthcare services, and create suitable homes for the users. This also applies to the wellness and benefits of the citizens. A government complex should have all these qualities. These considerations can contribute to fostering a thriving community within the government center, where everyone can meet their requirements, ensuring a decent standard of active societal participation and living (Tarver, 2022).

Site condition

Site conditions are also one of the fundamental criteria in site selection criteria, this includes a lot of factors such as infrastructure, environmental features, and existing topography. Evaluation of the site ensures the location and whether it aligns with the practical requirements of the research, influencing the overall implementation and success of the study. The availability of essential utilities is critical and plays a big role in site conditions such as sewer, electricity, gas, water, phone, and other services that are viable to the project. The level of maintenance required for the site, encompassing factors like drainage, topography, geotechnical issues, and retaining walls, must be thoroughly evaluated. Zoning regulations also play a big part in site conditions and whether the project is aligned with the permitted land use for the designated area. These comprehensive evaluations can contribute to the holistic understanding of site conditions (Archimash, 2021).

Development cost

Development cost is crucial in site selection criteria, it encompasses the financial implications associated with utilizing a particular site for research. Furthermore, the development cost ensures efficiency and feasibility while contributing to the comprehensive understanding of the economic dimension of the chosen site. It underscores the importance of evaluating the comparability and reasonableness of the lease rate or purchase price in relation to similar sites of quality and comparable age (Archimash, 2021).

Legalities

Legalities consider a lot of factors such as permits, land-use regulations, and compliance with local laws. Adhering and understanding legal frameworks to ensure the ethical and lawful conduct of the research, fostering relevance and credibility in the academic research (Archimash, 2021).

Environmental sustainability

Environmental sustainability plays a big role in innovation it is identified as a pivotal catalyst for sustainability. The integration innovative practices seen as a means to bolster mitigate environmental impact, economic performance, generate social benefits impact in construction projects. The effective implementation of innovation serves as the driving force in sustainability goals (Zhang et al., 2023).

Spatial transformation

Spatial transformation is the key to connecting physical and social space. It encompasses the networks linking spaces and daily routine designated for work and leisure. Spatial planning strategies emerges as a tool in driving the quality of life and elevating sustainable development (Lefebvre, 1991).

Urban design and its influence

Urban design is not only well-design structures but the spaces between landscape elements and infrastructure. It plays a big role in ensuring the livability of regional towns and cities. Essential buildings like municipal halls, community centers, and libraries, are central to

neighborhoods, while public open spaces can contribute to the well-being, health, and ecological balance. Green spaces also help in supporting mitigating heat-island effects, and biodiversity and bolstering resilience against extreme weather events (Lipton, 2023).

CASE STUDIES

Local Bangsamoro Government Center



Figure 1. Site Selection Criteria Model Diagram

Source: parliament.bangsamoro.gov.ph

The selection criteria for the new government center of Local Bangsamoro, according to government official includes:

- peace and order conditions,
- location and accessibility,
- land availability and suitability,
- infrastructure and utilities,
- institutional, and social services,
- social and political acceptability,
- economic,
- and the potential to enhance BARMM development.

There are also other locations considered in Cotabato City, Sultan Kudarat, Datu Odin, and Sultan Mastura of all these municipalities, Parang has the highest score in the assessment. The results showed that the government center is in need of relocation and Parang is the most ideal location due to its fast-growing population.

City of Bacolod New Government Center



Figure 2. Site Selection Criteria Model Diagram

Source: www.panaynews.net

The City administrator recommended the Taculing Property over other proposed site due to the donation to the city and will not cost them a lot of money. The criteria used by the planners include:

- minimal cost of transportation,
- accessibility,
- and communication facilities as well as proximity to government offices.

City of Lipa New City Hall



Figure 3. Site Selection Criteria Model Diagram

Source: business.inquirer.net

Lipa New City Hall promotes environmental sustainability and resiliency while allowing users to breathe with more open spaces. The design is guided by the renowned Architectural Firm Budji + Royal. The criteria used by the planners include:

- progressive
- accessible,
- and sustainable.

MATERIALS AND METHODS

The study used qualitative and quantitative methodology in acquiring the data, specifically the analytical and descriptive case study methods to identify the importance of site selection criteria selection. The proponent conducted an ocular visit to the Abra De Ilog to collect and gather information in the municipality to come up with the most effective study and solution to the problems and challenges of the government complex in Abra De Ilog. The research-design process adopted shall be a modification of the H. Rittle’s Summary of Design Process:

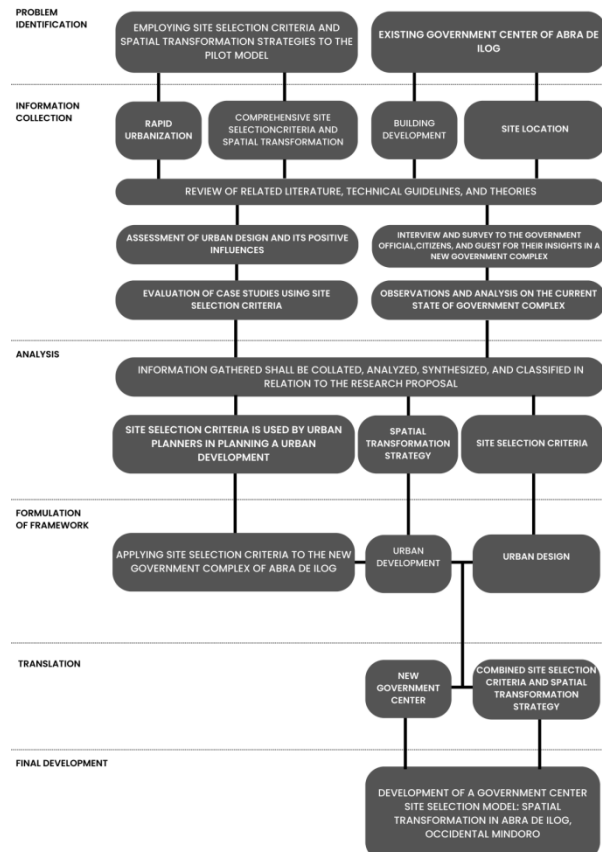


Figure 4. Research Paradigm

Research Instruments:

- *Data Gathering* from related books, internet, articles, magazines and technical books are used as a source of information to support the facts and feasibility of the study.
- *The Survey Questionnaire and Interview* was the most helpful process due to first hand of getting the data to support the research. The proponent conducted an interview and survey questionnaire to determine the criteria for site selection.
- *Experiences and Observations* is one of the helpful processes for gathering the data from the existing government complex of Abra De Ilog. The researchers obtained the analysis

from the current condition of the municipality. The researchers experienced the poor planning of the municipality and were able to take note of the problems that are facing by the users.

RESULTS

Presentation of Data and Analysis

The researcher used both qualitative and quantitative research approach to produce results through research of related literature and conducting survey and interviews, which will be use to weight the importance of each criterion and validate the result of the data.

Analysis and Interpretation of Data

Table 1 shows the respondents' assessments of the impact and contribution of various site selection criteria to the development and planning of a government center in Abra de Ilog, Occidental Mindoro. This will determine the impact and contribution of site selection criteria to the development and planning of a government center, considering factors like accessibility, location, site condition, development cost, environmental sustainability, and alignment with socio-economic needs.

Table 1. Spatial Transformation Strategies and Utilizes the Site Selection Criteria

| Indicator | Weighted Mean | Verbal Interpretation |
|--|---------------|-----------------------|
| 1. Visible to the public for easier recognition of landmarks. | 4.65 | Very Important |
| 2. Proximity to other government and communication facilities. | 4.61 | Very Important |
| 3. Enhanced visibility within the community, positioned along major thoroughfares and in close proximity to other. | 4.45 | Fairly Important |
| 4. A government center should be accessible to residents and visitors. | 4.70 | Very Important |
| 5. Situated adjacent to a classified arterial or collector road for enhanced vehicular accessibility. | 4.57 | Very Important |
| 6. Located on or immediately adjacent to residential property, schools, daycare centers, or other sensitive populations. | 4.31 | Fairly Important |
| 7. Positioned on relatively flat land with a drainage system in the surrounding area. | 4.50 | Very Important |
| 8. Support government spending on improving facilities for long-term development. | 4.65 | Very Important |
| 9. Encourage donations to support the improvement of facilities. | 4.26 | Fairly Important |
| 10. In compliance with the law and meeting all local and state building codes. | 4.63 | Very Important |
| 11. Area with lower pollution levels and the maintenance of ecological balance in our natural environment. | 4.54 | Very Important |
| Composite Mean/Overall Mean | 4.53 | Very Important |

In line with the accessibility, the indicator stated “Enhanced visibility within the community, positioned along major thoroughfares and close to other prominent features of the city.”, with a weighted mean of 4.45 verbally interpreted as “Fairly Important” received a lower rating compared to other and it indicates a nuanced view on the importance of enhanced visibility within the community. Another indicator under the category of accessibility is that “A government center should be accessible to residents and visitors.”, with a weighted mean of 4.70 and a verbal interpretation of “Very important” indicates that accessibility to residents and visitors emerged as highly important and it also indicates the recognition of the need for easy access to government services.

On the part of the location, statement number 1 stated “Visible to the public for easier recognition of landmarks”, with the highest weight of 4.65 interpreted as “very important”, indicates consensus among respondents on the importance of visibility for public recognition of landmarks in the selection of a government center site. It is followed by statement number 2 stated as “Proximity to other government and communication facilities”, with a weighted mean of 4.61 and a verbal interpretation of “very important” indicates that the proximity to other government and communication facilities is deemed very important, emphasizing the significance of strategic location for efficient coordination and communication. Statement number 5 stated “Situated adjacent to a classified arterial or collector road for enhanced vehicular accessibility”, has a weighted mean of 4.57 interpreted as “very important” and indicates that the proximity to classified roads for enhanced vehicular accessibility is considered as very essential, underlining the significance of transportation infrastructure in site selection.

Furthermore, statement number 7 such as “Positioned on relatively flat land with a drainage system in the surrounding area”, under the site condition has a weighted mean of 4.50 with a verbal interpretation of “very important” indicates that the importance of a flat land with drainage system is emphasized and indicates the significance of topography in the selection process.

Under the development cost, statement number 8 stated “Support government spending on improving facilities for long-term development”, has a weighted mean of 4.65 verbally interpreted as “very important” indicates that the respondents highly value government spending to enhance facilities and recognition of the long-term benefits of an investment. However, statement number 9 which is also under the development cost states “Encourage donations to support the improvement of facilities”, has a weighted mean of 4.26 with a verbal interpretation of “fairly important”. This tells that encouragement in donations is not as important to the respondents and the government must see to it that there should be an appropriate budget from the government in able to improve the facilities.

In line with environmental sustainability, statement number 11 such as “Area with lower pollution levels and the maintenance of ecological balance in our natural environment.”, has a weighted mean of 4.54 with a verbal interpretation of “very important” indicating that the respondents highly value the selection of a site with lower pollution levels and ecological balance, emphasizing the importance of environmental sustainability.

Under the alignment with socio-economic needs, statement number 6 stated “Located on or immediately adjacent to residential property, schools, daycare centers, or other sensitive populations”, with a weighted mean of 4.31 and a verbal interpretation of “fairly important”. The respondents assess this criterion as a moderate level of importance in selecting a site near the people living in the area.

Lastly, statement number 10 stated “In compliance with the law and meeting all local and state building codes”, with a weighted mean of 4.63 and a verbal interpretation of “very important” indicates that it adheres to legal and building code requirements is deemed highly important, underlining the significance of compliance in the site selection process.

The overall mean of 4.53 interpreted as very important indicates that the respondents collectively rated the importance of site selection criteria as very high and it also indicates that it has a strong consensus on the significance of the different indicators in the development and planning of a government center.

Based on the result, suggest a consensus among respondents on the importance of site selection criteria in the development and planning of a government center. Key factors such as accessibility, visibility, legal compliance, and environmental sustainability emerged as particularly crucial in the decision-making process.

Table 2 shows the ranking of each site selection criterion based on its importance for the government center. This ranking will determine the percentage of each criterion to be applied in the Likert Scale System.

Table 2. Ranking of Each Site Selection Criteria

| Site Selection Criteria | No. of Responses | Equivalent Percentage |
|----------------------------------|------------------|-----------------------|
| 1. Accessibility | 43 | 17% |
| 2. Location | 48 | 19% |
| 3. Socio-economic Needs | 16 | 6% |
| 4. Site Conditions and Utilities | 29 | 12% |
| 5. Development Cost | 23 | 9% |
| 6. Legalities | 60 | 24% |
| 7. Environmental Sustainability | 33 | 13% |
| Total | 252 | 100% |

The result shows the ranking of site selection criteria for the government center is based on collected responses, providing insights into their perceived importance. The criterion of "Legalities" garners the most responses, having 60 responses and constituting 24% of the total, indicating a strong emphasis on legal considerations. "Location" closely follows with 48 responses, having 19% of the total and proving the significance of the site's strategic positioning. "Accessibility" is ranked third with 43 responses, equivalent to 17%, highlighting the importance of accessibility and proximity to the user and other related facilities. "Environmental Sustainability" follows with 33 responses, making up 13%, emphasizing the importance of ecological considerations. "Site Conditions and Utilities" is ranked fifth, having 29 responses equivalent to 12%, indicating a balanced consideration of the physical attributes and necessary utilities. "Development Cost" garners 23 responses, making up 9%, signifying a mindful approach towards financial implications. Lastly, "Socio-economic Needs" garners 16 responses, constituting 6%, reflecting the importance of aligning the government center with the socio-economic requirements of the community. These percentages, are derived from a total of 252 responses, which contribute the percentage of each criterion in the Likert Scale System. This will determine the effectiveness of the formed site selection criteria for the government center.

DISCUSSION

Site Selection Criteria

After evaluating and assessing the related literature, the proponent identified the set of site selection criteria for the government center. Based on the results of the survey questionnaire and interview, the results show that legalities, location, and accessibility fall as major site criteria while environmental sustainability, site conditions, development cost, and socio-economic needs fall as minor criteria.

Table 3. Major and Minor Site Criteria

| Major Criteria | Minor Criteria |
|----------------|-------------------------------|
| Legalities | Environmental Sustainability |
| Location | Site Conditions and Utilities |
| Accessibility | Development Cost |
| | Socio-economic Needs |

Selected Site for Pilot Model



Figure 5. Site A – Tibag, Abra de Ilog, Occidental Mindoro

Source: Google Map, Modified

Site A from Barangay Tibag spans 2.93 hectares and is located near the Memorial Park of Abra de Ilog. However, the location is far from the main area of the municipality. The site can be accessed via the main road of Mindoro West Coastal Road and the access road which does not meet the standard size for road. Despite having a small lot area, the site is directly adjacent to the vacant lot which can be converted for future expansion.



Figure 6. Site B – Poblacion, Abra de Ilog, Occidental Mindoro

Source: Google Map, Modified

Site B from Barangay Poblacion covers 10.30 hectares of government-owned lot providing enough space for the development of necessary facilities for a government center. In addition, a lot is adjacent to a vacant lot on the north-west side, suitable to convert for future expansions. It is situated adjacent to the main road, Mindoro West Coastal Road, and located near the main area of the municipality. Some of the major establishments are already built on the site allowing for flexible site planning for the development of the government center of Abra de Ilog.



Figure 7. Site C – Poblacion, Abra de Ilog, Occidental Mindoro

Source: Google Map, Modified

Site C from Barangay Poblacion spans 5.04 hectares, a private property, accessible through the main road of Mindoro West Coastal Road and a service road. The area is relatively flat and contains few green elements. There are some residences near the site and there are no significant establishments.

Likert Scale System

Rating for each criterion shall be as follows:

- 5 - highly preferable/desirable
- 4 - very preferable/desirable
- 3 - preferable/desirable
- 2 - satisfactory/fair
- 1 - poor

Table 4. Likert Scale System

| Criteria | Explanation | Weight | Site | | | | | |
|---------------------------|---|--------|--------|--------|--------|--------|--------|--------|
| | | | Site A | | Site B | | Site C | |
| | | | Rating | Points | Rating | Points | Rating | Points |
| Major criteria 60% | | | | | | | | |
| Legalities | Adherence to legal frameworks, ensuring ethical and lawful site development | 24% | 4 | 1.0 | 5 | 1.2 | 3 | 0.7 |
| Location | Strategic positioning in relation to geographical | 19% | 2 | 0.4 | 4 | 0.8 | 5 | 1.0 |

| | | | | | | | | |
|-------------------------------|--|-----|---|------|---|------|---|------|
| | significance and accessibility | | | | | | | |
| Accessibility | Ease of reaching and navigating the site, considering transportation infrastructure | 17% | 2 | 0.3 | 3 | 0.5 | 4 | 0.7 |
| Minor criteria 40% | | | | | | | | |
| Environmental sustainability | Commitment to ecological balance and conservation, promoting sustainable practices | 13% | 2 | 0.3 | 4 | 0.5 | 2 | 0.3 |
| Site conditions and utilities | Assessment of physical attributes and availability of utilities | 12% | 2 | 0.2 | 4 | 0.5 | 3 | 0.4 |
| Development cost | Evaluation of financial implications for acquisition, construction, and operational expenses | 9% | 3 | 0.3 | 4 | 0.4 | 2 | 0.2 |
| Socio-economic needs | Consideration of site alignment with community socio-economic requirements | 6% | 2 | 0.1 | 4 | 0.2 | 3 | 0.2 |
| Total | | | | 2.57 | | 4.07 | | 3.33 |

Site Justification

The Liker Scale System shows that Site B garners the highest total points of 4.07. On the other hand, the two alternative locations, Site A located in Barangay Tibag, and Site B located in Barangay Poblacion garner 2.57 and 3.33, respectively. This assessment shows that Site B is the most suitable site for the proposed development.



Figure 8. Site A – Tibag, Abra de Ilog, Occidental Mindoro

Source: Google Map, Modified

Legalities

Site B is a government-owned lot according to the City Planning and Development office of Abra de Ilog. Land acquisition of the property is not a problem at all. Additionally, the lot conforms to the zoning ordinance and land use based on the purpose of development. The establishment of the government center in Poblacion is also outlined in the Comprehensive Land and Water Use Plan of the Municipality of Abra de Ilog, Occidental Mindoro, for the years 2021-2030.

Location

Site B is located in Barangay Poblacion, Abra de Ilog, Occidental Mindoro. As outlined in Comprehensive Land and Water Use Plan (CLWUP) of the Municipality of Abra de Ilog, Occidental Mindoro (2021-2030), the municipality itself is positioned in the northern region of Mindoro. Abra de Ilog is situated to the west of the Municipality of Puerto Galera, serving as the inaugural town along the boundary between the Provinces of Occidental Mindoro and Oriental Mindoro. The south of Abra de Ilog lies the Municipality of Mamburao, and on its western side lies Paluan. Facing north, Abra de Ilog overlooks the Verde Island Passage.

The site's location is desirable due to its proximity to important facilities crucial for the development of a new government center, including evacuation facilities, educational institutions, health facilities, protective service facilities, and parks and recreation areas.

Accessibility

Based on the information in Comprehensive Land and Water Use Plan (2021-2030) for the Municipality of Abra de Ilog, Occidental Mindoro, Abra de Ilog is a coastal town situated in the northeastern portion of the Occidental Mindoro Province. Given its geographical location, the primary transportation accessibility into the Municipality is by means of sea and/or land transport.

From the main island of Luzon, Abra de Ilog can be reached by passenger and cargo ships originating from the Port of Batangas in Batangas City and docking into the Abra de Ilog Port. The ferry terminal is connected to the Municipality's Poblacion area through the Abra-Mamburao Road section of the Mindoro West Coastal Road, which is a national road linking the town to the Municipality of Mamburao, and to the other municipalities in the province. Furthermore, the said national road is located along the central portion of the Municipality providing accessibility and connectivity to its 10 barangays.

Environmental Sustainability

According to the Goals and Objectives stated in the Comprehensive Land and Water Use Plan (2021-2030) for the Municipality of Abra de Ilog, Occidental Mindoro, the goals outlined for this environmental initiative are comprehensive, encompassing diverse aspects of sustainability. The primary goal is to foster a thriving natural ecosystem through the implementation of conservation strategies. This entails a commitment to long-term zero-waste management, including the adoption of solid waste management ordinances and the implementation of environmentally and economically viable initiatives. This commitment actively engages all stakeholders and is guided by capable leaders.

Site Conditions and Utilities

The chosen site includes several existing facilities that are critical to the development of a new government center. The New Municipal Building, Municipal Gymnasium, MDRRMO (Municipal Disaster Risk Reduction and Management Office) Operation Center, and a Dry and Wet Market are among the facilities. The presence of these critical facilities not only

complements the chosen site but also acts as a catalyst for further development in the surrounding area.

Development Cost

The development of government facilities is outlined in the Comprehensive Land and Water Use Plan (2021-2030) which indicates the support for the development in this sector. This development not only validates the community’s commitment to advancing its administrative infrastructure but also gives realization of the current condition of the government center of Abra de Ilog. On the other hand, it is advantageous for land acquisition since the lot is government-owned which significantly diverts the finance for that to other important development.

Socio-Economic Needs

Given the current state of the government center in Abra de Ilog, there is a compelling need for both relocation and comprehensive development. Due to inherent limitations, the current location is unsuitable for the planned expansion and enhancement initiatives. Recognizing the need for progress, there is a clear need to relocate to a more conducive and strategically advantageous location. On the other hand, the proposed site needs to allocate enough space for relocation of all government facilities.

Site Selection Criteria Model Diagram

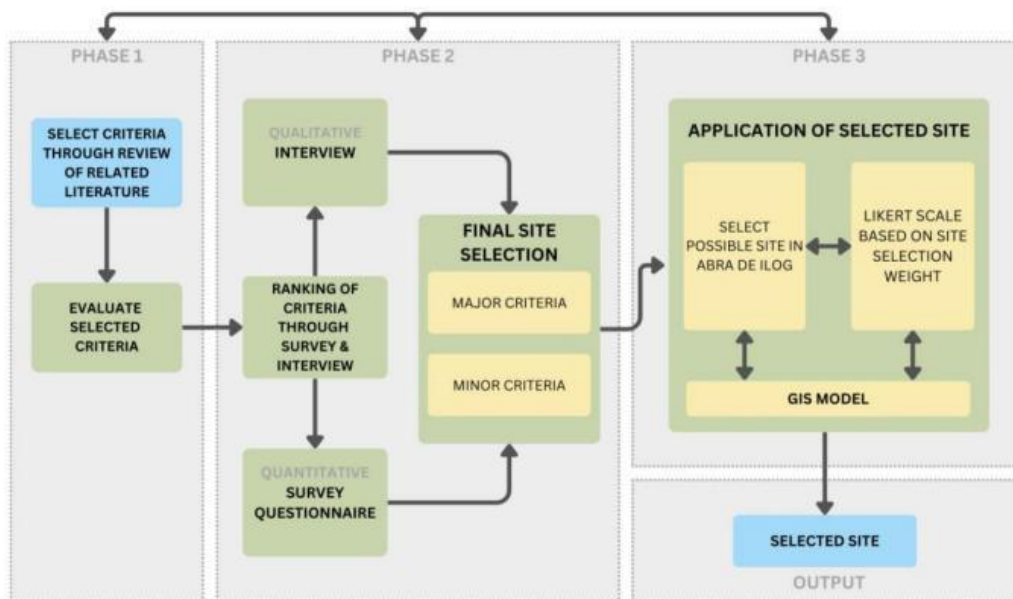


Figure 9. Site Selection Criteria Model Diagram

The researcher formulated and created a model diagram specific to the site selection criteria for the government center. This model is derived from both relevant literature and the application of analysis of data interpretation of both survey questionnaires and interviews. In the initial phase, the criteria were derived from related literature, followed by an evaluation to discern their relevance to the study's objectives. Subsequently, in Phase 2, the criteria were subjected to ranking through survey questionnaires and interviews, distinguishing between major and minor criteria. Once Phase 2 is completed, the application of site selection criteria on a chosen site, specifically the development of a government center in Abra de Ilog, aligns with the proponent's preferences. Moving on to Phase 3, the site selection process and a Likert

Scale System will be executed, necessitating validation through an existing GIS model to ensure result accuracy. The conclusive outcome will reveal the chosen site.

CONCLUSION

The Municipality of Abra de Ilog recognizes the need of urbanizing to keep pace with global trends and economic development. The planned establishment of a new government center aims to address the challenges in the physical, societal, economic, environmental, and institutional aspects posed by urban transformation. Urbanization in the Philippines, while contributing to economic growth, necessitates careful consideration of spatial planning to mitigate risks and adverse outcomes.

Throughout the study, the proponent assesses the proposed relocation of the government center, prompted by challenges in the current town center. This underscores the need for a comprehensive evaluation of the potential advantages and disadvantages of the development. The proponent conceptualized and created a model diagram for site selection criteria. The model was developed through an in-depth study of related literature and the administration of both survey questionnaires and interviews. The related literature, both local and foreign, aided the study in concluding a set of site selection criteria for the government center. On the other hand, conducting a survey questionnaire yielded results on major criteria including legalities, location, and accessibility, and minor criteria including environmental sustainability, site conditions and utilities, development cost, and socio-economic needs, while interviews validated and supported the results obtained from both related literature and the survey questionnaire.

After developing a model diagram for site selection criteria for the government center, the proponent used the current state of the Abra de Ilog government center in Occidental Mindoro as a pilot model. The results show that the criteria developed were adequate for determining whether the chosen site is suitable for development. Furthermore, the study intends to evaluate how the proposed relocation meets people's needs and solves problems using spatial transformation strategies. The new government center's success depends on balancing the benefits to government officials, employees, constituents, and environmental preservation.

Despite formulating a model diagram for site selection criteria for government centers, the research is still in the early phase of this topic due to limited resources based on the topic. It is recommended to use the research as a guide in formulating more updated and relevant criteria. The study can be used for relevant studies including institutional development. On the other hand, the created model diagram applies to other government development, especially for government centers. This comprehensive approach ensures that the development of the new government center in Abra de Ilog aligns with sustainable practices, meeting the needs of the present without compromising the ability of future generations to meet their own. In conclusion, the model diagram for site selection criteria for government centers should be used as a guide in assessing the government's future development.

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