



# Limits And Issues Of Townsite Sales Applications In Baguio City: *Barangay Irisan & Purok Bengao, Bakakeng Central*

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**Abstract:** This research paper aims to investigate the Townsite Sales Application (TSA) process in Baguio City, Philippines, addressing the research problem of understanding the issues and variables affecting TSA applications in selected barangays. The study follows a qualitative research design, employing exploratory and descriptive research methods to gather data. Collaboration with various entities, including government offices and geodetic engineers, was crucial for effective communication and data collection. Data was collected through documentation, non-statistical survey questionnaires, and live interviews.

The findings from the analysis of the data shed light on the complexities and challenges involved in the TSA process. Major trends and factors were identified, including overlapping issues, ancestral land claims, tie-line problems, land suitability, and the payment process contributing to pending applications. The Mines and Geosciences Bureau (MGB)'s involvement in hazard assessments and the unexpected encounters that can disrupt the process, such as adverse claimants and policy changes, were highlighted. The perspectives of approving and processing authorities, geodetic engineers, and barangay officials provided insights into common issues and limitations faced during the TSA process.

Based on the data analysis, it is concluded that streamlining the application process, enhancing coordination among stakeholders, increasing awareness and education, supporting geodetic engineers, and addressing corruption and bureaucracy are crucial for improving the TSA process in Baguio City. These recommendations aim to promote a more efficient, transparent, and fair land development and ownership system.

**Keywords:** Townsite Sales Application (TSA) | Streamlining the application process | Awareness and education | Efficient TSA process | Transparent TSA process | Coordination among stakeholders | Fair system for land development and ownership | Pending applications

## I. Introduction

Natural resources are the tangible items that nature produces that have economic value and are helpful to humans. They include not only soils and surface topography but also characteristics like underlying superficial deposits, climate, and water resources, as well as plant and animal species that have evolved due to the interaction of these physical conditions. (Nocca, 2017)

Land is an essential natural resource since it dictates where productive activities will occur and has special cultural and economic value for individuals and communities. To benefit from or exercise dominion over a piece of property, the idea of ownership is necessary since it is subject to all applicable laws and regulations and calls for the existence of a title as a foundation.

In the Philippines, land title is a proof of the owner's right or amount of interest, which allows him to keep control and generally establish the right to exclusive possession and enjoyment of the property (*Properties*,

2022). It is a legal document that shows property ownership. In addition, owning a title allows the applicant to enable the construction of a building or other transactions involving the property, as well as use the title as security for loans and other bank activities. However, acquiring such a title consists of many requirements. It also depends on the availability of alienable and disposable lands in the Philippines, where this research focuses on Townsite Sales Application, also known as TSA.

Townsite Sales Application is a type of application covering Alienable and Disposable (A&D) lands of the public domain within an established Townsite disposable under Chapter XI of the Public Land Act (*Commonwealth Act No. 141 of 1936 and an ACT to AMEND COMPILE... CONCESSION CHAPTER I*, n.d.) for residential and commercial purposes. The statement refers to the process of selling land in the Philippines through a public auction. The auction is conducted by the Community Environment and Natural Resources Office (CENRO) and involves oral bidding.

Prior to the auction, individuals may submit applications for the purchase of townsite sales. If the application meets the requirements outlined in the Republic Act (R.A.) 10023, the applicant may choose to convert their townsite sales application into a residential free patent application. This process requires the applicant to provide their consent through an affidavit renouncing any other claims to the land.

However, it is important to note that the auction must adhere to the restrictions set forth in Section 8 of Administrative Order No. 2010-12 by the Department of Environment and Natural Resources (DENR). These restrictions may include geographical limitations, environmental concerns, or other factors that may affect the sale and use of the land.

Overall, this process provides individuals with an opportunity to purchase land through a public auction and allows for flexibility in the type of application submitted, while also ensuring that the sale of the land is conducted in a manner that is consistent with the regulations set by the DENR.

Baguio City is a townsite reservation that provides good opportunities for all habitable lands as "alienable and disposable (A&D)" (Boquiren, 2018). According to Asian Studies Org, the city was designed for a core population of 25,000 people by the American colonial government, which built and developed this City into a chartered city in 1909. Throughout Baguio City's history, numerous laws and policies have passed, decisions are made and developments happened, resulting in a baroque and problematic land situation in the City. However, the townsite sales system has been considered a safeguard against overexpansion in Baguio City.

TSA is the instrument of land standpoint in the City within the Baguio Townsite Reservation. Residents applying for TSA are given a maximum area of 1000 sq.m., and a minimum area of 200 sq.m. (*Administrative Order No. 2010-12 - DENR - the Lawphil Project*, 2022), with conditions that (a) a husband and wife, a father and his children shall be allowed only one lot provided that are of legal age and living independently are found to be qualified to acquire lots of their own. (*Administrative Order No. 504, S. 1986 | GOVPH*, 1986), and (b) Under existing rules and regulations, no clearance shall be given to any person who has previously filed a public land application but has conveyed the said land in favor of another whether before or after the patent or title has been issued.

The approximate amount for alienable and disposable titling is 2,068 hectares out of Baguio City's total land area of 5,752 hectares (Ventura, 2021). However, based on the Mines and Geosciences Bureau (MGB) Geo-Hazard Map presented by Engr. Benjamin Ventura, DENR-CAR OIC Asst. Regional Executive Director for Technical Services, Baguio City, is marked as having a high landslide susceptibility in 87% of its territory as some of these areas are highly critical. The DENR-CAR estimated 267 hectares of remaining alienable and disposable lands for titling based on the geohazard data provided by the MGB and located within areas with low and moderate landslide susceptibility.

The ban due to allegedly irregular acquisition of "National Lands" in the City of Baguio has been lifted by virtue of Administrative Order No. 504, issued on February 1, 1986, by then President Ferdinand E. Marcos and further amended per Administrative Order No. 92, issued on September 22, 1988, by then President Corazon C. Aquino. It authorizes accepting, processing, and issuing awards and patents to lands covered by public land applications in the said City. It resulted in the creation of the A.O. 504 Clearing Committee, tasked to screen and evaluate all townsite sales applications within the Baguio Townsite Reservation.

The A.O. 504 Clearing Committee is composed of the A.O. 504 Clearing Committee, the A.O. 504 Regional Secretariat, and the A.O. 504 Technical Staff. Acceptance of Townsite Sales Applications (TSAs) and/or Sworn Statement of Intent (SSIs) starts when the application is submitted to the A.O. 504 Technical Staff. Since the A.O. 504 began operating in 1990, it has received and processed 26,141 applications. Of these, 13,845 RUR (Returned Unrecorded) applications were received, while 3,641 received clearance and were then processed to issue awards and patents at the CENR Office and PENR Office levels. Before issuing clearance, these applications underwent several rounds of screening and examination to evaluate their legal qualifications and compliance.

Barangays of Bakakeng Central (Purok Bengao) and Irisan are one of the A&D lands with the most Townsite Sales Applications in the vicinity. As a result, the researchers will be incorporating the stakeholders' participation regarding the TSA procedure in the City of Baguio.

## Theoretical and Conceptual Framework

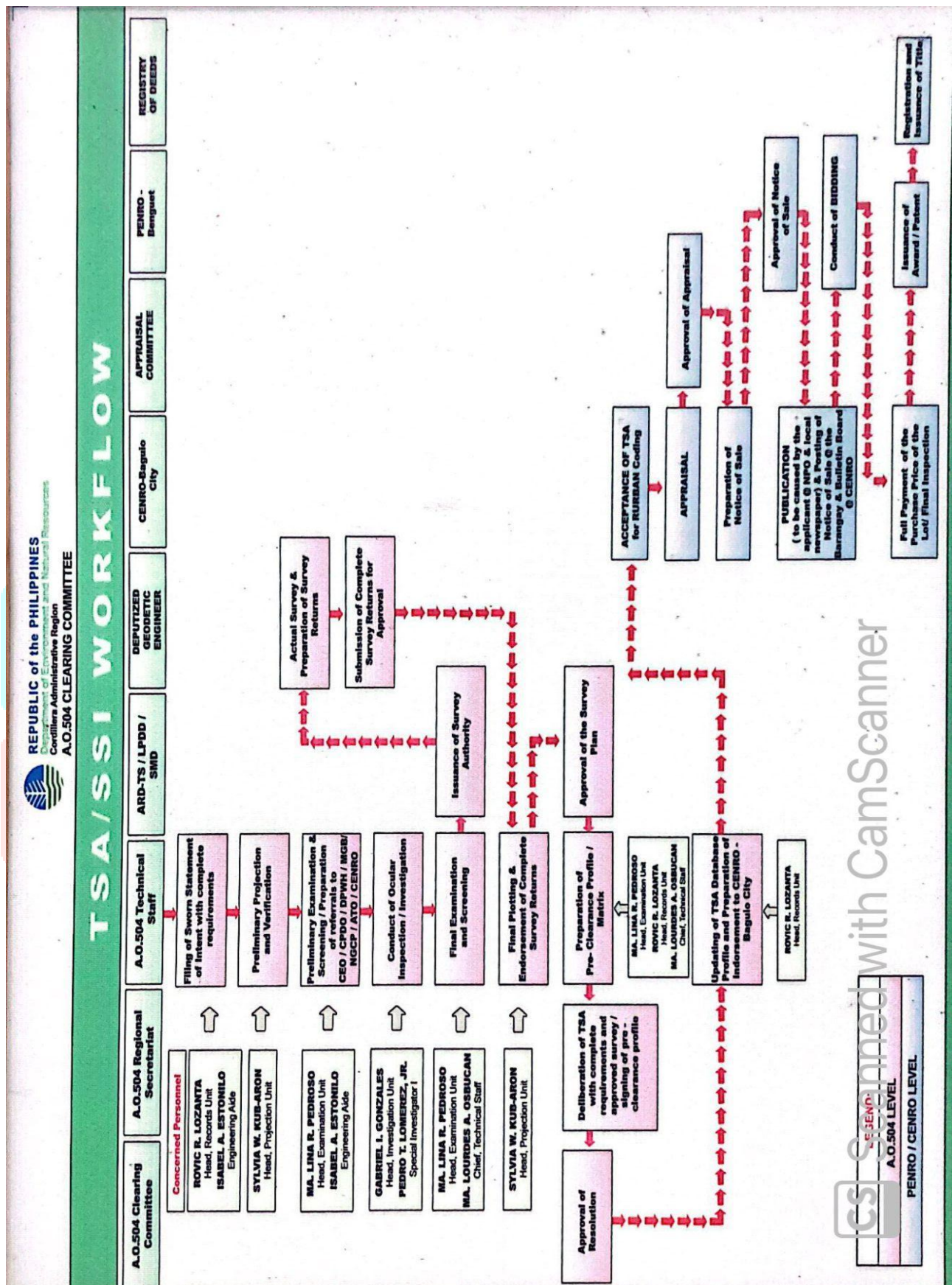
As all other legal applications that requires a lot of process, TSA has the qualifications of the applicant such as; (a) If married, must be a Filipino citizen of legal age; (b) If single, applicant must be the head or the breadwinner of the family; and lastly the, (c) applicant is not an owner of any home lot in Baguio City. Having the requirements of the applicant, the legal requirements in filling a TSA are given by:

- (a) Filing fee of Php 50.00 covered by official receipt (OR);
- (b) 5 blueprint copies of preliminary survey plan with vicinity map or location map;
- (c) 5 copies of identical 2x2 I.D. pictures;
- (d) Certificate of non-property to be secured at the City Assessor's Office (1 original and 1 photocopy);
- (e) Certified true copy of I.D. or voter's affidavit; birth certificate or marriage contract;
- (f) 1 copy each of five different angles of pictures of the land applied, together with developments with signature of the applicant at the back of the pictures;
- (g) Documentary stamp;
- (h) Current cedula;
- (i) 1 folder and fastener.

The process then will be held by the government referrals who will simultaneous prepared by the; (a) *City Engineer's Office* - if the lot applied abuts an alley, barangay/city roads, creeks, rivers; (b) *Department of Public Works and Highways* - if the lot applied for is along a national road; (c) *City Planning and Development Office* - to ascertain if the lot is identified or not for city/barangay needs/projects; (d) *Mines and Geosciences Bureau* - to verify geological suitability of the lot applied for if suitable for residential purposes; (e) *National Grid Corporation of the Philippines* - to verify if the lot applied for gas respected the transmission line right of way; (f) *Air Transportation Office* - to seek clearance whether or not the lot applied for is hazardous to airport transportation; (g) *CENRO* - for issuance of Certification whether or not the lot applied for does not overlap titled property, forest reservation, civil/military reservation and prior and subsisting applications and approved survey.



Figure 1. TSA/SSI Workflow



Pertaining to Figure 1, from acquiring the A&D certificate from the filing of A&D certification, the filing of the application comes next as it will be required for the issuance of the referrals, namely Mines and Geosciences Bureau, City Planning and Development Office, City Engineers Office, DPWH, and CENRO.

For the A&D activity, the projection from the database enables one to see the other applicants' sketch plans, wherein erroneous tie lines and human error of the database projectors appear. The sketch plan and other requirements, such as barangay certificate, deed of conveyance, and pictures of improvements, shall accompany the submission of the A&D certificate.

After completing requirements such as reports and certifications, a valid survey authority will be issued for six months. The time validity shall start at the time of submission at the DENR. The issuance of claims and conflict certificates may take three months. The transmission to CENRO of the survey returns to DENR will then be submitted to the Regional Office, which may take three to six months for survey approval. The applicant will then submit the approved plans to the A.O. 504 for the issuance of a resolution from LMB, which will be one to three months long. Deliberation will proceed wherein the checking of the requirements will be done. From appraisal, publication, posting, bidding, and order of award (if the applicant won) to being paid in full payment of appraised value will issue the patent or title.

### Statement of the Problem

During this research project, a number of barangay officials, geodetic engineers, and approving and processing officials for TSA were chosen to participate in a research survey into the use of processing TSA. This research attempted to discover the problems and variables affecting the townsite sales application in Barangy Irisan and Purok Bengao, Bakakeng Central in Baguio City.

Specifically, this study sought to answer the following questions:

1. What are the unexpected encounters before and during the processing of TSA?
2. To what extent do the approving and processing authorities, geodetic engineers, and barangay officials have in managing the issues of application?
3. How to manage issues regarding the application by the:
  - a. Approving and Processing Authorities/CENRO?
  - b. Geodetic Engineers?
  - c. Barangay Officials?

### Significance of the Study

The chosen residential areas with TSA applicants who have finished filing the application process by the researchers are to be found in the barangays of Purok Bengao, Bakakeng Central and Irisan, Baguio City.

Despite the challenges that were faced along the process, this study aims to recognize the issues and provide a reference for future land surveys conducted by GEs and for the requirements of prospective applicants that will be approved and processed by the authorities inside CENRO/DENR-CAR. This will provide the community with information on the extent to which the approving and processing authorities, geodetic engineers, and barangay officials manage the issues to be discovered in the application from their standpoints.

The community, Geodetic Engineers, TSA stakeholders, and the researchers who worked on the project will benefit from this study. The GEs would know their limits and bounds when surveying or re-surveying the lot for future use if the difficulties were identified when the application for a residential TSA was submitted. This would make the process much more convenient for everyone involved.

As a reference or starting point for further study, it will also serve as related literature.

## Paradigm of the Study

INPUT	PROCESS	OUTPUT
<ul style="list-style-type: none"> <li>- AutoCAD</li> <li>- Projection Map from DENR</li> <li>- List of locations with Townsite Sales Application</li> <li>- Boundary of the Barangays of Bakakeng Central (Purok Bengao) and Irisan</li> </ul>	<ul style="list-style-type: none"> <li>- Boundary Mapping</li> <li>- Analysis of the list of locations with Townsite Sales Application</li> <li>- Interviews</li> <li>- Non-statistical survey questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>- Limits, issues, and factors while processing TSA</li> <li>- Reference for future requirements</li> </ul>

The paradigm explains the framework of the procedures utilized in the study. These are the concepts the researchers used as guiding rules and bases to how to go about the study. The theories, laws, and cases from the different research materials and references were evaluated as to its implications and need for the study.

## Scope and Delimitation

The research study focused mainly on the limits and issues of townsites sales application in Barangays of Purok Bengao, Bakakeng Central and Irisan by integrating the cooperation of the officials and personnel from the Department of Environment and Natural Resources CAR (DENR-CAR), officials from the Community Environment and Natural Resources Office (CENRO), from the barangay officials of the said barangays, and Private Geodetic Engineers around Baguio City.

### *Procedures and processes undertaken on the barangays:*

The study defined its approach by going through face-to-face interviews with barangay officials to obtain a map of the boundaries of the chosen barrio and to float questionnaires among its barangay officials as per normal health protocol protocols.

### *Procedures and processes undertaken on the Approving and Processing Authorities/CENRO and Geodetic Engineers:*

By delivery of letters, the authorizing and processing authorities, CENRO, and Geodetic Engineers were contacted to obtain a copy of the projected map of the chosen barangays and to perform surveys through questionnaires to gather the data, respectively.

## Constraints Used in the Study

Given below are the constraints that the researchers have faced when conducting the study:

### 1. Data Gathering Constraints

The ability of the researchers to acquire information about the list of TSA applicants with their location and percentage of the applications to be presented as a map of the boundary of the barangays regarding the location of every lot properties incorporated with TSA were constrained by the confidentiality and unsorted database from the office of DENR CAR office. Additionally, the boundary map of each barangays does not have any copy resulting for the researchers to depend on the government agencies, namely DENR.

### 2. Time Constraints

The researchers, authorities, geodetic engineers, and barangay officials encountered different time frames in which they were available. Because of this, the researchers are constrained in their scheduling options, meaning they need to find a flexible time for the respondents.



## **Operational Definition of Terms**

**Administrative Order No. 504** - a Clearing Committee set to endorse land applications within Baguio City for eventual processing of Townsite Sales Applications.

**Adverse Claim** - Protects a person's interest over real property and serves as a notice and warning to third parties dealing with the said properties that someone is claiming an interest on the same or a better right than the registered owner, effective for 30 days from the date of registration.

**Alienable and Disposable (A&D)** - lands used in appraisal and engineering terms

**Anti-Red Tape** - an act to ease doing business and eradicate corruption in the government.

**Air Transportation Office** - to seek clearance on whether or not the lot applied for is hazardous to airport transportation

**Baguio Townsite Reservation** - covering lands within the Baguio and decreeing such lands in favor of private individuals or entities

**Baroque** - as an irregularly shaped

**Cadastral Type Survey** - the systematic survey of the whole municipality (or an extensive portion) to identify and delineate the individual claims of all land owners and claimants, which will serve as a basis for the issuance of title or patents.

**CENRO** - for issuance of Certification whether or not the applied lot does not overlap titled property, forest reservation, civil/military reservation, and prior and subsisting applications and approved survey.

**Chapter XI, C.A 141 of 1983** - reservations for public and semi-public purposes

**Citizens Charter** – it is an act that covers the Geodetic Survey Division, Land Policy, and Planning Division, and Land Management Division.

**City Engineer's Office** - Manage engineering projects and other infrastructure building, maintenance, and enhancement activities and carry out any other engineering-related tasks that may be required.

**City Planning and Development Office** - to ascertain if the lot is identified or not for city/barangay needs/projects

**Department of Public Works and Highways (DPWH)** - if the lot applied for is along a national road

**Dispute** - Disagreement, argument, or debate

**DMC 2007-2011 TSA Guidelines** - rules of procedure for the disposition of alienable and disposable public lands within Baguio Townsite Reservation.

**Executive Order No. 112 s.2022** - an executive order prescribing the width of city and barangay roads, pathways, and alleys within Baguio City

**Geodetic Engineer** - a professional who gathers physical data on the earth's surface using precise instruments as he processes these data points and presents them on graphs, plans, maps, and charts.

**Geodetic Engineers of the Philippines (GEP)** - aims to organize, operate and maintain a duly integrated and government-accredited national organization of geodetic engineers as well as formulate, develop, and implement continuing and competency-based education and training programs.

**Information, Education, and Communication (IEC) Campaign** - one of many initiatives by the Department of Environment and Natural Resources (DENR) to increase public awareness and knowledge about environmental issues and concerns, improve understanding of the characteristics and significance of

protecting, sustaining, and conserving our environment, inform participants about the current Philippine environmental laws, regulations, and policies implemented.

**Internal Revenue Allotment (IRA)** - is a share of local government units from the Philippine national government.

**Joint Memorandum Circular** - is a guideline to implement Paleng-QR by the government.

**Keyhole Markup Language (KML)** - it is an annotation of expressing maps and images and focuses on geographic visualization.

**Land Management Bureau** - with policies, land information, and geospatial services, to provide tenure security towards social justice and economic development.

**Local Government Unit (LGU)** - in charge of issues close to our homes, including building codes and development, public health, neighborhood footpaths and roads, parks and playing fields, libraries, regional environmental concerns, waste disposal, and a variety of community services.

**LRA Base Map** - provides a background, or visual context, for the data in a map.

**Lump Sum Payment** - is a one time payment for an entire due of the payment.

**Mines and Geosciences Bureau (MGB)** - to verify the geological suitability of the lot applied for if suitable for residential purposes.

**National Grid Corporation of the Philippines (NGCP)** - to verify if the lot applied for gas respected the transmission line right of way.

**Official Receipt (OR)** - in marketing, it acknowledges the collection of cash payment on services rendered.

**Public Auction** - is a public sale where goods are sold to the person who offers the highest price, an auction held on behalf of a government in which the property to be auctioned is either property owned by the government or property which is sold under the authority of a court of law or a government agency with similar authority.

**Red Tape** - Rules, policies, or government services are called "red tape" if they have little to no impact on the public interest while creating financial costs or frustration for producers and consumers.

**Residential Free Patent Application (RFPA)** - a mode of acquiring ownership of a parcel of alienable and disposable land and simply applying to legally own a particular land.

**Real-time Kinematic Positioning (RTK)** - is the application of surveying to correct common errors in current satellite navigation (GNSS) systems.

**Revised Manual on Land Survey Procedures** – an integration of the land survey rules and regulations of the Land Management and the MGB, embracing the DENR policy on an integrated approach in surveying and mapping.

**Townsite** - is a land authorized by the legal authority and to be employed by the town.

**Townsite Reservation** - a reservation of any tract of land for townsites.

**Townsite Sales Application (TSA)** - an application that undergoes investigation, appraisal, publication, and sale through public auction.

**Unit Value** - refers to the estimated value per unit of area.

**Zonal Value** - refers to the estimated value of land based on its location and classification within a specific zone.



## METHODOLOGY

### Research Design and Methodology

The process of registering townsite sales applications that will be followed by the issuance of the necessary reports and clearance from the concerned agencies, issuance of a survey authority, and the survey approval by the DENR prompted the researchers to survey and gather data for the Selected Barangays in Baguio City. The relevant methods and steps were categorized and listed to give the researchers a thorough background and systematic strategy for conducting this study. This chapter presents the research design and methodology, population and locale of the study, data collection and/or gathering tools, data gathering procedure, treatment of data, and ethical considerations.

Qualitative research is used in the study, mainly exploratory and descriptive research. Exploratory research is used to discern the limitations and issues that the selected barangays in Baguio encountered such that they can be used as a reference for other land title applications. It examines what is already known about a topic and what additional information may be necessary, as it rarely answers particular questions but rather presents the underlying knowledge of a subject as a preface to further research. Descriptive research also describes the features of the population or phenomenon under investigation as it concentrates on the "what" of the study topic rather than the "why" of the research topic.

Moreover, the Committee on Land and in Housing of Bakakeng Central, barangay officials of Purok Bengao, Bakakeng Central and Irisan, legal officials and personnel of the CENRO Office and DENR-CAR, and private geodetic engineers from Baguio City participated equally in this study's collaborative research. Pharmacol et al. (2019) claimed that research that involves collaboration between institutions, organizations, and/or communities fosters the development of effective communication while upholding honesty, integrity, fairness, transparency, and confidentiality.

Documentation and data collection were gathered from the records section and projection map by the Surveys and Mapping Division, DENR-CAR Regional Office, and questionnaires from Barangay Halls of Purok Bengao, Bakakeng Central and Irisan. Interviews were conducted with the Barangay Officials in each barangay, legal officials and personnel of the CENRO Office and DENR Regional Office, and private geodetic engineers.

### Population and Locale of the Study

The researchers conducted the study mainly at the Selected Barangays in Baguio City, Benguet. The population of respondents of the study was ten (10) officials and personnel from the Department of Environment and Natural Resources CAR Regional Office (DENR-CAR) according to Administrative Order No. 504 and five (5) officials from the Community Environment and Natural Resources Office (CENRO); ten (10) Barangay Officials; and five (5) private Geodetic Engineers. The distribution of the respondents is shown in Table 1.

**Table 2.** Distribution of Respondents for Pilot/Pre-Testing

<b>Pre-Testing:</b>	
Pretesting will serve as the trial and error part of our questionnaire where we will evaluate the reliability and validity of the survey questionnaire prior to their final distribution.	
Regional Office	5
Private GE	5
<b>TOTAL</b>	<b>10</b>

**Table 3.** Distribution of Respondents for Actual Survey

<b>ACTUAL</b>	
<b>Respondents</b>	<b>Total</b>
DENR-CAR: Approving Authorities	10
CENRO: Legal Personnel	5
Private Geodetic Engineers	5
Barangay Officials	10
<b>TOTAL</b>	<b>30</b>

### Data Collection and/or Data Gathering Tools

The non-statistical questionnaire was the primary data-gathering tool that was used in this study to integrate with the projection map in an AutoCAD drawing file and research lots with registered Townsite Sales Applications.

Moreover, this research is used with a researcher-made tool in the form of a survey questionnaire and live interview that was given to legal officials and personnel, private Geodetic Engineers, and Brgy Officials of Barangay Irisan and Bakakeng Central from Baguio City who are involved in the assessment of TSA of selected barangays in Baguio City.

Semi-structured interviews were utilized to identify the participants' responses regarding his/her experiences and techniques while gathering data. Advantageous to the information figured, in-depth interviews allowed the individuals (both researchers and participants) to have first-hand experience and direct interaction. Information from the interviews were presented in a narrative, allowing the participants' a degree of freedom in answering the questions.

The consultations were performed in an interview setting as the protocols were followed, and the participants consented. The interviews were taped using a digital audio recording device to avoid unintentional data loss. After the necessary documents are collected, the recordings were transcribed and written down. No rewards were given to the volunteers in exchange for their participation.

### Data Gathering Procedure

The researchers obtained the necessary permits to conduct the study from their research adviser, Engr. Erol F. Ayunon. The researchers requested approval from the Regional Executive Director (RED) of the Department of Environment and Natural Resources - Cordillera Administrative Region (DENR-CAR) to conduct this study.

Researchers distributed questionnaires to land surveying companies, barangay offices, CENRO, and DENR-CAR in Baguio City to obtain the necessary permits for the study. Each copy of the survey has a letter to the respondents attached. In the aforementioned letter, the purpose of the study was sufficiently described, and the respondents' responses were handled with the strictest confidentiality. Due to the pandemic, safety and health precautions were carefully followed throughout the data collection processes.

Prior to completing the actual questionnaires, the researchers sent out pilot questionnaires as a test run to help them find any potential problems with the questionnaire design, such as confusing or ambiguous questions. Using input from a small sample of participants improved the overall quality of the survey, allowing the researchers to make necessary changes to the questionnaire to make it more understandable for all respondents.

## Ethical Considerations

Before the conduct of this study, the researchers has observed and undertaken the following procedures to ensure ethical considerations in the conduct of this research:

1. The researchers secured the necessary permissions from the DENR-CAR Officials, CENRO Officials, private engineers, and Barangay Officials that allowed them to conduct the study and collect data from the identified respondents;
2. A letter was attached to the questionnaire before it was given to the respondents.
3. In accordance with the terms of the Data Privacy Law, the identity of the respondents were not disclosed in this study;
4. Strict confidentiality was applied to all information and data from the respondents of the study;
5. When the respondents will answer the questionnaires meant they are willing to cooperate and take part in the study as respondents;
6. The responses to the questionnaire were presented in aggregate form rather than as individual responses;
7. This research declared that all information, materials, and conclusions used in this study that will be cited from other sources were duly acknowledged.

## PRESENTATION OF ANALYSIS AND INTERPRETATION OF DATA

The first half of this chapter presents the analysis and interpretation of data related to the questionnaire with honesty and transparency. Thus, showing first the pilot questionnaires;

### Pilot Questionnaire

**"What are the possible reasons why the application process of TSA is long pending?"**

The findings indicate that the main reasons for pending applications include overlapping issues, ancestral land claims, and tie line or open polygon problems. Two additional key factors contribute to the duration of the application process. Firstly, the suitability of the land for residential purposes and the absence of adverse claims or disputes need to be ensured before proceeding with the application. Secondly, the payment process for the land significantly impacts the length of the application process, taking around 10 years unless a lump sum payment is made.

In conclusion, these findings highlight the complexity of issues that can lead to lengthy and challenging application processes for TSA. By understanding these factors, this research provided valuable insights to streamline the application process and address the underlying challenges.

**"Is it required for the Client to consult an official in**

**MGB to have a background check on the land's hazards?"**

The Mines and Geosciences Bureau (MGB) is a government agency in the Philippines responsible for managing the country's mineral resources and ensuring the safety of residential structures in areas prone to geological hazards as they certify the land's hazard status in terms of landslide susceptibility. The MGB conducts geo-hazard assessments to determine risks and hazards in specific areas, making sure that residential structures are safe for occupation. Clients can either consult an MGB official or an accredited third-party contractor to conduct the assessment, which is a crucial step in ensuring the stability and safety of structures built in hazardous areas.

To cover the cost of these assessments, the MGB charges a fee of 1000 pesos. However, the choice of consulting an MGB official or a third-party contractor rests with the client. By opting for an assessment conducted by the MGB or an accredited contractor, clients can have confidence that their structures are built on stable ground and can withstand potential hazards.



## **“What are the unexpected encounters**

### **before and during the processing of the TSA?”**

The processing of Town Site sales Applications (TSA) can be met with unexpected encounters that can disrupt the process. One reason for these encounters is the emergence of adverse claimants who assert rights to the land due to undocumented or unrecorded previous sales or transfers. These claimants can cause delays or even bring the TSA process to a halt. Another factor contributing to unexpected encounters is the introduction of new policies or city ordinances that impose additional requirements, such as changes in right-of-way width or shifts in land use priorities. Lastly, a lack of financial support from officials can hinder the TSA process by impeding essential tasks like surveys and title searches, leading to delays or a complete stoppage.

Overall, the TSA process is complex, especially when complications arise from overlapping issues that trigger conflicting claims. It is crucial to anticipate the unexpected when dealing with TSA applications and to be well-prepared for potential obstacles. This involves gaining a comprehensive understanding of the process and collaborating closely with professionals in the field, such as lawyers, surveyors, and land use planners, to ensure all requirements are met and any unforeseen encounters are effectively addressed in a timely manner.

### **“ Do you conduct seminars or lectures for the people of Baguio to be informed about the processing of TSA?”**

Coordination among government agencies and stakeholders is vital for the proper enforcement and implementation of townsite rules and policies. The Department of Socialized Housing and Urban Development (DSHUD) oversees the development of socialized housing projects, while the Department of Public Works and Highways (DPWH) handles the construction and maintenance of infrastructure within the townsite. Additional stakeholders like geodetic engineers and real estate groups contribute valuable information on land surveys and property valuation, ensuring compliance with land use and ownership regulations.

The Department of Environment and Natural Resources (DENR) plays a crucial role in townsite development through its information, education, and communication programs. These programs educate residents in approved barangays about the requirements and processes for obtaining Townsite Applications (TSAs) and residential free patents. By promoting awareness of landowners' rights and responsibilities, these initiatives help prevent conflicts over land ownership.

Effective coordination between government agencies and stakeholders is fundamental to achieving successful townsite development. Collaboration ensures that the townsite grows sustainably and equitably, with the interests and needs of all stakeholders taken into account. By working together, these groups can create a well-informed community that adheres to the laws and regulations governing land use, fostering a harmonious and prosperous environment.

## **Actual Questionnaire**

The last half of this chapter presents the analysis and interpretation of data gathered from the actual questionnaires.

## **Issues**

Most approving and processing authorities typically possess a service experience ranging from 2 to 10 years. This broad range allows for a mix of both fresh perspectives and seasoned expertise. Those with two years of experience bring new ideas, innovative approaches, and a willingness to adapt to evolving requirements. Meanwhile, individuals with ten years of experience offer knowledge, proficiency, and a deep understanding of established protocols, ensuring consistent and reliable decision-making. These experience levels foster a well-rounded and balanced decision-making process within the approving and processing authorities.

The working range of how long geodetic engineers who responded starts from twenty-five to forty (25-40) years of experience, proving their credibility and expertise in the field. By that, encountering challenges in their practices can be easier to handle and manage than before.

Regarding Townsite Sales applications, the unique challenges that geodetic engineers face in Baguio City compared to other areas based on the gathered data talks about the current term of the local government unit of Baguio, specifically the Chief Local Executive that meddles too much in the implementation of subdividing laws. Additionally, irregularities such as ground versus title are constant challenges to private practicing GEs.

For the barangay officials, there are three (3) who responded as being familiar with the Townsite Sales Application from Brgy. Bakakeng Central, as only one (1) has applied. By outlining his experience from it, he must obtain all clearance requirements before applying to the TSA.

By requesting a TSA, the benefits listed include legally owning a lot property for a lower price, receiving an Internal Revenue Allotment (IRA) in the barangay, and obtaining a land title.

Moreover, they were all willing to learn more about TSA since the respondents who represent the barangays of Irisan and Bakakeng Central have not yet attended any seminars regarding Townsite sales applications.

## **I. Unexpected Encounters Before and During the Processing of TSA**

### **I.A. For the Approving and Processing Authorities**

- *How would you describe the current state of the townsite sales application process in Baguio City?*

The current state of the townsite sales application (TSA) process in Baguio City can be described as ongoing, with several applications still in progress. While some TSA applications have been approved, there is a need to amend the survey plan for certain cases. This indicates that there are still some complexities and challenges involved in the process.

It is important to note that the TSA process in Baguio City is generally considered to be more tedious and lengthy compared to other modes of titling. This means that it requires more time, effort, and documentation to complete the process successfully.

The complications and special considerations associated with the TSA process distinguish it from other titling processes. The unique characteristics of the townsite sales, such as the need to survey and plan the development of a specific area, contribute to the complexity of the process. As a result, the TSA process requires careful attention to detail, adherence to specific regulations, and thorough scrutiny to ensure the proper titling of properties within the townsite.

Overall, the TSA process in Baguio City is characterized by ongoing applications, the need for survey plan amendments, and its inherent complexity. It is important for applicants and stakeholders to be aware of these factors and be prepared for a thorough and time-consuming process when engaging in townsite sales applications in the city.

- *In your experience, what are the most common issues that arise while processing Townsite Sales Applications?*

a.) One of the common issues reported by respondents is the inconsistency in policies followed by the survey authority at CENRO Pacdal. This means that different survey applications may be approved or denied based on varying criteria or interpretations of regulations. Such inconsistencies can lead to confusion, delays, and dissatisfaction among applicants.

b.) Another issue that can arise during the processing of Townsite Sales Applications is when there are ancestral claims on the land. Ancestral claims refer to indigenous or native rights over a particular area. If there are conflicting claims or disputes regarding the land's ownership or ancestral rights, it can delay or halt the application process until the matter is resolved through legal means or consensus among the parties involved.

c.) Processing Townsite Sales Applications often involves ensuring compliance with road-right-of-way requirements. Road-right-of-way refers to the legal right to pass through a designated area for the purpose of constructing or maintaining a road. It is necessary to have proper access to the land being sold or developed. If the proposed development does not meet the required road-right-of-way standards, it can result in delays or rejections of the application.

d.) Appraisal-related problems can also arise during the processing of Townsite Sales Applications. These issues may involve discrepancies in the zonal value and unit value assigned to the land. Zonal value refers to the estimated value of land based on its location and classification within a specific zone. Unit value, on the other hand, refers to the estimated value per unit of area. If there are concerns or disagreements regarding the appraisal values assigned to the land, it can impact the application process and require further evaluation or negotiation.

e.) Another issue that can arise is when a Townsite Sales Application overlaps with a prior application or falls within an area identified as having geological concerns, such as sinkholes or high landslide susceptibility. Overlapping applications can create conflicts and require resolution, while the presence of geological risks can affect the feasibility or safety of the proposed development. In such cases, additional assessments or studies may be necessary to ensure the suitability of the land for the intended purpose, which can cause delays in the application process.

These are some of the most common issues that can arise while processing Townsite Sales Applications. Each issue requires careful attention and resolution to ensure fair and appropriate land development and sales processes.

#### I.B. For the Geodetic Engineers

- *From a geodetic engineering perspective, what are the common issues encountered in the Townsite Sales application process in Baguio City?*

From the stated response, the frequent challenges experienced in the Townsite Sales application procedure in Baguio City from a geodetic engineering standpoint are corruption and that certificates are more difficult to require.

Additionally, they come from either the government or the constituents/clients. Concerning the constituents, complicated requirements, particularly those about heirships, a lack of records, and a lack of requirements for losses or damages, were mentioned. In contrast, problems with the government are caused by bureaucracy, negligence, incompetence, and red tape.

#### I.C. For the Barangay Officials

- *Are there any challenges or issues that you have encountered when applying for a Townsite Sales Application? If yes, can you describe them?*
- *Are there any particular concerns or issues that your barangay has encountered with Townsite sales applications in the past?*

The lone respondent who applied for TSA claims that he was required to obtain the certification of none property.

The barangay's particular concerns or issues with townsite sales applications in the past have included land disputes involving competing claims to property rights by two or more parties, land grabbing, and overlapping where the lot applied for is border-to-border due to the lack of a structure's setback and room for an alley or water drainage/canal.



## II. Extent of the Approving and Processing Authorities, Geodetic Engineers, and Barangay Officials have in Managing the Issues of Application

### II.A. For the Approving and Processing Authorities

- *Are there any specific challenges or limitations that you feel are hindering the success of this process?*

Several respondents highlighted various challenges and limitations hindering the success of the process. One major concern expressed was the strategic terrain of Baguio City, which poses a significant obstacle to implementing the Disaster Management Council (DMC) on Mines and Geosciences Bureau (MGB) issues. The presence of cliffs and high-risk areas susceptible to landslides greatly hampers the processing of Temporary Shelter Areas (TSAs) since numerous houses and lands are situated in such hazardous locations.

Additionally, respondents pointed out the issue of overlapping regulations, specifically Executive Order No. 112 s.2022, along with various laws, rules, regulations, and guidelines. This overlap creates confusion and hinders the smooth execution of the process. Furthermore, the implementation of new policies is challenging due to the disparity between these regulations and the actual ground situation. Laws being published nowadays are deemed infeasible when applied to the realities on the ground, posing further difficulties in achieving successful outcomes. Moreover, the introduction of new guidelines that are difficult to implement often leads to chaos in the TSA processing, exacerbating the overall challenges faced in this process.

- *Are there any particular concerns or considerations you consider when reviewing these applications?*

When reviewing these applications, there are several concerns and considerations that need to be taken into account. Firstly, it is crucial to adhere to the mandates set forth by CA 141 or other relevant public land acts and legal issuances, as well as the established policies and regulations. This ensures that all townsite sales applications meet the minimum requirements stipulated by the law.

Secondly, the review process relies on the prevailing policies in place. However, considerations may arise if they are justified and supported by other offices, while still adhering to the existing procedures. This emphasizes the importance of maintaining transparency and avoiding any circumvention of the established protocols.

Lastly, some respondents conduct their evaluation of applications in alignment with the DMC 2007-2011 TSA guidelines. By referencing these rules, policies, and guidelines, they ensure consistency and coherence in the review process, promoting fairness and standardization.

Overall, the concerns and considerations when reviewing the applications encompass legal mandates, adherence to policies and regulations, transparency in decision-making, and consistency with established guidelines.

### II.B. For the Geodetic Engineers

- *What role do collaboration and communication between geodetic engineers and other stakeholders play in the execution of the Townsite Sales application process in Baguio City?*

Communication is vital since it can help the process and is necessary to ask for certifications and the authority to conduct surveys. Additionally, they work together on the ancestral domain, national road, fault clearance, and land use with NCIP, DPWH, MGB, and CPDO.

- *How does using modern surveying instruments affect the surveying process in the Townsite Sales application in Baguio City?*

Without surveying types of equipment, GEs cannot execute land surveys. Modern surveying instruments are the tools of geodetic engineers to execute such surveys, which require the process of TSA as they can discover errors and mistakes in the previously approved surveys with higher precision and in a shorter time.

- *What potential risks are associated with inaccurate or incomplete geodetic data in the Townsite Sales application process in Baguio City, and how can they be mitigated?*

GEs collaborate with the DENR to correct the City of Baguio database. The dangers connected with faulty or incomplete geodetic data have been addressed in the Townsite Sales application process in Baguio City. These hazards include inaccurate solar declination observation, inadequate coordinates, and inaccurate surveys on plans that are checked against the ground, which cause confusion. GEs who act this way may be held accountable for damages. Overlapping claims of property owners, such as encroachment of structures, incorrect fencing, and similar issues, pose some problems.

- *How do local laws and regulations affect the role of geodetic engineers in the Townsite Sales application process in Baguio City?*

Local laws run counter to national laws, and applicability to survey is inappropriate. Additionally, local rules and regulations established in the areas of concern (AOC) could alter the role of GEs in complicated requirements such as compliance, survey return preparation and submission, and assistance in processing TSA.

## II.C. For the Barangay Officials

- *How does your barangay ensure that Townsite sales applications are properly informed and disseminated to residents?*

To ensure the Townsite sales applications are adequately informed and disseminated to residents, the barangays must have complete records and be identified appropriately regarding the TSA under the jurisdiction of the barangay. A campaign of information, education, and communication (IEC) must be launched to increase public understanding of environmental issues and concerns.

## III. Managing Issues regarding the Application by the:

### III.A. Approving and Processing Authorities/CENRO

- *How do you typically handle these issues, and what strategies have you found most effective?*

Respondents mentioned several strategies for handling issues effectively. They emphasized the importance of constant reminders to applicants regarding what to do and what to avoid, as well as the office's practice of collecting active contact numbers for efficient information dissemination. Another effective approach involves notifying all applicants or parties to comply with mandatory equipment and conducting thorough inspections to identify any overlapping claims. The respondents also highlighted the significance of collaboration between approving offices, other agencies, and central offices to address concerns. Additionally, they assist clients in securing necessary documents through timely office referrals, while patiently and sincerely explaining procedures, policies, and regulations based on CA 141 to applicants.

- *Is it a prerequisite for the client to consult with an MGB official in order to perform a background check on potential hazards associated with the land? If so, what are the reasons for this requirement?*

According to the respondents, consulting with an MGB (Mines and Geosciences Bureau) official is indeed a prerequisite for clients who wish to conduct a background check on potential hazards associated with a piece of land. The MGB's involvement ensures the assessment of the land's geological suitability and verifies whether adequate engineering and mitigating measures are in place to protect lives and properties. This requirement is crucial for ensuring the safety of the land being applied for.

Additionally, one respondent mentioned that MGB inspection is also required for the TSA (Topographic Survey Approval) process. This inspection helps determine if the lot falls within hazardous areas and if any engineering or mitigating measures are recommended. The findings and recommendations provided by the MGB hold significant importance in assessing the livability of the land.

However, with the introduction of the new TSA's A.O. 504, the responsibility of clearing and referring to the MGB lies with the new A.O. 504 clearing committee. This indicates a potential change in the authority handling the consultation process, although the involvement of the MGB and their recommendations remain significant in evaluating potential hazards associated with the land.

- *Does your office offer seminars or lectures to educate the residents of Baguio on the proper procedures for processing TSA? If this is the case, could you please elaborate on the specifics of how these seminars or lectures are conducted?*

In response to the question regarding seminars or lectures on TSA processing, some respondents indicated that their office offers education through various means. For example, one respondent shared that their office uses the citizens charter to educate those who want to apply for TSA. Another respondent noted that seminars are conducted in designated barangay halls, which suggests that the office may be making efforts to reach residents where they are located.

Another way that some respondents' offices are educating residents is through the provision of handouts or pamphlets that outline the requirements for TSA processing. This approach may be useful for those who prefer to learn through reading and may serve as a helpful reference for individuals who are in the process of applying for TSA.

Finally, some respondents shared that the Department of Environment and Natural Resources (DENR) conducts information, education, and communication (IEC) campaigns per barangay of the city of Baguio. This suggests that there may be a collaborative effort between the DENR and local government units (LGUs) to educate residents on proper TSA processing. This campaign may take the form of public hearings or radio programs, among other methods, and may be held during barangay assemblies or mass acceptance of TSA applications.

- *In your opinion, what changes or improvements could be made to the current process to make it more effective?*

Respondents provided a range of suggestions to improve the current process and enhance its effectiveness. One respondent recommended reviewing and potentially streamlining resources and requirements through policy mandates. By doing so, they believed the process could be made more efficient. Another suggestion centered around resolving the issue of overlapping Executive Orders, laws, regulations, rules, and guidelines. Harmonizing these elements could lead to a smoother and more coherent process.

In order to make the process more effective, a respondent proposed simplifying guidelines, reducing requirements, and minimizing the frequency of inspections. This approach aimed to alleviate burdens and ensure that the process focuses on helping people rather than adding unnecessary hurdles. Furthermore, to enhance the manpower and expertise within the office, hiring additional technical personnel and land management officers was suggested.

To support the growth and development of new employees involved in processing TSAs or handling land matters, respondents recommended organizing constant training sessions and seminars. Conducted by legal experts, these initiatives would equip the employees with the necessary skills and knowledge to navigate the complexities of the process effectively.

### III.B. Geodetic Engineers

- *How do you ensure the accuracy of geodetic data when conducting surveys for Townsite Sales applications in Baguio City?*

As stipulated in the GE pledge, GEs deal with the only surveying principle. They maintain accuracy and precision in every phase of survey work by strictly adhering to the standards set forth by the Revised Manual on Land Survey Procedures. Due diligence is consistent, from reconnaissance and data gathering to analysis and laying out property corners. Additionally, they convert grid coordinates to geographic coordinates as well as from Real-time kinematic positioning (RTK) to Keyhole Markup Language (KML) files to visualize on Google Earth the survey conducted.

- *What improvements or changes would you suggest to address any issues or limitations currently existing in the Townsite Sales application process from a geodetic engineering standpoint?*



According to the feedback, local laws should coordinate with national laws. Government agencies must also strictly adhere to the Citizens Charter to avoid anti-red tape. Inform the community by organizing an info drive, a barangay symposium, or other similar events. To prevent property ownership overlap, constituents must submit Red Tape activities to the appropriate authorities and project preliminary surveys onto the LRA base map before applying to TSA.

- *How does the geodetic engineering process contribute to the overall effectiveness of the Townsite Sales application process in Baguio City?*

Technical and legally sound, geodetic engineering complies with national and local laws. To address issues and concerns with TSA processing, GEP CAR must converse with the heads of government organizations, particularly DENR and LRA. If possible, execute a Joint Memorandum Circular or draft guidelines for effective implementation and ease of doing business.

### III.C. Barangay Officials

- *What are the ways you think the Townsite Sales Application can be improved to better serve the needs of barangay officials and residents in Baguio City?*
- *How do you typically handle these issues, and what strategies have you found most effective?*
- *Do you have any suggestions or recommendations for the Baguio City government to disseminate information regarding the Townsite Sales Application?*

To prevent disputes among neighbors, the barangay officials advised DENR-PENRO-CENRO to make sure there was access to the alley and drainage between the adjoining lots before approving the TSA of the residents.

To address those issues, consulting with all involved parties regarding TSA and endorsing the matter for resolution to DENR, particularly the Department of Claims and Conflict Office, is necessary. Additionally, the respondents suggested that the City Committee on Lands and the DENR-CENRO, Baguio officials conduct seminars and continuous IEC. One proposed that they apply for RFPA rather than TSA.

### Limits

By referring to the theoretical framework, there are findings regarding the filing of certification and application filing that are considered limits of the Townsite Sales Application.

As for the application filing, the A&D certificate may declare the allegations regarding the applied lot that can be proven by ocular investigation. For the issuance of referrals, personal follow-up for the application is highly suggested instead of abiding by the normal processing period that may reach a year of waiting.

Given below are the limits of the referrals that encompass TSA:

#### 1. Mines and Geosciences Bureau (MGB)

This office mainly focuses on soil stability. Only six (6) MGB officials cover the entire Cordillera Administrative Region, which causes the applicant to wait for their turn to be assessed.

#### 2. City Engineering Office (CEO)

This office handles the administration, coordination, supervision, and control of engineering projects and infrastructure development, maintenance, and repair. The required width of city and barangay roads, paths, and alleys within the City of Baguio must follow Executive Order No. 112, Series of 2022; otherwise, the application will be denied.

#### 3. Department of Public Works and Highways (DPWH)

The application will be denied when the land applied for overlaps or collides with the national road, which is 60 meters wide.

#### 4. City Planning and Development Office (CPDO)

This office limits TSA as it overlaps with the functions of other offices, such as an affidavit of the undertaking, which may involve a violation of ownership.

The deliberation of the application after the issuance of resolution is dependent on the availability of deliberating members.

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### Summary

Chapter 3 of this study, Limits and Issues of Townsite Sales Application in Baguio City, presents the analysis and interpretation of data gathered from questionnaires related to the townsite sales application (TSA) pilot and actual process in Baguio City. The findings highlight overlapping issues, ancestral land claims, and tie-line problems that cause pending applications.

Factors contributing to the duration of the application process include land suitability for residential purposes and the payment process. This chapter also discusses the requirement of consulting an official from the Mines and Geosciences Bureau (MGB) to conduct land hazard checks. Additionally, it explores the unexpected encounters and challenges faced during the TSA process, such as adverse claimants, policy changes, and lack of financial support. The coordination among government agencies and stakeholders and the need for seminars and education programs are emphasized for successful townsite development. The latter part of the chapter presents the perspectives of approving and processing authorities, geodetic engineers, and barangay officials, highlighting common issues, challenges, and limitations in managing the application process.

### Conclusions

The analysis of the data reveals the complexity and challenges involved in the townsite sales application process in Baguio City. It is evident that overlapping issues, ancestral land claims, tie-line problems, and financial constraints significantly impact the duration of the application process. The involvement of the Mines and Geosciences Bureau (MGB) in hazard checks and coordination among government agencies and stakeholders is crucial for successful townsite development. Additionally, the perspectives of geodetic engineers and barangay officials shed light on specific issues and challenges faced during the application process. Overall, this chapter provides valuable insights into the factors affecting the TSA process and emphasizes the need for streamlining procedures and addressing underlying challenges.

### Recommendations

Based on the findings presented in this chapter, the following recommendations can be made:

1. *Streamline the application process:* Efforts should be made to simplify and streamline the townsite sales application process in Baguio City. This can include revising regulations and policies to avoid inconsistencies and overlapping requirements.
2. *Strengthen coordination and collaboration:* Enhance coordination among government agencies, stakeholders, and professionals involved in the townsite development process. Regular communication, collaboration, and information sharing can help address challenges and ensure a smooth and efficient application process.

3. *Increase awareness and education:* Conduct seminars and educational programs to inform the people of Baguio City about the townsite sales application process. This will help applicants and stakeholders understand the requirements, procedures, and potential challenges, leading to better compliance and smoother transactions.

4. *Improve support for Geodetic Engineers:* Provide adequate support, resources, and training for geodetic engineers involved in the townsite sales application process. This can include modern surveying instruments, clear guidelines, and access to accurate geodetic data. Ensuring the professionalism and expertise of geodetic engineers will contribute to accurate surveys and efficient application processing.

5. *Address issues of corruption and bureaucracy:* Take measures to address the problems of corruption, bureaucracy, and red tape that hinder the success of the townsite sales application process. Implement transparent and accountable practices to build trust among applicants, stakeholders, and the public.

6. *Reference for the Future Researchers:* By integrating the participation of the applicants who are one of the stakeholders of TSA, as well as exploring other barangays in Baguio City, the knowledge and background of TSA will be broadened.

By implementing these recommendations, the townsite sales application process in Baguio City can be improved, leading to a more efficient, transparent, and fair system for land development and ownership.

## BIBLIOGRAPHY

1. *10+ Best Data Collection Tools With Data Gathering Strategies.* (2023, April 27). Software Testing Help. <https://www.softwaretestinghelp.com/data-collection-tools/>
2. *Administrative Order No. 504, s. 1986 | GOVPH.* (1986, February). Official Gazette of the Republic of the Philippines. <https://www.officialgazette.gov.ph/1986/02/01/administrative-order-no-504-s-1986/>
3. *Administrative Order No. 2010-12 - DENR - The Lawphil Project.* (2022). Lawphil.net. [https://lawphil.net/administ/denr/ao\\_2010-12\\_2010.html?fbclid=IwAR01TZAFEUPLRLmNYFlqT7APe1aMjr1fpGOdRFo5xiYFDyCFCw46Qweay04](https://lawphil.net/administ/denr/ao_2010-12_2010.html?fbclid=IwAR01TZAFEUPLRLmNYFlqT7APe1aMjr1fpGOdRFo5xiYFDyCFCw46Qweay04)
4. Boquiren, R. (2018). *History of Baguio how it became a city of migrants.* [https://www.wheninbaguio.com/wp-content/uploads/2018/09/8Aug-2018-NCIP\\_2-1.pdf](https://www.wheninbaguio.com/wp-content/uploads/2018/09/8Aug-2018-NCIP_2-1.pdf)
5. *Commonwealth Act No. 141 of 1936 AND AN ACT TO AMEND COMPILE THE LAWS RELATIVE TO LANDS OF THE PUBLIC DOMAIN TITLE I TITLE AND APPLICATION OF THE ACT, LANDS TO WHICH IT REFERS, AND CLASSIFICATION, DELIMITATION, AND SURVEY-THEREOF FOR CONCESSION CHAPTER I.* (n.d.). <https://media.dar.gov.ph/source/2018/06/29/commonwealth-act-no-141.pdf>
6. *Descriptive Research: Definition, Characteristics, Methods, Examples and Advantages | QuestionPro.* (2018, August 23). QuestionPro. <https://www.questionpro.com/blog/descriptive-research/>
7. *DMC 2007-11.pdf.* (2023). Scribd. <https://www.scribd.com/doc/292233711/DMC-2007-11-pdf#>
8. Nocca, F. (2017). The Role of Cultural Heritage in Sustainable Development: Multidimensional Indicators as Decision-Making Tool. *Sustainability*, 9(10), 1882. <https://doi.org/10.3390/su9101882>
9. *Properties.* (2022, September 16). Blog by DMCI Leasing. <https://leasing.dmcihomes.com/blog/land-titles-philippines/>
10. *Republic Act No. 11689 | GOVPH.* (2022, April 11). Official Gazette of the Republic of the Philippines. <https://www.officialgazette.gov.ph/2022/04/11/republic-act-no-11689/>
11. Super User. (2015). *Nat'l Cadastral Survey Program.* Lmb.gov.ph. <https://lmb.gov.ph/index.php/e-library/nat-l-cadastral-survey-program>