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Assessment of the Practice of Real Property Valuation for Expropriation Compensation: The Case of Bahir Dar City, Amihara, Ethiopia

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ASSESSMENT OF THE PRACTICE OF REAL PROPERTY VALUATION FOR
EXPROPRIATION COMPENSATION: THE CASE OF BAHIR DAR CITY,
AMIHARA, ETHIOPIA

BY: TEWACHEW YIRGA

ADVISER: BELACHEW YIRSAW (PHD)

August, 2020

Bahir Dar, Ethiopia

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BY:-

TEWACHEW YIRGA Getie

A THESIS

SUBMITTED TO THE INSTITUTE OF LAND ADMINISTRATION, BAHIR DAR
UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF
MASTERS' OF SCIENCE (MSC) IN REAL PROPERTY VALUATION

ADDIVISER: BELACHEW YIRSAW (Ph.D.)

August, 2020

Bahir Dar, Ethiopia

DECLARATION

This is to certify that the thesis entitled “ASSESSMENT OF THE PRACTICE OF PROPERTY VALUATION FOR EXPROPRIATION COMPENSATION: THE CASE OF BAHIR DAR CITY, AMHARA, ETHIOPIA”, submitted in partial fulfillment of the requirements for the degree of Master of science in REAL PROPERTY VALUATION, Bahir Dar University is a record of original work carried out by me and has never been submitted to this or any other institution to get any other degree or certificates. The assistance and help I received during the course of this investigation have been duly acknowledged.

Declared by:

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I hereby certify that I have supervised, read, and evaluated this thesis titled “Assessment of the practice of property valuation for expropriation compensation: the case of Bahir Dar city, Amhara, Ethiopia” by Tewachew Yirga Getie prepared under my guidance. I recommend the thesis be submitted for the oral defense.

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Tewachew Yirga Getie

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ABSTRACT

Nowadays in Ethiopia property valuation is carried out for expropriation compensation purposes in addition to mortgage lending purposes. However the practice of real property valuation is not standardized, hence the affected people are raising their grievance on the amount of compensation they were paid for the loss of property. The objective of this study was to assess the practice of property valuation for compensation purposes. To achieve this objective the researcher used primary and secondary data sources. The kebele where the expropriation activity took place in 2010 and 2011 were purposely selected for this study. All expropriated landholders were included in the questionnaire. For this study to analyze the data, descriptive statistics were used. According to the result of the study, the methods used to estimate the value of expropriated improvement property is the replacement cost approach. However, the valuers have not applied all procedures in a standard way; hence the valuation result is not consistent. The substituted land is not the same as the previous land due to differences in access to infrastructures and displaced people were not compensated for this locational value difference of the place they were in. When we compare the compensation paid and the estimated value using an income approach for the expropriated property, it has a difference. Even the government transfers the land through a lease system for the user in a large amount of birr by taking in a small amount of compensation from the farmer. As well, the government does not fully apply what the expropriation law says. According to the new proclamation, the compensation paid for the expropriated land is not enough when we compare the benefits get from the land for unlimitedly future generations. Generally, this study concludes that the paid amount of compensation to the affected people is not equivalent to the value of the expropriated property and the income approach is the appropriate valuation method to estimate the value. Finally, it has been recommended that it is necessary to apply the income approach to estimate the value of the expropriated property. The government should fully apply what the expropriation law says and the compensation should be calculated and paid in line with the legal framework, and the state should employ a graduate valuer.

Key Words: *Market Value, Real Estate, Valuer*

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LIST OF ACRONYMS

ADB	Asian Development Bank
CBD	Central Business District
CSA	Central Statistics Agency
ETB	Ethiopian Birr
GDP	Gross Domestic Product
FDRE	Federal Democratic Republic of Ethiopia
IAAO	International Association of Assessing Officers
IVSC	International Valuation Standard Council
MV	Market Value
RICS	Royal Institution of Chartered Surveyors
TEGoVA	The European Group of Valuers' Associations
USPAP	Uniform Standards Professional Appraisal Practice

CHAPTER ONE: INTRODUCTION

1.1. Background of the study

Real property is defined as all the interests, benefits, rights, and encumbrances inherent in the ownership of the physical real estate, whereas real estate is the land together with all improvements that are permanently attached to it and all appurtenances associated thereto (Elli et al., 2003). Property valuation is the process of estimating an opinion of value in exchange under certain assumptions. It is financial estimates of the future net benefit of purchasing an interest in the property (Peter, 2007). Property valuation is carried out for various purposes such as; for the transaction, taxation, insurance, loan security, and compensation (Millington, 2000). It is an important activity in expropriation since right holders should get compensation based on the estimated value of the lost property (Habitamu, 2019). Through the acquisition of appropriate land or another kind of real properties from the landholder; we can bring the development of modern society at the state, regional or local levels, by providing public infrastructure and facilities that ensure the safety and prosperity of life, economic progress, and social welfare, compatible with sustainable development and environmental protection guidelines. An early step in the process is the acquisition of appropriate land or other kinds of real properties, which is the obligation of public institutions (FAO, 2008).

Moreover, to meet the need for public services and other economic and social needs of the society, the government uses expropriation as an alternative tool to secure land for development. Compensation for the affected landholders, whether in financial form or as replacement land or structures is the heart of expropriation. The process, however, brings tension for people who are threatened with inadequate compensation when they compare the benefit they get from the full holding right. According to (Daniel, 2018) the main rule for the assessment of compensation and valuation for the property expropriated is the market value. Also according to (Kuala, 2014), market value is stated to be the basis of value for the assessment of compensation. The market value plays an important role to determine the adequate compensation paid for the landowners who are forced to vacate their properties as a result of expropriation (John, 2015).

In various countries, there is a different method to calculate compensation depending on the type of land ownership and economic system. It is market value-based and average annual value-

based ongoing on the land respectively in countries where land is privately owned and publicly owned (Zemenfes, 2014). In the United States of America, the general standard is to accept a “fair market value” as the basis for determining just compensation. Also in Swedish compensation legislation, the compensation paid for a whole property unit shall be equivalent to the property’s market value. Besides, the property owner shall be compensated for other economic damages, such as loss of income or increased costs that may affect activities carried out on the property as a result of the expropriation. But only the present use of the property is compensated and all expectations based on the changing use of the property must be ignored. In England, the future development value of the land is taken into account in the assessment and thus all such development of the land which would have been permitted to the owner shall be taken into account (Viitanen, 2002). One of the basic reason for adopting the market value as the main criterion for determining compensation is that the person to whom compensatory damages are paid shall be able to obtain a new in principle, exactly equivalent to the property which has been expropriated (FAO, 2008). Expropriation must be socio-economically beneficial and a balance has to be struck between public and private interests. The property owner’s wealth status must not be affected by expropriation (Thomas. et al., 2011).

In countries like Ethiopia where the level of economic and social development is extremely low, the government, for redevelopment purpose and undertaking public facilities, there is a displaced people both in the inner cities and peripheral urban areas that are affected by the problem related to the expropriation consequence (Belachew, 2013). Expropriation compensation and valuation are based on the constitution and proclamation legislation. The FDRE constitution Art 40(8) says that “without prejudice to the right to private property the government may expropriate private property for public purpose subject to payment in advance of compensation commensurate to the value of the property” and the new proclamation 1161/2019 on Article 6 and 12(1), “the city or woreda administrations has the power to order the evacuation and take over the land decided to be expropriated for a public purpose with payment of compensation for the property on the land and the permanent improvement made on the land”.

The payment shall be equal to the value of capital and labor expended to the land. However, this contradicts the very essence of market value by ignoring the economic value of land and there is a failure in the proper implementation of the laws concerning expropriation, compensation, and

valuation. According to the Expropriation Proclamation No 1161/2019; the basis of compensation should be the replacement cost of the property (Article 12(2)), meaning that the compensation given should cover the costs of reproducing an equivalent property. This also means that in urban area factors such as the locational value of the property, access to infrastructure, or other market conditions are not included under consideration, and in the rural area, the value of the land in itself is not considered during the valuation of the property.

Bahir dar city is one of the cities in Amhara regional state of Ethiopia. Data from the Bahir Dar city municipality office revealed that in the inner city land and attached improvements are expropriated for the fulfillment of different infrastructures and development of the city. In this regard, the method used to estimate the value of the expropriated property is the cost approach and the valuers have not used the other methods of valuation. Even cost approach is not implementing in a standard manner. Also in the estimation of the expropriated property locational value is not included under consideration. Consequently, the estimated value of the expropriated property for the purpose of compensation becomes insufficient. Therefore, this paper emphasized on the assessment of the practice of real property valuation for expropriation compensation in Bahir Dar city.

1.2. Statement of the problem

In agrarian countries like Ethiopia, the land is not only the main means for generating a livelihood but is often also used to accumulate wealth and transfer it among generations. Also, in urban areas, most human activities are meaningfully linked to the land. It is the starting point for all urban development activities that provide the physical location for the shelter, commercial, industrial, and other public services. Therefore, the land lies at the heart of the social, political, and economic life of the nation at large (Abubeker, 2018)).

According to (Abebaw, 2016), Most towns and cities in Ethiopia have been expanding twice their size within the past ten years. After the downfall of the Dreg, in 1991, Ethiopia opened its doors for foreign and national investment. As a result, a large area of land is required for private and public investment, for the expansion of urban areas and the construction of roads and other types of infrastructure in all areas of the country. Presently large tracts of land are being taken from individual or group holders by way of expropriation for roads, streets, irrigation works, private mechanized farming, horticulture investment, real estate development, and other massive

infrastructure developments (Daniel, 2009). Such types of projects are needed and initiated by the government and peoples, since it is one of the mechanisms that should be used to enhance the economic development of the country, Ethiopia. However, in Ethiopia, the practice of compulsory land acquisition has not been accompanied by adequate compensation (Zemenfes, 2014). Thus the affected people raise the grievance on the amount of compensation that is paid by the government (Kweyamba, 2015 & Daniel, 2015). In Ethiopia before September 7, 2012 compensation for the expropriated property was done by 455/2005 expropriation proclamation. However, this proclamation is changed by another proclamation number 1161/2019 in 2012. Even though the new proclamation is enacted in the view of the researcher, this proclamation did not answer the main questions of affected people on the amount of compensation. Since the fifteen-year multiplication rate for displacement compensation of the land cannot replace the unlimited use right of the people on the land. Also, the locational value of the expropriated land is not included under consideration in this law. This means the valuation for compensation does not consider the value of location, and this significantly reduces the amount of compensation payable to the owner (Daniel, 2015). Besides according to (Abebaw, 2016) the biggest source of the inadequacy of compensation is the methods valuation used in determining compensation.

There were studies concerning expropriation, valuation, and compensation in Ethiopia and other countries. For instance, the study of (Theodorus Kweyamba, 2015), was assessed the Promptness and Fairness Compensation awardable for unexhausted Improvement on Land In Tanzania(examine the procedures in the processes of land acquisition, examine the legal challenges of compulsory land acquisition procedure, examine the valuation processes in the event of land acquisition). Similarly (Carolina Nilsson,2011), was examined the Valuation of development rights Current practice and limitations in Sweden (how do appraisers estimate the market value of a development right). The study of (Belachew, 2013), examined the implementation of expropriation, valuation, and compensation procedures; fairness of compensation paid for expropriated land. likewise, (Martin Person, 2015) was done qualitative research on compensation Practices in the Ethiopian Expropriation Process in a rural area. Moreover, the study of (Daniel, 2013) was focused on Land right and expropriation in Ethiopia (the implementation of expropriation procedures, fairness of compensation of expropriated land).

Despite the increasing rates of grievance on the paid amount of compensation, previous studies on this issue have been limited to some specific incidence that has a wide-ranging focus on the consistency of property valuation (variance and inaccuracy), the fairness of compensation in terms of other valuation methods in addition to the method stated in the expropriation proclamation, and the practice on valuation and compensation especially the methods. So, further investigation is needed on the actual practice of property valuation and compensation system in case of expropriation. Methodologically, almost all studies reviewed by the researcher in this study employed either quantitative or qualitative methods. Therefore this paper attempts to conduct what the researchers have never seen before to fill the above methodological and study area gap by triangulating both qualitative and quantitative research methods and come up with holistic insights regarding the study issue. In general, prior studies conducted in Ethiopia rarely examined the actual practice of property valuation for the expropriated improvement property in the urban area (inner city).

Having this consideration, this study tries to fill the above gap by examining the current practice of Real property valuation for expropriation compensation including both the expropriated land and attached improvement on it (house) comprehensively in the inner city of Bahir Dar.

1.3. The objective of the Study

1.3.1. General Objective

The general objective of the study is to assess the practice of real property valuation for expropriation compensation in Bahir Dar city.

1.3.2. Specific Objective

To meet the General objective of the study, the following specific objectives were designed:

- To assess the real property valuation procedures and its challenges
- To identify the gap between the legal framework and the actual practice of the expropriation legislation on real property valuation for compensation
- To assess the fairness of compensation paid to the affected people and to recommend the appropriate alternative valuation approach for the expropriated property
- To identify the main factors for the payment of insufficient compensation in the study area

1.4. Research Questions

To achieve the general and specific objectives of the study, the following research questions are forwarded:

- ✓ What procedures they have followed for valuation work when the compensation is done?
- ✓ Are the expropriation law and the actual implementation of valuation and compensation the same?
- ✓ Is the paid compensation for the affected people fair in amount?
- ✓ What is the appropriate valuation approach for the better estimation of the value of the expropriated property?
- ✓ What are the main factors for insufficient compensation payment in the study area?

1.5. Significance of the Study

The main significance of this study is to show the current practice of real property valuation for expropriation compensation, identify associated problems that affect the expropriated people, and proposing the recommendation for the problems.

Real Property valuation is a very crucial and serious task in the expropriation process. If the valuers properly estimate the expropriated property, the affected people will get better and sufficient compensation. Therefore, the output of this study is important for affected peoples. The output of this study would also be important for Bhir Dar city municipality, urban development office to fill the knowledge gap of the valuer about the valuation methods and to improve real property valuation practice. Consequently, the city municipality pays fair and just compensation for affected people by applying the national valuation standards. Besides, different financial institutions (Banks, insurance, microfinance, and others) can use the output of this study as a source to apply a standardized valuation system through communicating with the government institutions. Lastly, this study also would help as a stepping ground for future researchers to conduct further research in property valuation for expropriation in the region and country level.

1.6. Scope of the Study

This study is limited by both geographically and conceptually. Concerning geographical delimitation, it has been restricted in Bahir Dar city. Conceptually, the study has been limited to the practice of real property valuation for expropriation compensation; methods, procedures, the law and practice, and alternative valuation approach for the value estimation of expropriated property.

1.7. Limitation of the study

This study did not have any operating budget. However, the researcher has done the study effectively by resisting the challenges. The second problem faced was the unavailability of comparable sold properties that have a formal price to estimate the value of the expropriated property in the sale comparison approach. The third problem was the lack of written literature on real property valuation practice in the Ethiopian context.

1.8. Definition of Terms

- ❖ **Real property:** Legal interest on the owner of real estate and entitles to him to sell, lease, cultivate, subdivide and develop the land and building on it.
- ❖ **Real Estate:** it is the physical land as well as buildings and assets permanently fixed to the land itself.
- ❖ **Property valuation** is the financial estimates of the future net benefit of purchasing an interest in the property.
- ❖ **Valuer:** It is an individual, group of individuals or a firm who possesses the necessary qualifications, ability, and experience to execute a valuation in an objective, unbiased and competent manner with full competence.
- ❖ **Alternative valuation approach:** It is an appropriate method of valuation used to estimate the value of expropriated property in addition to the method stated in the expropriation proclamation.

1.9. Organization of the study

The study is organized with five chapters: The first chapter contains the background of the study with the research problem, objectives, question, significance, scope, and limitation of the study. The next chapter deals with a review of the literature about the general background of property valuation, the practice and legal frameworks of the property valuation and compensation, property valuation experience in other countries, international regulation and standards about the property valuation, and consistency of property valuation. In chapter three, the research design and methodology are explained with contains a brief description of the study area, research approach, sources, and method of data collection and analysis. Chapter 4, the survey results are discussed. Finally, chapter five gives concluding remarks and recommendations.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1. Theoretical Literature Review

2.1.1. General Concept of Real Property Valuation

Real property is legal interest on the owner of real estate and entitles to him to sell, lease, cultivate, subdivide and develop the land and building on it. The real property encompasses all the rights, interests, and benefits related to the ownership of real estate such as; the right to develop, lease, sell, donate, farm, mine, and others (Peter, 2007). Wear as real estate is the physical land as well as buildings and assets permanently fixed to the land itself (Joseph, 2014). For instance; trees and minerals as well as all things that are attached by the people, building, and site improvements. All permanent building attachments such as plumbing, heating and cooling systems; electrical wiring; and built-in items like the elevator, or lifts, are also part of the real estate. Real estate includes all attachments, both bellow and above the ground (IVSC, 2019). For real-estate, the subcategories of compensable entitlements include property rights held in land, building, farm crops, economic trees, and any other physical improvement on the land (Joseph, 2014). Real estate is commonly classified into two classes: residential and non-residential properties. Residential properties are single-family houses, condominiums, and multi-family properties such as apartment houses. Non-residential properties are office and retail buildings, factories, warehouses, hotels, and institutional real estate like hospitals and universities (Schulz, 2003).

Property valuation is the process of determining an estimate of the value of an asset (IVSC, 2019). It is an important activity in expropriation since right holders should get compensation based on the estimated value of the lost property (Habitamu, 2019). The proper valuation process is the most important step for the landowner as that is the means to reach a just compensation (Daniel, 2015).

Valuer: “It is an individual, group of individuals or organizations that have the necessary qualifications, skills, experience and knowledge of the subject of the valuation, the market(s) in which it trades, and the purpose of the valuation to effectively implement value-based, impartial and efficient pricing (IVSC, 2019). Real estate Valuers are required to have extensive education, training, and experience before they are recognized as professionals, with the majority of

valuation assignments focusing on market value (AJIBOLA, 2010). Also In some jurisdictions, licensing is required before one can act as a valuer (IVSC, 2019).

2. 1.2. Purpose of Real property valuation

The purpose of real property valuation refers to the information that the client wants the appraiser to provide the report. In most cases the client wants the appraiser to provide an opinion about a defined type of value for a specific property interest in a specific parcel of real estate as of a specific date. Buyers and sellers of real estate use appraiser to help determine how much to ask for the property, and how much to pay for it. Financial institutions use appraisals in connection with their lending activities, to evaluate the property that is offered as loan security. Governments use appraisals for taxation and compulsory acquisition. Appraisals are also frequently used to guide investment decisions and help with business planning (Schram, 2006).

According to (TEGoVA, 2016 & IVSC, 2019) property valuation is used for financial reporting, taxation, compulsory acquisition, merging, purchasing and selling, loan security purposes.

1. Sale report: the common purpose for requesting a valuation is for sale. Although this is often referred to as a valuation, it is more similar to marketing advice as normally the estimate of the price is given for a future date after the property has been fully marketed. Conversely, a valuation for purchase is by its nature, an estimate of the individuals' best and this is a calculation of worth.

2. Loan security: Financial institutions and other lenders commission the valuation of the property acting as collateral for a loan. They want a market value on which they can judge the amount of the loan based on the "loan to value" ratio. They are attempting to manage the risk of the loan by ensuring that the property has sufficient value to act as security for the amount lent.

3. Insurance: all property must be insured in the case of replacement but this is unconnected to the sale price which of course it uses the land. For insurance purpose the normal bases of valuation adopted will be the cost of replacing the building in the event of destruction or partial destruction.

4. Taxation: value frequently has to value property for tax purposes. The principal taxes fall in to the groups: capital and revenue. Often these evaluations are formula-based and differ from normal market value calculations.

5. Acquisition: Where national or local government bodies acquire property compulsorily to carry out public interest schemes it is usual for the owner to receive appropriate compensation payments. A suitable amount as compensation shall have to be paid to the owner, for which the valuation of a property has to be carried out. Therefore this study is carried out to assess the practice of property valuation for compensation in compulsory acquisition.

2. 1.3. Principle of Real property Valuation

The principles of valuation are the guiding factors in market analysis; they define how and why value rises or falls. They are fundamental. However, an investment in real estate may be valued based on one of several different measurements in addition to the price.

According to (Kahr, 2006) ten major principles that govern property valuation are:

- 1. Principles of anticipation:** markets are continually estimating the future value of properties and Market value often is affected by expectations about future events.
- 2. Principles of Balance:** the highest market value will result when the size and type of improvements are proportional to each other as well as the land.
- 3. Principles of Change:** This principle tells us, “No condition remains the same indefinitely; change is part of the economic cycle.” Property values are affected by the change in several ways. These include local economic and demographic trends, physical age and condition of the property and surrounding properties, character of a neighborhood or city, and natural events like disasters (hurricanes and earthquakes, for example).
- 4. Principles of computation:** The principle of competition states, “Opportunities for a profitable investment lead to competition.” This has consequences for the valuation of all properties. Thus, as long as demand remains unchanged, the emergence of competing properties will tend to weaken market value for all similar properties.
- 5. Principles of conformity:** This concept is, “A property is most likely to appreciate in value along with other, similar properties in the same neighborhood.” The value of the property is increase when there is a reasonable similarity among the improvements in a neighborhood.
- 6. Contribution:** Making improvements to the property will cause growth in market value to an extent (increasing returns) and the value of a component of property depends upon its contribution to the whole. The additional market value one may expect from improving a

property is not equal to cost, but to the contribution, those changes make to actual market value.

7. **Consistent use:** The principle of consistent use states that the entire property must be valued with a single-use. It is improper to value a property on the basis of one use for the land and another use for the improvements.
8. **Progression and regression:** this principle states that “A property’s value may increase due to the existence of similar properties in similar locations, containing greater quality” and “A property’ value may decrease due to the existence of similar properties in similar locations, containing lower quality.”
9. **Substitution:** This principle is, “A property’s greatest potential market value is limited by the market value of other, similar properties.” the buyer is not paying more for a property than the cost of producing an equally desirable substitute property.
10. **Highest and best use:** It is closely related to the principle that “Real estate valuation is maximized when land is utilized in the best possible way.”In the real estate market, the maximum benefit of investing either inland or improved property, whichever produces the greatest overall investment return.

2.1.4. Bases of value

The basis (or bases) of value must be appropriate to the terms and purpose of the valuation assignment, as a basis of value may influence or dictate a valuer’s selection of methods, inputs and assumptions, and the ultimate opinion of value (IVSC, 2019).

The most commonly used bases of valuation in the valuation literature are market value, mortgage lending value/MLV/, investment value/IV/, synergistic value, fair value, and special value (Hemphill, 2014). According to (Adair et al., 2014) Market value is the most common and widely accepted bases of value for a wide range of purposes. It is the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm’s length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently, and without compulsion (IVSC, 2019). Market value is a valuation basis for adequate compensation in most legislation that adheres to the principle of equivalence (John, 2015). However the expropriation is not done with consent on a free market, we will never know the actual market value of a specific object (Martin, 2015). In addition to the

difficulties of determining market value where land markets are poor or non-existent, there are also problems when it comes to the implementation of legal provisions in practice particularly in developing countries (John, 2015).

Market value will include 'hope value', which arises from expectations of changing circumstances surrounding the property such as development potential (even if there is no planning permission at the time of the valuation) (Peter, 2007). Market value is estimated through the application of valuation methods and procedures that reflect the nature of the property and the circumstances under which the given property would most likely trade in the open market. In the appraisal theory, market value can be established by using three methods of valuation (Daniel, 2018).

2.1.5. The use of market value as a measure of compensation

Based on constitutional requirements, many countries have developed standards for determining "just compensation." Most high- and middle-income countries with well-functioning legal systems have adopted "fair market value" of the expropriated asset as the standard for determining compensation for state expropriations. The fair market value is commonly defined as "the amount that the land might be expected to realize if sold in the open market by a willing seller to a willing buyer." The underlying reason for adopting the fair market value standard is that the market is an objective gauge for assessing the value of the land. Market value has been the most popular suggestion for calculating compensation payable (ADB, 2007). When the government acquires the land compulsorily and pays compensation, the transacted price cannot be equal to the market value because of the coercive conditions attached to the sale. This is contradicting to the basic rule of a free market, i.e. "free operation" of the transitions. In a free market, market value can only be produced in a situation where willing buyers and sellers of commodities meet and transact freely under market conditions and the price arrived at is supposed to be fair assuming that negotiations were not interfered (Belachew, 2013).

In Compulsory land taking there is the involuntary nature of the taking, and the government is a willing buyer, but the affected landowners are often not willing sellers. So some countries provide a payment above the "fair market value" and have developed a variety of mechanisms to compensate landowners above market value. For instance, Great Britain provides for special compensation when expropriation of agricultural land disturbs a farmer's operations. Similarly,

in Germany, when an expropriation divides or transverses agricultural land, the government must pay additional compensation based on the following: (i) increased time required for the farmer's to travel and preparation of machinery; (ii) damage due to long transport; and (iii) damage due to increased boundaries on the land. Also In Italian, the law provides for a high level of compensation and strong incentives for agricultural landowners and users to accept the compensation offered by the state. When agricultural land is expropriated and rezoned for urban uses, the municipality offers compensation of 1.5 to 3 times the value of similar agricultural land in the locality. This higher-than-market value offer of compensation has encouraged landowners to accept compensation offers without appeal to the courts (ADB, 2007). In countries like Ethiopia, where the property market is thin and inactive, and where there are no independent professional property valuers, valuation using the fair market value standard is impossible (Belachew, 2012). However, in a sales transaction, the market approach is used by buyers and sellers of real property where brokers have a significant role in price and rent determination and they tend to use the market approach. This is an indicator of the application of the market approach in actual transactions between economic units (Habitamu, 2019).

2. 1.6. Real Property Valuation methods and steps

The approaches employed for the valuation depend on the type of property, the use of the appraisal, and the quality and quantity of the data available for analysis (Appraisal Institute, 2013). Valuers are not required to use more than one method for the valuation of an asset, particularly when the valuer has a high degree of confidence in the accuracy and reliability of a single method, given the facts and circumstances of the valuation engagement (IVSC, 2019). Moreover, valuers will choose the method that, in their opinion, are the most appropriate to the property being valued unless there is legislation or statute applicable so that they would produce the most reliable value figure (TEGoVA, 2016). The choice of the valuation approach depends largely on the property type and the data at hand (Schulz, 2003). However, valuers should consider the use of multiple approaches and methods to arrive at an indication of value, particularly when there are insufficient factual or observable inputs for a single method to produce a reliable conclusion. Where more than one approach and method is used, or even multiple methods within a single approach, the conclusion of value based on those multiple approaches and/or methods should be reasonable and the process of analyzing and reconciling the differing values into a single conclusion without averaging should be described by the valuer

in the report. The goal in selecting valuation approaches and methods for an asset is to find the most appropriate method under particular circumstances. No one method is suitable in every possible situation. The selection process should consider, at a minimum: (a) The appropriate basis of value and premise(s) of value, determined by the terms and purpose of the valuation assignment, (b) The respective strengths and weaknesses of the possible valuation approaches and methods, (c) The appropriateness of each method in view of the nature of the asset, and the approaches or methods used by participants in the relevant market, and (d) The availability of reliable information needed to apply the method(s) (IVSC, 2019) There are three principal approaches to real property valuation: the market approach, the income approach, and the cost approach. These methods will give guidance on how much the expropriated property would be worth on the free market (TEGoVA, 2016).

Cost Approach

It is mostly used where the assets are “**special,**” i.e. those that do not produce incomes and they have very little or no sales comparable, such as churches, public schools, historical buildings, mosques, water treatment plants, etc. Like other methods, the cost approach is also used in compulsory purchase in determining values that could be used in compensation payment (Daniel, 2018). Also, it is mainly used for new buildings, where the value of the property for a potential buyer equals the reconstruction costs (Spies. et al., 2005).

Its economic rationale is that no rational investor will pay more for an existing property than it would cost to buy the land and to build a new building on it. However, given that construction of buildings needs time and that land for building purposes might not be immediately available, prices and costs will diverge in the short-run (Schulz, 2003). This approach indicates *value* by calculating the current replacement or reproduction cost of an *asset* and making deductions for physical deterioration and all other relevant forms of obsolescence (IVSC, 2019). In this approach, the value of prosperity is derived by adding the estimated value of the land to the current cost of constructing a reproduction or replacement for the improvements and then subtracting the amount of depreciation in the structure from all causes. The current cost to construct the improvement can be obtained from cost estimator, cost manual, builders, and constructors (Appraisal Institute, 2013). The cost approach for estimating current market value starts with the recognition that a parcel of real estate contains two components the land and the

improvements (Britton, 1991). However, this method fails to take into consideration aspects such as the location of the property or market factors that influence the value of the property. Thus the cost approach is not necessarily the best indication of market value for many properties. The method can be used in cases where the market is very weak and not enough transactions are documented to use the sales comparison method (Martin, 2015).

The cost approach should be applied and afforded significant weight under the following circumstances (IVSC, 2019):

- ❖ participants would be able to reconstruct an asset with substantially the same utility as the subject asset, without regulatory or legal restrictions, and the asset could be recreated quickly enough that a participant would not be willing to pay a significant premium for the ability to use the subject asset immediately,
- ❖ the asset is not directly income-generating and the unique nature of the asset makes using an income approach or market approach unfeasible,
- ❖ The basis of value being used is fundamentally based on replacement cost, such as replacement value.

Different steps are used to reach the final value of the property in this approach. The most commonly used steps are the estimation of the value of the land as vacant, Determination of cost bases, estimation of the cost of improvements, estimation of depreciation entrepreneurial profit, and determination of the value of the property(ASFAMRA, 2011).

Step 1 Estimation of the value of the land as a vacant

In estimating the value of the property using the cost approach land is valued separately as vacant (IAAO, 2013 & John, 2015). A land value that reflects the value of the site, as if vacant and available for development to its highest and best use, is added to the value of the improvement. Comparable sales approach, and/or income approach are typically two basic approaches used for land valuation (John, 2015). The sales comparison approach is the primary approach to land valuation and is always preferred when sufficient sales are available(IAAO, 2013). It is used to appraise vacant sites for improved sites whether they are zoned for Residential, commercial, industrial by locating vacant land sales that are similar to the subject site in terms of potential use and date of sale. It is also used to determine the value of

unimproved land by adjusting the prices to account for any differences in size, location, and features (Jerome et al., 2000).

The second method is the Income capitalization approach which is used in situations where markets are relatively inactive. The income capitalization approach is the most applicable to agricultural land and investment properties which depends on the quality and quantity of the expected income to generate over the life of the property at issue. The value of the land derived from this approach is the estimated present value of future benefits, including streams of incomes during the lifetime of the property. The income approach assumes that the owner intends to generate income from the land. This valuation approach derives land value by annual net income from the land divided by an estimated capitalization rate (John, 2015). $\text{Land Value} = \text{Net Income} / \text{Capitalization Rate}$.

Step 2 Estimation of the cost bases

In the cost approach, the process used to obtain a value for the structure relies on the cost to construct a replica of the subject property (reproduction cost) or the cost to construct an equally useful substitute for it (replacement cost). Reproduction cost is the current cost to construct a building that is the same as the subject property in all aspects replicate or it is the cost of constructing an identical structure by using the same materials and design at the time of appraisal. In the physical sense, reproduction cost assumes as a fact that the materials, quality of work, and technology used in the original construction of the subject property are still available today. Reproduction cost is appropriate in the following circumstances such as:

- a. The cost of a modern equivalent asset is greater than the cost of recreating a replica of the subject asset, or
- b. The utility offered by the subject asset could only be provided by a replica rather than a modern equivalent.

Replacement cost is the current cost to construct a new improvement that serves the same purpose as the subject property and that is as useful as the subject property. It is also the cost of constructing a substitute structure of equal utility using current materials, design, and standards. The replacement cost is generally that of a modern equivalent *asset*, which is one that provides

similar function and equivalent utility to the *asset* being valued, but which is of current design and constructed or made using current cost-effective materials and techniques (John, 2015).

The choice of either reproduction or replacement cost can affect the calculation of depreciation. When reproduction cost is the bases of the cost estimate the valuer must estimate depreciation from all causes. Whereas when replacement cost is used the amount deducted for accrued depreciation should not include any loss of utility from antiquated materials, undesirable design features, the like (Richard et al., 2008).

The replacement cost estimate is usually lower than reproduction cost estimates because it usually costs less to build a structure using modern material and techniques. In actual estimation, however, the replacement cost basis is employed most cases as it is very difficult to find the replica of older building materials. Theoretically, replacement or reproduction cost is considered as the base for the cost approach but it is difficult to apply reproduction cost because the building can include materials that are no longer used or even no longer available or no longer permitted by current construction standards(John, 2015).

Step 3 Estimation of the cost of improvement

Construction cost estimating is considered by many to be a specialized skill requiring a great deal of knowledge about building specifications and construction technology. For routine appraisals, however, reasonable results can be achieved by the appraiser who understands the four basic methods of estimating the costs; the comparative square- foot method, unit in-place method, index method and quantity survey method (Richard et al., 2008). According to (Kummeerow, 2012) the cost of improvement may be estimated either of the following techniques.

The Comparative Square –foot method: it is the most widely used method of estimating construction cost. The appraiser uses this method by referring to the published cost manual. Since the cost manual represents the average cost level at any one time, they are generally preferred over the actual costs for any specific project encountered. The cost of a particular building is estimated by applying the average square – foot costs of a similar building. Differences in building specifications and components that are not included in a base cost are adjusted by appropriate multipliers or adjustment amounts. The valuer can draw upon various

data sources that provide construction cost per square foot for various size-types of structures. Besides, data services provide a figure on changes in the price of building material in the wage rate of construction.

The unit in-place method: the unit in place method calculates the separate cost of each component of the building. Typical components would include foundation, walls, floors, roof, ceiling, heating, and so on. The cost estimate for each component includes the cost of installing the component into the structure. The costs for the various components are added to reach a total cost estimate. This method is especially well suited for estimating the cost of industrial buildings. Because such buildings often vary widely in size, shape, and height, it can be harder to make an accurate estimate of their cost using comparative square-foot cost calculation.

The IndexMethod: The index method is sometimes relied on to estimate costs for unique or unusual structures when the original or historic costs are known. The method adjusts the original costs to the cost level on the date of value by a construction multiplier, derived from published cost indexes. Cost records are cataloged by building design and type of construction and then indexed to a base year. The formula is $\text{current cost} = \text{original cost} \times (\text{Index on date of value} / \text{Historical year index})$.

Quantity Survey Method: it is the most detailed and accurate of the construction cost estimating methods. It involves the listing and separating pricing of each of the material and labor components of a project as well as all of the indirect costs of construction. Written full specifications and drawings are necessary. Although the quantity survey method is the most precise method of estimating construction costs, it is rarely used by the appraiser. It requires more technical knowledge of construction.

Step 4 Determine the amount of depreciation

When the valuers estimate the cost of the structure he or she recognizes that there are differences between the new structure and the subject property. This difference requires an adjustment to account for all of the possible value reducing phenomena that have affected the subject property. The money adjustment made to the account or the value reduction is the accrued depreciation. To estimate the accrued depreciation, the valuer examines three categories of value reducing factors;

physical deterioration, functional obsolescence, and economic obsolescence(Richard et al., 2008).

Physical deterioration: It is the reduction in value caused by wear and tear of the wearing out of the structure of the building due to age, condition, and an increase in the likely costs of future maintenance(Blackledge, 2009). It also any loss of utility due to the physical deterioration of the *asset* or its components resulting from its age and usage(IVSC, 2019). Economically physical deterioration can prove to be either curable or incurable depending on the costs of repairing the deteriorating items in the structure. If the repair cost is less than or equal to the increase in the value of the structure after the repairs, the physical deterioration is curable. Wear as if the repair cost is greater than the value of the structure after repairing, the physical deterioration is incurable.

Functional obsolescence: Any loss of utility resulting from inefficiencies in the subject *asset* compared to its replacement(IVSC, 2019). Loss of utility means that there are some features of the building that is not as useful as is the cost would suggest. Loss of usefulness is caused by faulty building design, old-fashioned equipment, technology being outdated, change of consumer attitude towards modern design, and some other design defects within the structure. Functional obsolescence can also be curable or incurable depending on whether the cost to cure the problem is less than or greater than the value benefits(Richard et al., 2008).

Economic (External) obsolescence: economic obsolescence describes a loss in building value that is caused by factors located outside the subject property. It is also referred to as environmental or locational obsolescence. Environmental hazards, changes in the zoning of a property, inharmonious nearby land uses, dust, and freeway or airport noise are sample conditions that might cause economic value loss to a building. Generally, economic obsolescence is caused by some event that has occurred or has been identified in the neighborhood since the property was built. The cause of the problem sometimes is beyond the control of anyone's property owner. This type of obsolescence can be temporary or permanent(IVSC, 2019). Economic obsolescence is not curable since the source is not inherent in the property and changes to the improvement do not affect it. The valuer determines the value of incurable external obsolescence through analysis of the market(Richard et al., 2008).

According to (Richard et al., 2008) there are four basic methods of measuring Accrued depreciation. It is important to remember that these methods are not abstract mathematical calculations. Rather they are an attempt to estimate the actual loss in market value, compared to the new building.

Age life method: the straight line or age life method of estimating accrued depreciation is based on the theory that all structure has a total useful life that can be predicted or estimated from analysis of sales. This is called the economic life of the building. it is defined as the period over which improvements to real property contribute to property value. Loss in value due to age is assumed to be directly proportional to the age-life or useful life of the structure.

$$\text{Accrued depreciation} = \frac{\text{Effective age}}{\text{Economic Life}} \times \text{Cost new}$$

Buildings of the age vary greatly in their condition and desirability (because of differences in maintenance, modernization, and so on). For this reason, some appraisers base depreciation estimates on the effective age of the building rather than the actual age. The effective age of the building is the actual age of other buildings that are in similar condition and of similar utility and marketability. For example, a 40- year- old building that has been modernized and well-maintained may be able to compete directly with 20-year-old buildings. Here the effective age of the 40-year-old building in question would be 20 years.

Market extraction method: the market extraction method (also called the market or comparables sales data method) is the only method that uses comparable sales data to estimate depreciation.

Breakdown, the cost cure (or observed condition) method: in the breakdown method the physical, functional, and external factors contributing to the loss in value of the improvements are isolated and estimated separately. This method measures the accrued depreciation by the cost to cure or repair any observed building defects. After inspecting the building, the appraiser tries to identify each building defect, feature, or condition that reduces value. Each is then classified as physical, functional, or economic.

Advantage of cost Approach

- ✓ The public tends to understand it
- ✓ It is often the only method to use in appraisal of special purpose properties
- ✓ It is relatively easy for the appraiser in making a cost calculation
- ✓ It is useful for new homes in a subdivision

Disadvantage of cost Approach

- ✓ It is difficult to estimate depreciation, particularly in older buildings
- ✓ While the cost of construction appears relatively easy to estimate, there is no exact cost figure.
- ✓ Construction cost is constantly changing the data is historical in nature

The Sales Comparison Approach

In the sales comparison approach transaction prices of highly comparable and recently sold properties are used to estimate the market value of the subject property being valued. The economic rationale of the sales comparison approach is that no informed investor would pay more for a property than other investors have recently paid for comparable properties given that the general market conditions are the same (Schulz, 2003). It is mostly used when recent transaction prices for similar properties are available, which is most often the case for single-family residential housing. The sales comparison approach is heavily dependent on the availability, accuracy, completeness, and timeliness of sale transaction data. Information sources include government records, data vendors, and appraiser's network of local contacts (example; brokers participating in the transaction) (Elli et al., 2003). If the properties have small differences (which they normally have), the appraiser tries to value these differences to level them off. As this is a subjective process, the "adjustments should be justified with evidence-based on recent experience with highly comparable properties. Finally, he weights the different properties according to their degree of similarity to the subject property and uses the mean as the estimated subject property value. When good and truly comparable properties are used the estimated value of the subject property becomes more reliable. The best comparison can be made when the selling price is reduced to a proper unit of comparison. A valuer should choose comparable transactions within the following context (IVSC, 2019):

- Evidence of several transactions is generally preferable to a single transaction or event,
- Evidence from transactions of very similar assets (ideally identical) provides a better indication of value than assets where the transaction prices require significant adjustments,
- Transactions that happen closer to the valuation date are more representative of the market at that date than older/dated transactions, particularly in volatile markets,
- For most bases of value, the transactions should be “arm’s length” between unrelated parties,
- Sufficient information on the transaction should be available to allow the valuer to develop a reasonable understanding of the comparable asset and assess the valuation metrics/comparable evidence,
- Information on the comparable transactions should be from a reliable and trusted source,
- Actual transactions provide better valuation evidence than intended transactions.

According to (Richard et al., 2008) Comparables sales analysis procedure have the process;

Step 1 Forgiven subject property, finding the sales of properties that are comparable to the subject property and that sold about the same time as the date of value. This requires understanding the meaning of the word comparable, identifying comparable properties, and collecting the necessary information about each property.

Step 2 Adjusting the selling prices of the comparables to match the characteristics of the subject. For the difference between the sales and the subject property. The purpose of this step is to adjust the price of each comparable, to reflect what the price would have been if that sale property had been more nearly identical to the subject property.

Step 3 Using several estimates of the value to arrive at an estimate of market value.

Step 4 Presenting the results in a report format suitable for viewing or printing.

The appraiser estimates the degree of similarity or difference between the subject property and the comparable sales by considering various elements of comparison: Real property rights conveyed, Financing terms, Conditions of sale, Expenditures made immediately after purchase, Market conditions Location, Physical characteristics, Economic characteristics, Use/zoning, and Non-realty components of value (Appraisal Institute, 2013).

Advantage of Sales Comparison Approach

- ✓ Appraiser, real estate market participants and clients understand and use it
- ✓ It gets around the problems of estimating costs, depreciation, rentals, and expenses
- ✓ It is generally accepted by the courts, judicial bodies and the general public

Disadvantage of Sales Comparison Approach

- ✓ It is sometimes difficult to obtain comparable properties
- ✓ Making adjustments for differences requires careful judgment and experience
- ✓ It is often difficult to obtain relevant information relating to each sale
- ✓ The data is historical in nature

Income Capitalization Approach

The income approach indicates value by converting future cash flow to a single current value based on the principle of anticipation (the value of any property is based on the present worth of future benefits) (Richard et al., 2008). Under the income approach, the value of an asset is determined by reference to the value of income, cash flow, or cost savings generated by the asset (IVSC, 2019). The economic rationale of the income approach for existing properties is that no investor will pay more for a property than he will retrieve by holding the property (Schulz, 2003). This method is primarily used for property that is generating cash flow, such as commercial real estate or rental units (Spies. et al., 2005). In this approach the greater the income the greater the value. This approach places a dollar of valuation on the future stream of cash flows and requires determining the amount, certainty, and length of time of future income from the property, then applying an appropriate capitalization rate to convert the future income into a present value. This approach is also used by determining the net operating income of a property and then choosing a capitalization rate suited to the property's type, location, age, and quality of tenants (Belasco, 2016). This method is applied only when the subject property produces some sort of income, usually in the form of rental income. It focuses on return on investment and the value of the property is determined by how much income is produced. The valuer must calculate the total gross potential rental income and then deduct for vacancy times and expenses to figure the net operating income (NOI) of the property. The valuer then applies a capitalization rate to determine the value of the property (Hawkins. et al., 2001).

The most commonly used procedures of estimating the value of the property using the income approach are the following (Hawkins. et al., 2001):

Step 1 Estimation of PGI and other income

Through market research, the valuer estimates potential gross income. Potential gross income consists of the rent for tenant space plus any service income. It is estimated based on a rental survey and the past performance of the property being appraised (Richard et al., 2008). Moreover, to generate rent, buildings may generate a variety of miscellaneous incomes that are called other income. Laundry, parking, vending machine revenues, and sign rentals are examples. Those incomes should be included in the calculation.

Step 2 determining vacancy and collection loss

Rental properties always have a loss or reduction in income from their potential gross income due to empty units (vacancy), from turn over and the possible nonpayment of rent. Even in high demand markets when the rental is difficult to find there will be some vacancy and collection losses. Thus valuers include an allowance in their income and expense estimates for income loss or a vacancy and collection loss.

The vacancy and collection loss used in this approach to the value section of an appraisal report attempts to reflect investors' expectations over a typical holding period, thus they may not always match the current market vacancy rate. The credit loss allowance is a provision for a likely loss of income on rented unit or space caused by tenants failing to pay their rent.

Step 3 Calculating Effective Gross Income (EGI)

The effective gross income (EGI) is the income after deducting the vacancy and collection loss allowance from the potential gross income. The Amount of income produced by a piece of property, plus a miscellaneous income, less vacancy, and collection loss.

Step 4 Estimation of operating and maintenance cost

Operating expense and direct expenses involved in running the building and may include maintenance or equipment replacement reserve, which is a non-cash provision for future expenditure for major repairs and equipment replacement.

Operating expenses are numerous and include repairs and maintenance, utilities, property taxes, wages and benefits, property management, insurance, etc.(Osborne, 2008).

Step 5 Estimating Net Operating Income (NOI). According to (Etter, 1994) the Performance calculation to reach the net operating income shown as follows:

PGI Potential Gross Incomes

-VC Vacancy & Collection loss

+MI Miscellaneous Income

=EGI Effective Gross Income

-OPEX Operating Expenses

=NOI Net Operating Income

After the net Operating Income is determined the final Market value of the property is estimated using different techniques as explained in the subsequent paragraphs. The most common techniques are direct capitalization and Discounted Cash Flow method. In direct capitalization, the relationship between one year's income value is reflected in a capitalization rate and the rate is extracted from the comparable sold properties.

In yield capitalization (DCF) the relationship between several years of stabilized income and a reversionary value at the end of the designated period is reflected in a yield rate. Direct capitalization and Discounted Cash Flow analysis are each appropriate in certain circumstances. In particular, direct capitalization is well suited for properties expected to have stable NOI whereas DCF analysis is well suited for properties expected to have fluctuating NOI. Discounted cash flows' investment holding period that is typical for investor explicit forecast of net operating income for each year of forecasting period (no just a single year) forecast must include the net income produced by the sale of the property at the end of holding period (Appraisal Institute, 2013). The discounted cash flow technique assumes that the price an investor is willing to pay for an enterprise depends on the amount of cash flow that the enterprise expected to generate in the future, and the degree of risk involved or the likelihood of actually receiving those each cash flow. Discounted cash flow analysis requires projecting expected cash flows' and converting these cash flows into their present values using a discount rate. The

result of DCF analysis, however, it is extremely sensitive to the underlying assumptions of the analysis. The critical factors that influence the results of a DCF analysis are the cash flow projections, the discount rate, and the terminal value.

Cash flow projections: It is commonly developed by applying expected growth rates to the current level of revenues and costs. Even moderate variations in these growth rates can have a significant impact on the estimated firm value when projected into the future. Because of this DCF analysis is generally performed for several different each cash flow sceneries to identify a range of values that reflects the uncertainty of cash flow projection.

Discount Rate: Are used to convert future cash flows to their present value and are also highly influential on the results of the DCF analysis. Due to the difficulty of accurately establishing discount rates, particularly in an emerging economy, it is important to estimate firm value under a variety of discount rate assumptions.

DCF calculations are generally considered to be the most complicated form of business valuation. This method requires the projection of business cash flows into the future. The cash flow will cover cash generated from operations as well as capital expenditure and working capital requirements. The value of the business is determined by doing a net present value calculation of the future cash flow expectations using an inappropriate discount rate.

DCF a technical method of calculation that is heavily dependent on the assumption about long-term business conditions (Wilhoite, 2011). The market value using direct capitalization is calculated as; $MV = NOI/R$, where MV is market value, NOI is net operating income, and R is capitalization rate. On the other hand, the market value of the property using the DCF method is $MV = \text{Summation of Discounted NOI} + \text{Discounted Terminal value (the value of a business or project beyond the forecast period when future cash flows can be estimated)}$ (Etter, 1994).

$$MV = \left(\sum_1^n \frac{NOI}{(1+r)^n} \right) + \left[\frac{NOI_{n+1}}{r-g} \right] \frac{1}{(1+r)^n}$$

It considers the monetary returns a property can be expected to produce and converts that into a value the property should sell for if placed on the market today. The main two techniques are Direct Capitalization and the Yield Capitalization. The Direct Capitalization uses the stabilized net income and a market-derived cap-rate.

The Yield Capitalization, on the other hand, is a more advanced Discounted-Cash-Flow model (DCF) of explicit future cash flow assumptions(Spies. et al., 2005). The income capitalization approach is the most applicable to agricultural land and investment properties which depends on the quality and quantity of the expected income to generate over the life of the property at issue(John, 2015).

Advantage of income Approach

- ✓ It is particularly applicable in estimating the value of income-producing properties

Disadvantage of income Approach

- ✓ The major problem with the income approach is the difficulty of selecting an appropriate capitalization rate
- ✓ Estimating the income and operating expense can sometimes prove difficult
- ✓ It is off limited use in the appraisal of owner-occupied and special purpose properties
- ✓ The data is historical in nature

2. 1.7. Factors affecting Real estate value

When the property is transacted we need making of market analysis about the factors of value through the interview from; the broker, owner, urban planner, local officials, and so on(Kahr, 2006). Each building has its own unique identity. The better this identification is, the greater the price estimates for the property. Each building is separated from each other in terms of the quality of the material used and the quality of the workmanship. It is unlikely that the prices of the two different houses with the same characteristics, or even the two different houses in different regions, will always be the same. However, in the case of an appraisal, certain criteria must be taken into consideration. The main factors affecting the value of the real estate are the age of the building, Interior Features, Size and Design of the real estate, the distance to the city center, the popularity, the income situation, and the availability of the area in which the real estate is located, Infrastructure availably and Landscape(Ersoz et al., 2018).

Location: it is one of the most important factors that affect property value. The location of the property will highly affect the buying decision of the buyer. If the property is in a prime location, you will be expected to pay a higher price.

Building Age: The age of the building is inversely proportional to the value of housing. The newer the home, the higher the price will be simply because the structure is almost new and no major repairs and renovations are needed however some homes have been built decades ago and are still worth far more than the modern homes. These are old homes that have historical significance and have been well-maintained.

Size and Design: The larger the property area and the home with good design, the more expensive a house can be.

Distance: The distance to the city center is inversely proportional to the housing value. The main thing to note here is that the busiest area of the city should not be taken as the center. On the contrary, the number of centers taken as a center is increased according to the structure of the city.

Popularity: It is the level of popularity of the environment in which the residence is expected to affect housing value the most. This factor also reflects the cultural structures, economic and social levels of the people in that region.

Parking and Garden: Properties such as parks and gardens are important for buyers.

Interior Features: Interior features are one of the first variables to multiply the space in a house. Changes can be made to the interior with subsequent restoration.

Landscape: For some buyers, the landscape can be the most important factor. Therefore, the landscape is very influential in the value of the place.

Area: The first factor that comes to mind in determining the value of an estate is the area in which it is owned.

2. 1.8. International and National Institutions, Regulations, and Standards

There are many Valuation Professional Organizations (VPOs). Most operate on a national basis, but some operate across countries. With the development of globalization, cross border money flows, and international companies, the importance of valuations undertaken across borders is recognized and a strong case put forward for international regulatory frameworks for the valuation profession (Hemphill, 2014).

Three major organizations set standards at the national and international levels.

- The International Valuation Standards Council (IVS)
- The Royal Institution of Chartered Surveyors (RICS)
- The European Group of Valuers' Association (TEGoVA)

International Valuation Standard

The International Valuation Standards (IVS) are standards for undertaking valuation assignments using generally recognized concepts and principles that promote transparency and consistency in valuation practice. The main objective of IVS is to increase the confidence and trust of users of valuation services. The authors and the publisher of this standard are the International Valuation Standards Council (IVSC) which is an independent, not-for-profit organization committed to advancing quality in the valuation profession. The primary objective of this council is to build confidence and public trust in valuation by producing standards and securing their universal adoption and implementation for the valuation of assets across the world (IVSC, 2019).

The IVSC is responsible for developing the International Valuation Standard (IVS) and related technical guidance. These standards are a set of high-level valuation principles giving a framework that describes overarching valuation concepts and principles, with the belief that public trust in the Valuation Profession is enhanced by having a common set of valuation standards. To ensure that the public interest is effectively protected, IVSC works cooperatively with national professional valuation institutes, and users (IVSC, 2019).

A standard will do one or more of the following: Identify or develop globally accepted principles and definition, Identify and promulgate procedures for the undertaking of valuation, Assignment, and reporting of valuations, Identify specific matters that require consideration and method, commonly used for valuing different types of asset or liability, Identify appropriate valuation procedures for the major valuation purposes (Hemphill, 2014)

Royal Institution of Chartered Surveyors (RICS)

RICS is a professional body that accredits over 118,000 professionals within the land, property, and construction sectors, with offices covering the major political and financial centers of the world. RICS regulates and promotes the profession; maintains the highest educational and professional standards; protects clients and consumers via a strict code of ethics, and provides

impartial advice and guidance. Any individual or firm registered with RICS is subject to their quality assurance and is required to keep up to date with current practice through a program of lifelong learning. Further, through their Valuer Registration scheme which is in process of being implemented globally, all registered valuers (i.e. those members who practice valuations that are covered by the Red Book) are carefully monitored annually on a ‘risk assessed’ basis to ensure that they comply with the Red Book provisions. Currently, the Registration scheme is in force within the UK and 10 mainland European countries (Hemphill, et al., 2014).

The European Group of Valuers’ Association (TEGOVA)

TEGoVA is a European non-profit making association composed of 61 valuer’s associations from 33 countries representing more than 70,000 valuers in Europe. Unlike the RICS and IVSC, which are public interest organizations, TEGoVA “represents the interests of qualified valuers”(TEGoVA, 2016 & IVSC, 2019).

2.1.9. Date of valuation

It is the date on which the hypothetical sale or valuation is assessed to take place and is usually; therefore, deferent from the date the valuation is actually prepared. The valuation amount will reflect the actual market state and circumstances at the required date of valuation, not at a past or future date. As markets and market conditions may change, the estimated value may be incorrect or inappropriate at another time. The date of valuation and the date of the valuation report may differ, but the latter cannot precede the former. Since the completion of the valuation report will never be earlier than the date of valuation (TEGoVA, 2016).

2.1.10. Valuation Report

The valuation report is the result of an assignment involving the valuation of an asset or assets. The valuation report must communicate the information necessary for a proper understanding of the valuation or valuation review. A report must provide the intended users with a clear understanding of the valuation. To provide useful information, the report must set out a clear and accurate description of the scope of the assignment, its purpose and intended use (including any limitations on that use) and disclosure of any assumptions, special assumptions, significant uncertainty, or limiting conditions that directly affect the valuation. This standard applies to all valuation reports.

The format of the report should be agreed with all parties as part of establishing a scope of work; however, the report must be sufficient to communicate to the intended users, the scope of the valuation assignment(Hemphill, 2014).

The report must convey the following, at a minimum: the scope of the work performed, the intended use, the method or methods applied, the key inputs used, the assumptions made, the conclusion(s) of value and principal reasons for any conclusions reached, and the date of the report(IVSC, 2019).

❖ **General Requirements for the report**

- ✓ The purpose of the valuation, the complexity of the asset being valued, and the users' requirements will determine the level of detail appropriate to the valuation report. The format of the report should be agreed with all parties as part of establishing a scope of work.
- ✓ Compliance with this standard does not require a particular form or format of report; however, the report must be sufficient to communicate to the intended users the scope of the valuation assignment, the work performed and the conclusions reached.
- ✓ The report should also be sufficient for an appropriately experienced valuation professional with no prior involvement with the valuation engagement to review the report.

2.1.11. Consistency of property valuation

Consistency of property valuation; In a market-consistent valuation framework, assets and liabilities are valued in line with market prices and so consistently with each other. In principle, each projected cash flow is valued in line with the prices of similar cash flows that are traded on the open market. We say valuation is a market consistent if it replicates the market prices of the calibration assets to within an acceptable tolerance (Sheldon, 2004).

The consistency of valuation includes valuation variance and accuracy. Valuation accuracy is the extent to which valuation accurately predicts actual market prices(Ayedun, et al., 2011).“The principal issue in valuation accuracy is standardizing the information set to ensure that all Valuers are equally informed. Valuations are a function of information and it is usually understood as the process of estimating price in the market place. This estimation will be affected by uncertainties (Juhana et al., 2014). If a group of Valuers each has a different view of the market then the distribution of valuations would have a wider variance than those which are

based on similar information(AJIBOLA, 2010). Valuation variance and inaccuracy is the cause of the inconsistency of property valuation (Sheldon, 2004).

The deviation between valuation and market prices is the degree of property valuation inaccuracy(Abayomi, 2013).It is the failure of property valuations to accurately reflect on the changing market conditions, demand, and supply expectations(Effiong, 2015). While the deviation between two or more valuers working of property valuations on the same subject property made at the same time for the same purpose is valuation variance(Abayomi, 2013).Two or more valuers valuing the same property at the same time for the same purpose and the same data would not arrive at the same value(Effiong, 2015). However, it is noted that no two valuers carrying out the valuation on the same property, given the same information will ever arrive at the same opinion of value(Ayedun, et al., 2011). The problem of valuation inaccuracy can lead to damaging the confidence of the property market.

As the concern for valuation variance and inaccuracy continues to generate more debate, the consumers of valuation services may become weary and begin to question the reliability of the valuer's opinion of value. If this issue is not finally addressed, widespread rejection of the valuer's opinion of value may occur(Effiong, 2015).The accuracy standard adopted(maximum margin of valuation error in UK;+-15% for commercial valuations,in Nigeria; +-10.2%, Australia;+-10%)(Nnamdi, 2018). According to (Abayomi, 2013) Causes for the valuation inaccuracy, variance, and high margin of error include the nature of the property, valuation assumptions, behavioral characteristics of the valuer, type of property, Obsolete(outdated) valuation methods, Lack of reliable data bank. Also specifically factors for the inaccuracy of real property valuation include; the nature and state of the property market, quantity and quality of data, the integrity of valuer, complexity of the property, valuation methodology, skill, experience, and judgment of valuer(Juhana et al., 2014).

2.1.12. Expropriation and Compensation

Expropriation has been defined as the power of government to acquire private rights in a land without the willing consent of its owner or occupant in order to benefit society. The Governments, therefore, have the right to compulsory acquisition of land and other property on the land, with payment of just compensation, for the broader public service (Keith, et al., 2008).

Compensation is a payment, either in cash or in-kind, and is principally about awards to negatively affected persons (Onyije, 2016). Also, it is placing in the hands of the owner expropriated the full money equivalent of the thing which he has been deprived.

According to (FAO, 2008) both developed and developing countries reveal the following among the commonly accepted purposes for compulsory acquisition:

- Transportation uses including roads, canals, highways, railways, bridges, wharves and airports;
- Public buildings including schools, libraries, hospitals, factories, religious institutions, and public housing;
- Public utilities for water, sewage, electricity, gas, communication, irrigation, and drainage, dams and reservoirs;
- Public parks, playgrounds, gardens, sports facilities, and cemeteries;
- Defense purposes

According to (UNCTAD, 2012) in order to be lawful, the exercise of this sovereign right requires, under international law, that the following conditions be met:

(a) Property has to be taken for a public purpose; (b) On a non-discriminatory basis; (c) In accordance with due process of law; (d) Accompanied by compensation. Those conditions are essential for the lawful expropriation and the expropriation law is certainly the guiding tool for proper valuation and subsequently fair compensation (John, 2015). Legislation should define the basis of compensation for the land, and guarantee the procedural rights of people who are affected, including the right of notice, the right to be heard, and the right to appeal. It should provide for fair and transparent procedures and equivalent compensation. (FAO, 2008).

Most national constitutions provide for adequate, fair, or just compensation for expropriated properties in the public interest. In many jurisdictions, expropriation is principally guided by the objectives of “equity” and “equivalence”. The principle of equivalence is crucial to determining compensation: people should receive compensation that is no more or no less than the loss resulting from the compulsory acquisition of their land. Besides, the Principle of equivalence is the right of the owner to be, so far as money can do it, in the same position as if his land had not been taken from him.

In other words, he gains the right to receive a money payment not less than the loss imposed on him in the public interest, but, on the other hand, no greater". In the United Kingdom, compensation is based on the principle of value to the owner or the principle of equivalence. Also, this principle is broadly followed in most Commonwealth countries and regions such as Australia and Hong Kong. That is, the adequacy of compensation should be measured against the goal of ensuring that people are neither impoverished nor enriched. In this principle, the compensation value to the owner is made up of market value together with other losses suffered by the claimant. Ideally, according to the principle of "equity" and "equivalence", compensation should be paid not only for the actual loss of the land but also for other socio-economic losses which include the development on land, severance, injurious affection, disturbance, special value and damages (Akintunde, 2012).

Compensation, whether in financial form or as replacement land or structures, is at the heart of compulsory acquisition. As a direct result of government action, people lose their homes, their land, and at times their means of livelihood. Compensation is to repay them for these losses and should be based on the above principles. Financial compensation on the basis of equivalence of only the loss of land rarely achieves the aim of putting those affected in the same position as they were before the acquisition; the money paid cannot fully replace what is lost. In some countries, there is legal provision recognizing this in the form of additional compensation to reflect the compulsory nature of the acquisition. However, the determination of equivalent compensation can be difficult, particularly when land markets are weak or do not exist, when land is held communally, or when people have only the right to use the land (FAO, 2008). The full compensation shall cover the objective value (market value) of the expropriated property, the depreciation of the value of the remaining property (severance), and other damages and costs which will weaken the financial situation of the expropriated owner. Compensation during expropriation should ideally aim at putting affected people into the position they would have been had the expropriation not been undertaken. It should not worsen their situation through compensation, nor should it enrich them through over-compensation. Those are the basic parameters in measuring the amount of compensation (Viitanen, 2002). Accordingly to say sufficient compensation the affected property owner shall beget the payment that enables in the same economic position as if the compulsory acquisition had never happened and able to continue their life similarly as before (Martin, 2015).

Also according to (Viitanen, 2002), the expropriated owners should be able to purchase a similar property in a voluntary transaction in the normal market instead of the expropriated property.

However, the method of calculating compensation varies from country to country based on the type of land ownership and the economic system. In countries where land is privately owned the amount of compensation is calculated based on the market value of the land, while in countries where land is publicly owned it is decided based on the average annual value of the economic activity ongoing on the land. For instance, as a best practice in India, land compensation is calculated based on the average market value of the top 50 percent of all transactions in the previous three years for similar types of land in the area. The calculated compensation based on the average market value of the area is doubled and the value of all assets attached to the land is added. The total figure obtained from adding the doubled average market value of the land and the value of the attached assets is doubled again to reach a final compensation amount. This shows the total amount of compensation in India is about four times the average market value of land in the specific area plus the value of all other assets attached to the land (Martin, 2015).

2.2. Empirical Literature Review

2.2.1. Empirical Review of real property valuation procedures

The problem of the appraisal can be solved by applying the systematic valuation process. During the valuation process; it is necessary to collect relevant data and the problems need to be identified. In all cases, the valuation process provides the model to be followed in performing market research and data analysis, in applying appraisal techniques and in integrating the results of these analytic activities into an opinion of value” (Appraisal Institute, 2013). The process of valuation requires the valuer to make impartial judgments as to the reliability of inputs and assumptions. For a valuation to be credible, those judgments must be made in a way that promotes transparency and minimizes the influence of any subjective factors on the process. Judgment used in valuation must be applied objectively to avoid biased analyses, opinions, and conclusions (IVSC, 2019). Eight main Steps in the property valuation process are; Identification of the problem, the scope of the work determination, data collection, and property description, Data Analysis, Site Valuation Opinion, Applications of the approaches to value, Reconciliation of value indications and final opinion of Value and Report of defined Value.

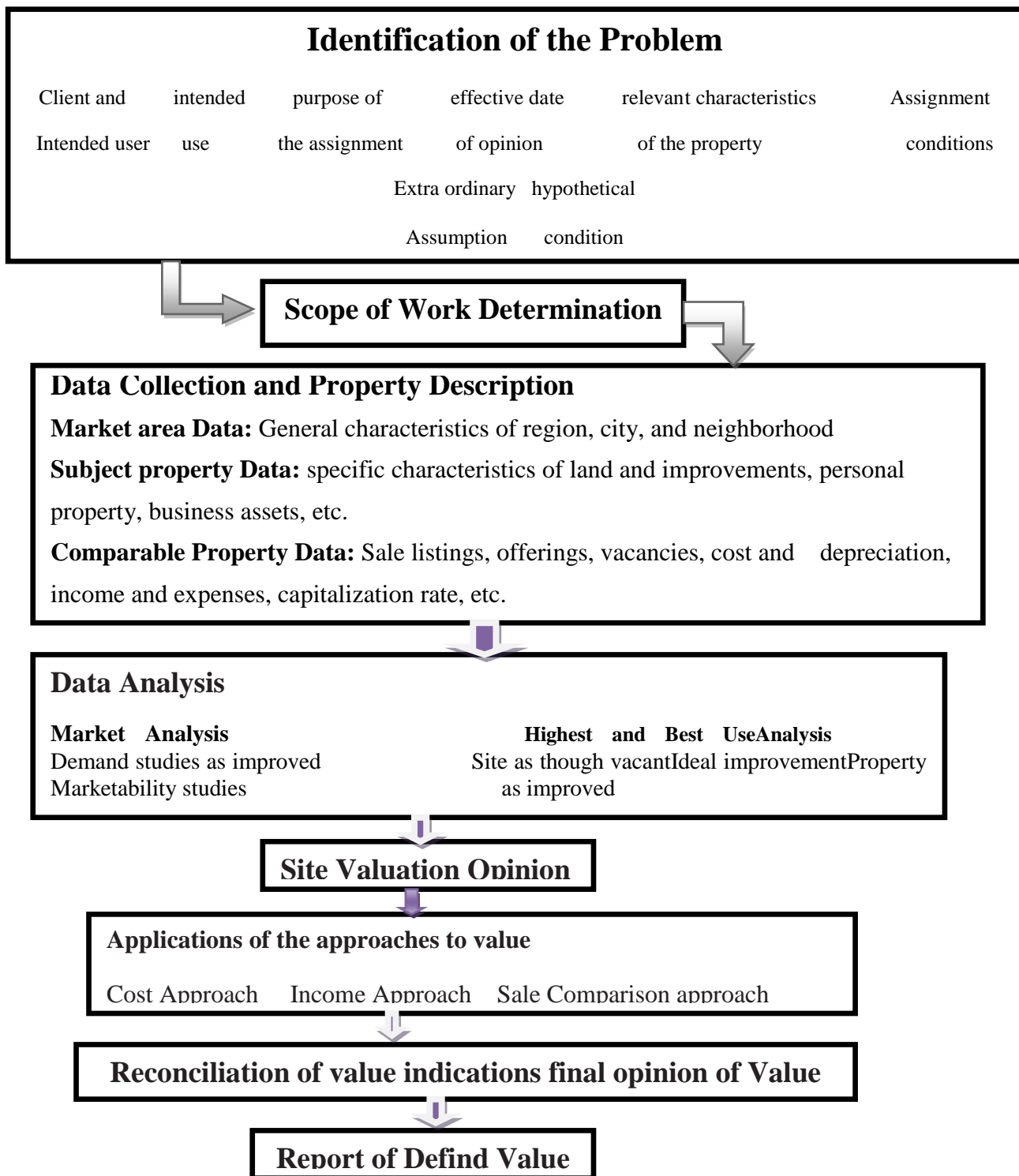


Figure 2.1 Real Property Valuation Procedures

Source: appraisal institute, 2013

According to (Habitamu, 2019) Property valuation in Ethiopia has not national valuation standard in which bases and techniques of valuation are taken. Also, there is neither an independent and developed valuation system, nor are there available professionals in the field. In this regard only cost approach is only the method used to estimate the value of the expropriated property, however, the full procedures of cost approach are not applied(depreciation value of the improvement is not takes into account and there is no site valuation)(Abebaw, 2015 &Daniel, 2009).

2.2.2. Empirical Review on Real Property Valuation Best Experience

In Germany

In Germany, the most prominent real estate price indices are reported by professional bodies of real estate agents and private research firms. Real estate valuation is codified through the Regulation on Valuation and the Guidelines on Valuation. The value of the existing stock is calculated at replacement cost for new structures subtracting a net depreciation value for age. In Germany, as in many countries, professional bodies of real estate agents provide price indexes that allow access to the average level of real estate prices. German appraisal data are outcomes of a largely standardized process; the empirical knowledge on the accuracy of different approaches to predict individual real estate prices is rather limited. The codified German valuation techniques can be justified by economic models for property markets. For real estate evaluating all three valuation approach is applied by using the regulation. Investors and project developers are free to choose the valuation approach they like for their purposes. However, in many cases, they use approaches oriented on the codified approaches. Commonly used appraisal approaches in Germany for residential properties are: (Single-family house=Cost approach Condominium=sale comparison approach, Apartment house=Income approach). Unlike other European countries, appraisers in Germany are obliged in many cases to use codified valuation techniques (Schulz, 2003).

In Turkey

The housing and construction sector in Turkey shows a structure parallel to economic development. Property valuations in Turkey are carried out by various private companies such as members of the Turkish Appraisers Association, some public institutions for expropriation purposes, individual experts for different purposes, commissions for taxation, etc. The three most commonly used methods in valuing real estate are sale comparison, cost approach, and income approach (Ersoz et al., 2018). The main data source for real properties in Turkey is the General Directorate of Land Registry and Cadastre. Data produced during the valuation activities are either kept in local databases of different institutions or kept in hard copies. Turkey has an active real estate market with over two million property transactions every year and monitoring the real property market has an essential role in a country like Turkey as the real estate has a significant share in GDP. Monitoring the activeness of the property market can be achieved through the Land Registry and Cadastre Information System and Spatial Property System. Also, p property valuation activities are carried out by public institutions conducting expropriation implementations and local governments for taxation purposes (Umit, 2018).

In Brazil

Brazil also has a valuation standard that is ABNT (Association of Brazilian Technical Standards) which is enforced by consumer law and is legal binding for all architects and engineers carrying out real estate appraisal. This standard for evaluating urban properties and are well developed in terms of their acceptance in the local market and more importantly their use by local valuers. Local real estate valuation is carried out by individuals who hold either an engineering or architecture primary degree. Brazilian appraisers use a sale comparison approach to determine the value of the property by using direct market data with associated market adjustment. Since all property sale has to be registered with the real estate registry office. Also to determine the market value of the real estate the valuers use linear regression modeling software with numerous comparable and detail factor adjustment (Adair et al., 2014).

In Tanzania

Tanzania introduced valuation as a profession several years ago with the passing of Professional Surveyors and establishment of internationally certified Bachelors Degree Program in Valuation in 1974 becoming the largest source of tertiary training in the subject within the Eastern Africa region for many years.

In 1977, Tanzania introduced the first legislative framework to condition the work of professional surveyors which included land economy surveyors; Professional Registration, Surveyors (Theodorus, 2015).

The term 'land economy surveyors' was used to describe the Valuation or the Appraisal Profession as is known elsewhere around the globe. Real estate transactions are highly active in Tanzania; hence there has been a huge expansion in the number of practicing valuers both in the public and private sectors. Tanzania has been active in striving for harmonized real estate practices and valuation standards. It adopted the International Valuation Standards (IVS) and International Financial Reporting Standards (IFRS). Besides the notable achievements both in training and registration of valuers in Tanzania, there has been a steady improvement in the adoption of digital data management system both in the education and professional practice areas. Valuers in Tanzania are the holder of Bsc degree in land management and valuation, Real Estate Finance and Investment, Property and Facilities Management. Today, both in the public and private sectors, some senior valuers have been trained abroad with MSc or PhDs in various advanced topics of the Valuation profession. Some of these were trained in the United Kingdom, Australia, New Zealand, Kenya, and the USA. There are three distinct groups of valuers practicing in Tanzania (i) Ministry of Lands Valuers commonly referred to government valuers (ii) Public Servants in Parastatal organizations and (iii) Private Valuers(Felician, 2017).

2.2.3. Land Ownership and Real property Valuation System in Ethiopia

Land may be held in one of the following four ownership regimes: private, communal, state, or open access (Daniel, 2015). According to the (FDRE, 1995) Article 40(3) The right to ownership of rural and urban land, as well as of all-natural resources, is exclusively vested in the State and in the peoples of Ethiopia.

The land is a common property of the Nations, Nationalities, and Peoples of Ethiopia and shall not be subject to sale or other means of exchange.

For this reason, rural farmers and pastoralists are given a right called “holding right” that provides rights of use and enjoyment, lease/rent, donate, and inheritance. This right is short of ownership because of the absence of the sole right of selling the land. Similarly, according to the urban lease proclamation urban residents can get land under a lease agreement that guarantees 99 years use right on the land. Even the leaseholder cannot sell the bare land only rather than with improvement. It is highly restricted which makes it also short of ownership. This shows the land tenure system is highly dominated by the government and has the right and power to take the land for his want. As stated in the above countries where land is publicly owned compensation is calculated based on the average annual value of the economic activity ongoing on the land. As a result, the compensation calculation system of Ethiopia is categorized under this.

When come to real property valuation in Ethiopia, it is carried out for payment of compensation for both rural and urban development activities; private and government development projects (Kweyamba, 2015 & Daniel, 2015). Property valuation in Ethiopia has not national valuation standard in which bases and techniques of valuation are taken (Habitamu, 2019). Also, there is neither an independent and developed valuation system, nor are there available professionals in the field. The reason is related to the fact that land is not privatized property in Ethiopia, which has resulted in the non-development of the productive real property market in the country (Daniel, 2009). Property valuation is a discouraging business in Ethiopia while it is one of the most appreciated and productive businesses in any nation with a well-performing economy. It is a difficult challenge in Ethiopia owing to a lack of properly developed land market, among others. Hence, proper valuation of, for instance, a given real estate’s market value could be quite confusing.

Since there is no developed market for the land on which such properties are established or developed; the valuation would not be as complete and as convenient (Daniel, 2018). In the preceding laws including the Addis Ababa land charter and the civil code, real property valuation issues were not clearly addressed (Habitamu, 2019). However, the federal expropriation proclamation no 1161/2019 under Art.12 (2) stipulates replacement cost approach is the only method of valuation for all types properties (the amount of compensation shall be determined

only on the basis of the replacement cost of the property) and since property market is very weak, the easiest method used to value the expropriated property is the replacement cost method (Kweyamba, 2015 & Daniel, 2015). Comparative sales approach or income capitalization are unknown by property appraisers in Ethiopia (Daniel, 2015). Also, the replacement cost approach requires estimates of land value, accrued depreciation, and the current cost of constructing improvements such as a house (John, 2015). Scholars suggested that this approach can be used in countries where the market value for real property is not developed well (Abebaw, 2016). In Ethiopia in the actual practice these approaches are limited by the following condition;

- ❖ Since expropriation is a forced sale, then the compensation must enable the loser to go to the market and obtain a similar property of a comparative utility. But the 1161/2019 expropriation law denies this fact under Art.12 (1) by claiming the land is not a compensable element rather gives fifteen-year income generated on the land.
- ❖ The true worth of an asset will not be the same as its cost rather it is a function of the expected benefits or cash flows derivable from that property. Since the cost approach is not market-driven (IVSC, 2019).
- ❖ It is particularly more problematic given that construction of buildings needs time and that land for building purposes might not be immediately available, prices and costs will diverge in the short-run (Schulz, 2003).

2.2.3.1. Bases of Real Property Valuation

Bases of value are important in dictating valuation approaches, inputs, and assumptions applied in valuation estimation. In Ethiopia, in a sales transaction, the market approach is used by buyers and sellers of real property where brokers have a significant role in price and rent determination. Although brokers practice a general tendency of inflating prices, with an overall intention of benefiting mostly from the commission calculated as a percentage of the sales/rent value of each transaction, they have the tendency of using the market approach. This is an indicator of the application of the market approach in actual transactions between economic units (Habitamu, 2019). However, according to The expropriation proclamation 1161/2019 On Article 12(2), the “amount of compensation for property situated on the -expropriated land shall be determined on the basis of the replacement cost of the property”, meaning that the compensation given should

cover the costs of reproducing an equivalent property. But this valuation base denies the market worth of the expropriated property.

2.2.4. The legal framework and actual practice of real property valuation for compensation

Although Real property valuation is carried out for several purposes, in Ethiopia it is carried out for mortgage lending and expropriation by legislations. For other purposes, valuation is carried out according to the institutional interest. Today in Ethiopia valuation for expropriation is ruled by FDRE Constitution and expropriation law.

Article 40(8) of the FDRE Constitution says that “without prejudice to the right to private property the government may expropriate private property for public purpose subject to payment in advance of compensation commensurate to the value of the property”. However, the constitution does not recognize land as private property. What are considered as private property in the constitution are any other properties planted or erected on the land by the skill, labor, or capital of the person. Therefore, the objects of compensation under the present legal regime are buildings, plants, and other similar things, save the land itself. The general reason given is that land is public property; thus there is no private ownership of the land and no compensation should be paid by the government for its own property. As a result, it denies the holder of the land fair compensation (Martin, 2015). Since the 15 years, land income displacement compensation does not replace a loss of a lifetime and even beyond and cannot buy them an equal livelihood.

The expropriation proclamation 1161/2019 On Article 12(2) of this proclamation “amount of compensation for property situated on the -expropriated land shall be determined on the basis of the replacement cost of the property”. I.e. The valuers, in Ethiopia as well, normally use the cost approach valuation method. However, the valuation system is quite unsuitable and not implemented correctly in Ethiopia for lack of properly developed land market and hence the difficulty of precisely reaching the market worth of a given property (Daniel, 2018). Modern valuation systems, give market value for expropriated land and, during the calculation of compensation, location value has always been given a place (Daniel, 2009).

In Ethiopia, although the economic value of land is denied in the constitution and other subsequent laws, in actual market transactions, it is the land that has a significant contribution to the total worth of the property (Abebaw, 2016). The sale price of small houses in the center of large cities is inflated due to location. In this case, it is the land that is transacted rather than the improvements (Habitamu, 2019). Also when the property is transacted land value is included indirectly together with the property situated on the land. The same property in different locations has a different value but the government pays the same amount of compensation for that property. This is the fact that existing compensation legislation ignores location value for land (Daniel, 2009).

The Ethiopian practice is also against the practice in many countries. For instance, in Brazil, Engineers and Architectures with valuation specialization, in UK and US real estate degree holders, in China construction, economics, and business and finance experts with valuation specialization are responsible for valuation (Adair et al., 2014). In Ethiopia, there is no valuation standard and there is no strong national institution that gives clear policy as well as technical and financial guidance; as a result, real property valuation has been practiced without any framework. This contradicts the international valuation practice where certified valuers do the valuation assignment depending on the national or international standards (IVSC, 2019). Also, valuation standards, which cover ethics and competency issues like the basis of valuation, the stated purpose of the valuation, and competency tests of the valuer are absent (Habitamu, 2019) As a result, the valuation output maybe not consistent and appropriate. Therefore, the estimated value obtained through this arbitrary process definitely results in insufficient compensation.

2.2.4.1. The issue needs to a discussion in the expropriation proclamation

The expropriation proclamation has the following problems:

- ❖ In the expropriation proclamation, No 1161/2019 on article 13(2(a)) states that a rural landholder whose landholding has been provisionally expropriated shall be paid displacement compensation for the lost income based on the highest annual income during the last three years. However, if the land is taken for fifteen years (temporarily) the compensation amount will be the same as to the compensation paid when landholding is expropriated permanently.

- ❖ **Proclamation No 1161/2019 on article 13 (1(c))** states that where equivalent land is not available the landholder shall be paid displacement compensation which is equivalent to fifteen times the highest annual income he generated during the last three years preceding the expropriation of the land. However this compensation system doesn't consider the farmers' lifetime right in the land with life-long income from their land, livestock's, other landed assets, and the right to pass it to the coming generations. Hence the government deprives them of their rights on the land and the amount of compensation is not sufficient and not equal when we compare to benefits get from the land by possessing it for an unlimited period. Three years' or 'fifteen years' appear to be baseless, unscientific, and not offer valid justification.
- ❖ **In Article 13(1(a))** "a landholder who is to be displaced permanently shall be substituted for a reasonable proportion of the land taken from the area, shall be given a substitute land if it is available."The law predicts the possibility of providing a substitute land to peasants who lost their land under expropriation. However, because of the scarcity of land in our country, a replacement land is not easily accessible, and Even where a substitute land is available the fertility, location, and sizes are not clarified (Muradu, 2015). Those are problems of expropriation proclamation.

2.2.4.2. The improvements made on the 1161/2019 expropriation proclamation

The new expropriation proclamation is enacted to rectify and fill the gaps in the former law and include other provisions to make more effective the system of expropriation of landholding and payment of compensation. In the new proclamation the following provisions were added:

- ✓ Giving priority rights to develop land for the landholders; landholders whose holdings are within the urban area to be redeveloped shall have a priority right to develop their land according to the plan either individually or in a group. Also, rural landholders for agricultural use shall have priority rights to develop their land holdings according to land use plan either individually or in a group.
- ✓ The rate of multiplication for the compensation of land is increased; the landholder will be paid displacement compensation which is equivalent to fifteen times the highest annual income he generated during the last three years preceding the expropriation of the land.

However, in the researcher's view, this improvement cannot solve the problem of the affected people on the compensation amount. Since they get the benefit on the land unlimitedly.

- ✓ Providing compensation for the social and moral damage; Displaced people shall be compensated for the breakup of social ties and moral damage they suffer as a result of expropriation

Give more emphasis on the resettlement; Urban or woreda administration shall have the duty to resettle the people displaced on the basis of the resettlement package and allocated budget.

2.2.5. Way of compensation calculation for Building

Regulation no. 135/2007, under Article 3, states that the amount of compensation for a building shall be determined on the basis of the current cost per square meter or unit for constructing a comparable building. The compensation for a building shall include: The current cost for constructing floor tiles of the compound, septic tank, and other structures attached to the building, the estimated cost for demolishing, lifting, reconstructing, installing and connecting utility lines of the building. In expropriation proclamation 1161/2019 on Article 13(4) where urban landholders are permanently displaced as a consequence of land expropriation in addition to compensation for the property situated on the land substitute land for building houses is given or an arrangement shall be made to let them purchase housing units. But there are no mentions about the size, location, condition of the infrastructure of the substituted land whether it is the same or not to the previous land.

Based on Amhara region directive No 7 Article 26(G) Compensation for building = current cost of construction (material cost + labor cost + capital cost) + cost of a permanent improvement on the land (clearance+ Land adjustment+ stone pick up + others land development work) + the amount of refundable money for the remaining term lease contract.

2.2.6. Way of Compensation calculation for Land

On proclamation No 1161/2019 under Article 13(c) the amount of displacement compensation payable with respect to land used for growing crops or perennial crops shall, where it is impossible to provide replacement land be fifteen times the price of the average yield of crops or perennial crops obtained from the land. The most commonly productive crop type in that area is taken and the maximum yield of a crop is taken in the previous three years then multiplies it by the current price of the crop.

Table2.1: Way of calculation for the compensation of land

Expropriated land area	Type of crop produce	Land usage in area	Crop product / hectare	Crop product/ quintal for each crop type	Price/quintal	Total price	Sum	Total price * 10
1hectar	Maize	0.33 hectare	55 quintal	18.15 quintal	861 birr	15627.15	45829.46 birr	458294.6 birr
	Finger Millet	0.33 hectare	25 quintal	8.25 quintal	1331 birr	10980.75		
	Teff	0.34 hectare	23 quintal	7.82 quintal	2458 birr	19221.56		

Source: Survey result from Bahir Dar city municipality in 2011

2.2.7. Way of Compensation calculation for Vegetable

Based on regulation No 135 Article 6(1 & 2) compensation for unripe vegetables=number of plants (legs) x cost incurred to grow an individual plant + cost of a permanent improvement on land. Compensation for ripe vegetables the annual yield of the ripe vegetable (in K grams) * the current price of the Perennial crops + cost of a permanent improvement on land.

Table 2.2: Way of calculation for compensation of the vegetable

Vegetable Type	Quantity/leg	product/leg/kg	Price/Kg	Total Price	Total Price*10
Mango	1	0.35 kun (35kg)	20birr	700 birr	7000 birr
Coffee	1	0.0033ku (0.33kg)	140 birr	46.2 birr	460.2 birr
Buckthorn	1	0.0028ku (0.28kg)	45 birr	12.6 birr	120.6 birr
Zeitoni	1	0.1096ku (11 kg)	15 birr	165 birr	1650 birr
Orange	1	0.024ku (2.4 kg)	35 birr	84 birr	840 birr
Banana	1	0.041ku (4.1kg)	25 birr	102.5 birr	1020.5 birr
Avocado	1	0.079ku (7.9 kg)	15 birr	118.5 birr	1180.5 birr
Papaya	1	0.066 ku (6.6 kg)	15 birr	99 birr	990 birr
Sum					13261.8 birr

Source: Bahir Dar city municipality agriculture office in 2011

Table 2.3 Summary of some practice of property valuation and compensation in case of expropriation

Authors	Study Area	Title	Methods	Results
Carolina Nilsson(2011)	Sweden	Valuation of development rights Current practice and limitations	Qualitative method and comparative case study research design were used. It is analyzed narratively.	The preferred approach among appraisers is to use the comparable sales method, trying to find comparable objects that are in the same phase in the development and planning process as the subject property.
Theodorus Kweyamba (2015)	Tanzania	Assessment of Promptness and Fairness Compensation Awardable for unexhausted Improvement on Land In Tanzania	A mixed research approach and case study research design were used	The application of compulsory land acquisition is exercised, without providing an alternative resettlement area or paying fair compensation is likely to make the livelihoods of many households more precarious.
Belachew Yirsaw (2013)	Ethiopia	Expropriation, valuation, and compensation in Ethiopia	A mixed-method method and Case study research design were used. Analyzed by descriptive statistics	The problems associated with the legal, technical, institutional and financial aspects of valuation and compensation practices are numerous and that the practices are full of inconsistencies, unfairness, and lack of standardization.
Gashaw Tenna (2015)	Ethiopia	Land Expropriation and Compensation Payment in Ethiopia: Review	literature review of published materials were used and analyzed narratively	Land expropriation in our country encountered resistance from farmers because of unfair compensation and lack of training before and after compensation.

Habtamu Bishaw (2019)	Ethiopia	Real Property Valuation in Expropriation in Ethiopia; Bases, Approaches, and Procedures	It is desk review by using existing literature and analyzed narratively	The study found that there is no standard and responsible institution for real property valuation. As a result, valuation activities have been practicing arbitrarily by a committee without proper bases and approaches with cumbersome procedures.
Daniel w/Gebriel (2013)	Ethiopia	Land Rights and Expropriation in Ethiopia	it is qualitative research and were used a Case study research design. The research is analyzed narratively	<ul style="list-style-type: none"> ✓ Even if the Ethiopian Constitution provides and guarantees common ownership of land to the people, this right has not been fully realized whether in terms of land accessibility, enjoyability, and payment of fair compensation in the event of expropriation. ✓ The law or its practical applicability, such as valuation process which reduces the amount of compensation
Martin Persson 2015	ANR S	Compensation Practices in the Ethiopian Expropriation Process	It is a mixed research approach and used a Case study research design.	The affected people are to a large extent dissatisfied with how the expropriation process was undertaken, as well as the amount of compensation received for lost property.
Abebaw Abebe (2016)	Addis Ababa	Expropriation, Valuation, and Payment of Compensation; The Law and The Practice in Addis Ababa City	Desk review was made on legal issues and research papers made in the area.	The expropriation, valuation and payment of compensation practices in Addis Abeba are now a day's becoming a cause for dispute and unrest. Especially, the government is solely capturing the value of the land which has expropriated from surrounding farmers.
Zemenfes (2014)	Mekelle	Farmland Conversion and the Compensation Question in Mekelle (Ethiopia)	It is a quantitative research approach and were used Survey research design	The city advances towards the agricultural hinterland fringe farmers feel threatened of losing their livelihood, and are not happy because of the knowledge that the compensation process is unfair in terms of amount and absence of rehabilitation support for their losses.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Background information of the study area

Bahir Dar is the capital city of Amhara national regional state in Ethiopia. Administratively Bahir Dar is a special zone. Historians say that the city has a long history related to its ancient residents, but it was established in its present form in the early 1930's, at the time of the Italians "occupation, and since then it has remained to be one of the fast-growing cities in the country. In particular, the city has made dramatic growth in population size and in the area in the last two decades(Seltene, 2012). It is found in the Northwestern high lands of Ethiopia and it is located northwest of Addis Ababa about 550 km far from the capital city Addis Ababa. It is situated at an altitude of about 1820 meters (5,970 ft) above the sea level at geographic coordinates 11°36' N37°23'E (Google Earth map, 2019). The city lies at the southern extreme of Lake Tana, the largest lake in the country. Its location at this spot favors the city with many and multi-faceted opportunities like water resources, lake, and river, suitable topography, favorable climate to live, to serve as a center for northwestern Ethiopia.

Currently, Bahir Dar is divided into 10 kebeles of which 6 are urban and the rest 4 are rural Kebeles. Apart from the above 10 Kebeles, the present city administration incorporates also three satellite towns; namely, Tis-Abay, Zegie, and Meshenti. It is the center of two governmental administration offices, Bahir Dar city administration, and Bahir Dar Zurieyaworeda administration office(SAWE, 2017). Today Bahir Dar is not only a center of administration but also a nucleus of commerce, industry, transport, communication, health, education, and tourism. (Bahir Dar, 2019). According to the data obtained from Bahir Dar City administration housing problem, unemployment, inadequate social and physical infrastructure facilities, weak city administration capacity, the spread of HIV/AIDS, flooding are the major problems that are threatening the development of the city.

Demography: Based on the 2011 Census conducted by the Finance and economic cooperation office in Amhara region, Bahir Dar Special Zone has a total population of 356,757, of whom 168,839 are men and 187,918 women; 296,532 or 83.12% are urban inhabitants, the rest of population are living at rural kebeles around Bahir Dar.

Climate Condition: The climate condition of Bahir Dar city is «Woinadega» or it has a medium temperature. Afternoon temperatures are very warm to hot year-round, and morning temperatures cool; however, the diurnal range is much larger in the largely cloudless dry season (Bahir Dar, 2019).

Economic Activities: The country's free-market economic policy has encouraged investment and other market potentialities. Today, Bahir Dar is not only a center of administration but also a nucleus of commerce, industry, transport, communication health, education, and tourism. Bahir Dar is one of the leading tourist destinations in Ethiopia, with a variety of attractions nearby Lake Tana and Blue Nile River. It is also considered as one of the most beautiful, well planned, and safest city by many standards.

3.2. Study Area Location

The study was conducted in Bahir Dar city because the relevant data for this study are available, the researcher has an adaptation and prior knowledge of Bahir Dar city (simple to collect the data and manage the respondent), also it is near in transportation.

For this study, the researcher purposely used the expropriated people data in 2010 and 2011 from the two selected kebeles (Fasillo and Atse-Tewodrose) in the Bahir Dar city. For the reason that only the above year data is available in the municipality and the expropriation, activity is taking place merely in this kebele.

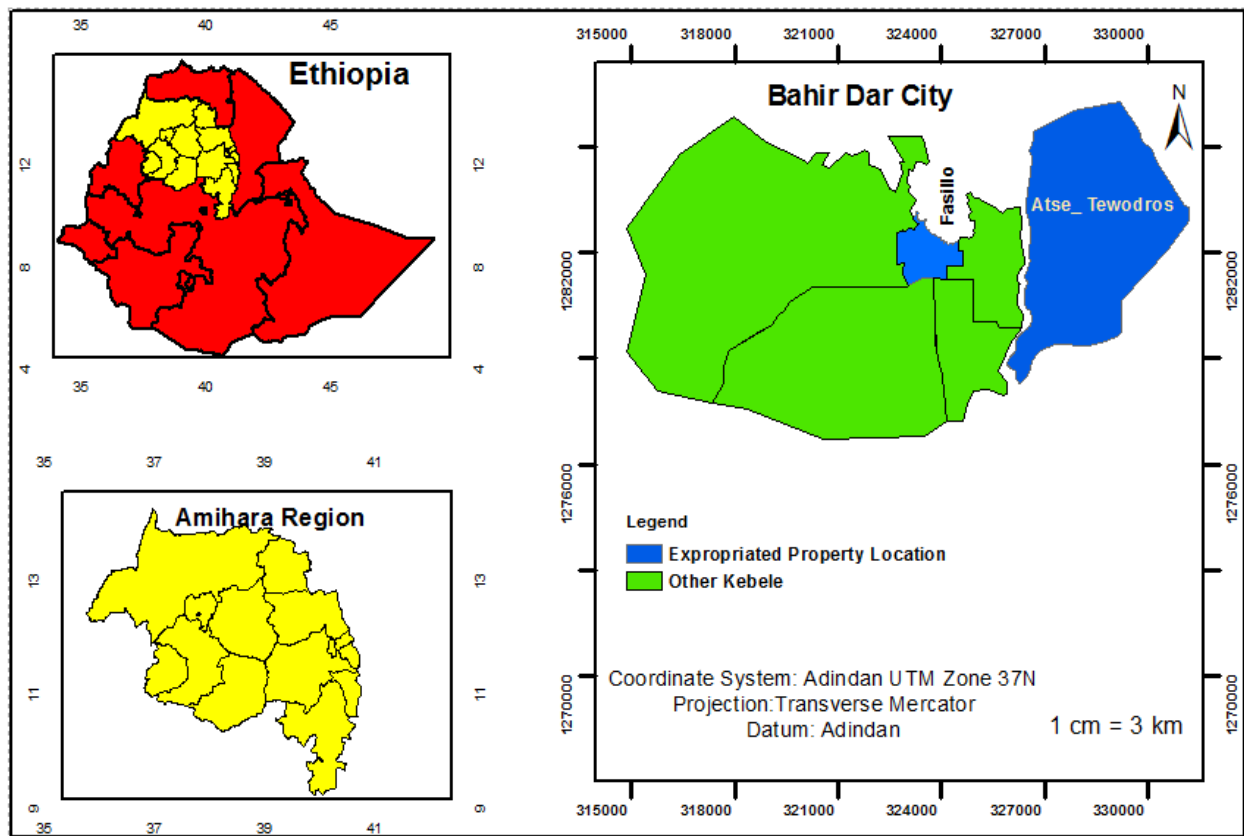


Figure 3.1: Location map of Bahir Dar city and the study area

3.3. Research Approach

In order to achieve the objective of the study, a mixed (both qualitative and quantitative) type of research approach were used. It involves; the integration of qualitative and quantitative research, the collection of both qualitative and quantitative data, and analysis of both forms of data. The quantitative research approach involves the generation of data in a quantitative form which can be subjected to rigorous quantitative analysis. Whereas a qualitative approach to research is concerned with the subjective assessment of attitudes, opinions, and behavior. Qualitative data tends to be open-ended without predetermined responses while quantitative data usually includes closed-ended responses such as found on questionnaire instruments (Creswell, 2014). Therefore, the qualitative method was used to collect data on the perception of affected people, government staff involved in property valuation for compensation. Similarly, quantitative data on documented material were gathered.

3.4. Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement, and analysis of data (Kothari, 1990). The main function of a research design is to explain how you will find answers to your research questions (Ranjit, K, 2011). This research aims to investigate the practice of real property valuation for expropriation compensation in Bahir Dar city. Hence, to carry out effective analysis, appropriate data related to the actual real property valuation work for compensation are required. The data were collected from individuals involved in property valuation for expropriated property in the municipality and from affected people. As the research was largely focused on collecting and analyzing the perception and attitude of the affected people and government offices a survey research design (cross-sectional research design) was applied. (Bryman, 2012) Argues that a cross-sectional design demands the collection of data on many cases and at a single point in time in order to gather a body of quantitative data in connection with two or more variables, which are then examined to find out patterns or associations.

3.4.1. Data type and Source

For this study, both primary and secondary data were used. Primary data were collected from the affected people and governmental valuer groups who were responsible to do the work of compensation in the municipality. Secondary data were collected from; relevant documents, papers, and regulations such as; books, journals, reports, legal documents, etc.

3.4.2. Data collection instruments

I. Direct field observation

By using a direct field observation the following information were collected; the characteristics of the expropriated property to determine the exchanging price and the necessary data of the expropriated house to estimate in the income approach.

II. Questionnaire

A questionnaire is a written list of questions, the answers to which are recorded by respondents. In a questionnaire, respondents read the questions, interpret what is expected, and then write down the answers. There are two forms of questions; open-ended and close-ended questions. In an open-ended question, the possible responses are not given rather the respondent writes down the answers in his/her words. Whereas closed questions the possible answers are set out in the questionnaire and the respondent ticks the category that best describes the respondent's answer (Ranjit, K, 2011).

Therefore, the researcher has developed both open and close-ended questionnaires for the thirty-three affected people to obtain the information about; the overall property valuation and compensation system, the complaints on the compensation amount, and the compensation they received was the potential for their future lives.

III. Interview

It is a commonly used method of collecting information from respondents. An interview is a verbal interchange, often face to face, though the telephone may be used, in which an interviewer tries to obtain information, beliefs, or opinions from another person.

An interview involves interviewer reading questions to respondents and recording their answers. It can be categorized as a structured and unstructured interview.

In a structured interview, the researcher asks a predetermined set of questions, using the same wording and order of questions as specified in the interview schedule (Ranjit, K, 2011). Unstructured interviews are characterized by flexibility of approach to questioning and do not follow a system of pre-determined questions and standardized techniques of recording information. It also demands deep knowledge and greater skill on the part of the interviewer than a structured interview (Kothari, 1990). Therefore, this study employed unstructured interview for the key informant to extract detail information from six government valuer group and three higher officials about the real property valuation system in case of expropriation, valuation procedure for compensation, challenges of real property valuation, amount of compensation paid for affected people, and the implementation gaps of the law of expropriation.

IV. Document Review

In this study document review was used to obtain the necessary and relevant data from the compensation report, expropriation proclamation, books, published journals, and related material sources. By using this source the following data was gathered; Valuation technique, the law and practice of valuation system for improvement properties, valuation procedure and bases, compensation amount of the expropriated property, and problems of expropriation proclamation.

3.4.3. Sampling technique and sample size

The target population of the research is the expropriated people in the inner city of Bahir Dar in 2010 and 2011. The issue is to show the practice of property valuation for the compensation payment of the expropriated property. In doing so the potential information should be from the, affected people and Bahir Dar city municipality office (government valuer group who were participating in the process of real property valuation in case of expropriation compensation).

Because of a few people were expropriated in 2010 and 2011, the study is a census and all affected people are the respondents. Also, six valuers in the municipality and three higher officials from the land administration office and Bahir Dar city municipality agriculture office are the respondents for this study.

3.4.4. Data analysis and presentation

Data analysis is the process of bringing order, structure, and meaning to the mass of collected data. The process of attaching meaning to the data is data interpretation(Ranjit, K, 2011). In this study to address the objective of the research and to analyze the data, descriptive statistics were used. The data were analyzed by employing Micro-soft excel. Finally, the analyzed quantitative data were presented by using, statistical tools such as tables, graphs, bar charts, and pie charts. But the qualitative data were presented by narratives, figures, maps, and photographs.

CHAPTER FOUR: RESULT AND DISCUSSION

This chapter deals with the analysis and interpretation of major findings of the study undertaken in Bahir Dar city on the practice of real property valuation for expropriation compensation. The findings are based mainly on data collected from all expropriated people in 2010 and 2011 in the inner city of Bahir Dar, six property valuers, and three higher official person in the land administration office and Bahir Dar city administration agriculture office. Detail information about the practice of property valuation for compensation is gathered from the government valuers groups.

4.1. Characteristics of the respondents

Based on the field survey, it was seen that those valuers in the municipality and affected peoples whose properties have been expropriated in the inner city of Bahir Dar could be categorized into different groups. As indicated in Tables 4.1 bellow: the people of these areas belong to different age groups, educational level, and family size. 63.7 percent of the respondents are between the ages of 50 and 75 and 9 percent are between the age of 25 and 49 years. Whereas 27.3 percent of them are above 75 years old. As far as their educational background is concerned, 24.2 percent of the respondents can read and write and 15.2 percent of the respondents have only elementary education. However, the remaining 60.6 percent of the respondents have not any educational level even they cannot read and write. The affected people have also been categorized in a number of family size. Therefore, 33.3 percent of the respondents have 1-5 family size, 51.5 percent of the respondents have 6 – 8 family size, and 15.2 percent of the respondents have above 8 family size.

Also, the valuers in the Bahir Dar city municipality has not an educational qualification in property valuation rather than in related fields. All valuers have not taken any local and international training about the practical work of real property valuation. Hence these factors have a direct effect on real property valuation works to estimate at a standard level.

Table 4.1: The main characteristics of the respondent (affected people)

Affected Peoples			
Characteristics		Frequency	Percent
Sex	Male	27	81.8%
	Female	6	18.2%
	Total	33	100%
Age	Less than 25 years	-	0%
	25 up to 49 years	3	9%
	50 up to 75 years	21	63.7%
	Above 75 years	9	27.3%
	Total	33	100%
Educational Level	Illiterate	20	60.6%
	Reading and writing	8	24.2%
	Elementary	5	15.2%
	preparatory	-	0%
	University degree	-	0%
	Total	33	100%
Family Size	From 1-5	11	33.3%
	From 6 - 8	17	51.5%
	Above 8	5	15.2%
	Total	33	100%

Source: Field survey (2012)

4.2. The actual practice of valuation and compensation work in the study area

The methods used to estimate the value of expropriated improvement property in Bahir Dar city municipality is a replacement cost approach; however, as the institution, the valuers did not follow and apply the full procedures of the cost approach. For instance, land valuation and depreciation calculations are omitted. Also, Even though it is possible to reach market value through the use of the replacement cost approach, the Ethiopian replacement cost approach is defective as compared to the international practice. It does not at all give market value for the displaced people. Also, the Comparative sales approach and income capitalization are unknown by the valuers in Bahir Dar. Furthermore, the institution has not valuation standard, certified valuers, and valuation report for the client. Consequently, the affected people have the following complains:

- ✓ The governmental valuer groups did not give any description for affected people about the valuation system of the expropriated property so that the affected people are not clear.
- ✓ The substituted land given to the affected people is not the same as the previous land in different factors. Distance from the city center (CBD) is very far, It is not developed in different infrastructures such as; rood, electricity, water, school, health center, warship place or religious institution, and others. Even in the new site, the extra or additional cost is asked by the government for the fulfillment of the above infrastructure.
- ✓ The other complaint associated with the replacement of land is the location aspect. In their previous residential areas, people were closed to the center of the city, workplaces, public services, and also can easily access other infrastructure. However, the substituted land they were given is far away from the center and they have to travel long distances to access public services and to go to their workplaces.

As proven in the study area, affected people are not compensated for; the locational value of the place they were in and additional costs incurred as a result of the change in location. Consequently, they did not get market value for their property. However, it is a clear fact that home sales at the center bring higher value as compared to the periphery, because of the location. According to the higher officials in the ground, the following problems and oversights have occurred; absence of clear guidelines and standards to conduct a real property valuation, delaying of compensation (After taking over the land, the government pays compensation to the

affected people), and affected people are only allowed to make a complaint after they have given up their land. Also, the higher officials thought that the most obstacles for the valuation and compensation work are the amount of budget, litigation process to persuade the affected people on the importance of the development and the legal framework because of the FDRE government allows for the estimation of expropriated property is only by the cost approach.

4.3. Valuation procedure for compensation calculation

Table 4.2: The actual practice and the gap of valuation procedure in Bahir Dar

The actual procedure followed by the governmental valuer group	The gaps in procedures of property valuation
<p>Step 1: Identification of the Problem</p> <ul style="list-style-type: none"> ✓ Identifies the client and intended users of the appraisal purpose of valuation is known by default 	<p>The valuers does not put the effective date of opinion, and relevant characteristics of the property.</p>
<p>Step 2: Scope of Work Determination</p>	<p>This step is totally omitted (not implemented)</p>
<p>Step3: Data Collection and Property Description</p> <ul style="list-style-type: none"> ✓ Only Subject Property Data, Specific characteristics improvements, personal property, and business assets data is collected 	<p>The valuers do not collect; market area data, general characteristics of the region, city, neighborhood data and comparable property data. They also do not collect specific characteristics of the land.</p>
<p>Step4: Data Analysis</p>	<p>This step totally does not apply or implement</p>
<p>Step5: Site Valuation Opinion</p>	<p>There is no site valuation rather than giving the Substituted land</p>
<p>Step6: Applications of the approaches to value</p> <ul style="list-style-type: none"> ✓ Only Cost Approach is applied for all type of property 	<p>The institution did not apply Income and sale comparison approach. Even cost approach is not applied in a standard manner.</p>
<p>Step7: Reconciliation of value indications of final opinion of Value</p>	<p>There is no reconciliation of value, since the institution is only use Cost approach.</p>
<p>Step8: Report of Defined Value</p>	<p>The institution did not prepare any report for the client.</p>

4.4. Implementation gap of the expropriation legislation

In the study area of the researcher, the important things for the affected people what the law says did not apply correctly. For instance, both the new and old expropriation proclamation on article Art 12(2) and Art 7(2) stated that “amount of compensation for property situated on the - expropriated land shall be determined on the basis of the replacement cost of the property a new” and also on article 12(5), 7(5) “where the property on the land can be relocated and continue its service as before, the cost of removing, transporting and erecting the property shall be paid as compensation”. However as the researcher confirmed in the study area, the government did not properly implement and paid compensation according to what the law says above. Since expropriated people were not compensated for the cost of removing, transportation, erecting rather than they were paid only costs for the building material and had given substituted land as compensation. Thus, the expropriated people were not received a replacement cost new compensation that the law allows replacing the property which is already taken. Also, both the new 1162/2019 and the old 455/2005 expropriation proclamation on article 17 (1) and 9(1) states that “compensation for the property situated on land to be expropriated shall be evaluated by certified private institutions or individual consultant valuer based on nationally approved valuation method”. However as evidenced by this study, the value of the expropriated property is not yet estimated by experts who have the educational qualification in property valuation.

4.5. Variation of lease value and compensation amount for expropriated land

The government transfers the land by a lease system for the user in a large amount of birr by taking it from the farmer in a small amount of compensation. As shown the figure 4.1 below, according to the data from the municipality, the Bahir Dar City administration expropriates one hectare of land from farmers in 2010 by paying displacement compensation calculated at 25.01 birr/m² and subdivides and transfers it by lease system in 2012 to private residents for a minimum of 250 birr/m². The amount of profit that is collected by the government is huge in amount, whereas while leaving the farmer with an insufficient amount of compensation. The highest economic value of the land is ignored and not compensated by the government. Therefore, the farmers have an opportunity to be paid this amount of compensation as a lease value.

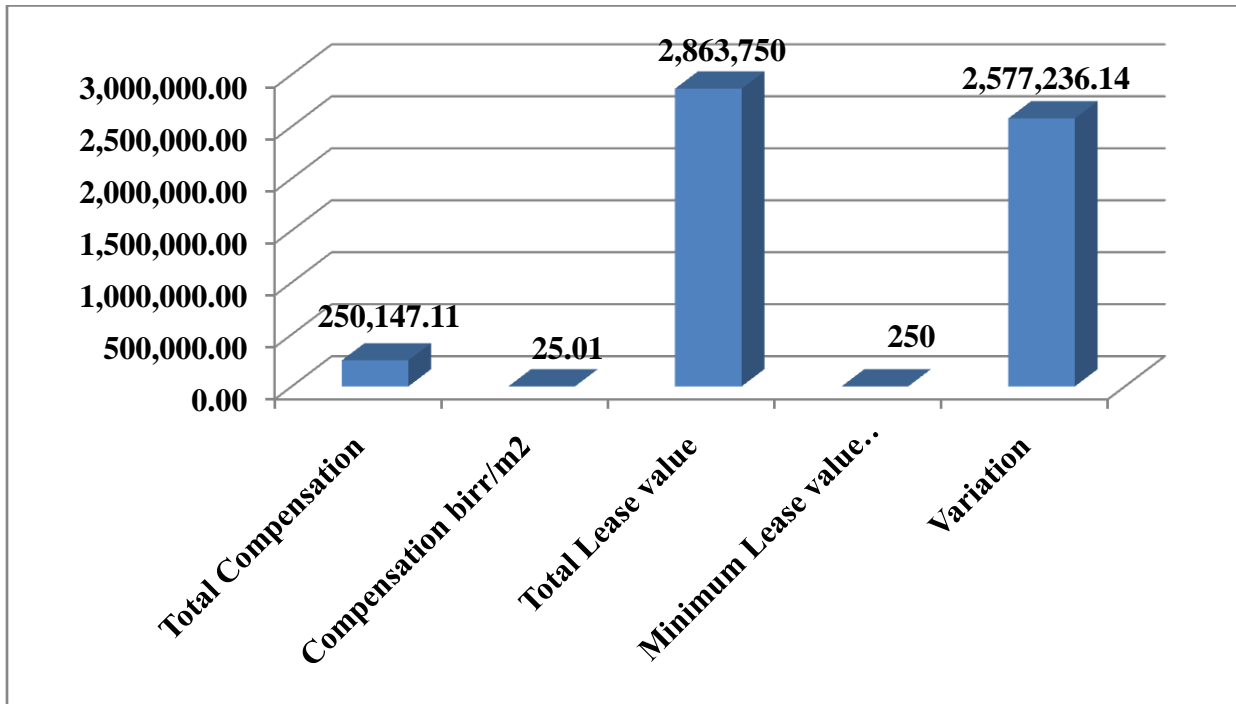


Figure 4.1: Lease value, compensation amount and variation for one hectare of land

Source: field survey (2020)

4.6. Alternative valuation approach and growth rate determination

As stated in the objectives, the study would show an alternative valuation approach to generate the better value of the expropriated property than the compensation amount. An alternative valuation approach is an appropriate method of valuation used to estimate the value of expropriated property in addition to the method stated in the expropriation proclamation. In this study depending on the source of data and nature of the expropriated property alternatively, the income approach was used to estimate the value of expropriated property; however, the researcher did not use the other two methods of valuation because of a lack of data.

Based on the data was collected from the affected people, the house was serving for the last 42 years by renewing. In the future, on average the house would serve for 20 years. Similarly cultivated vegetables on the expropriated land will generate income for 20 years the same as to the house. Therefore twenty years of cash flow incomes of house and vegetables were taken to estimate the value of expropriated property in the income approach.

- ✓ The productivity and price data of the crop and vegetable are obtained from the agricultural office and commerce office in Bahir Dar city.
- ✓ The growth rate for the income, cost, and vacancy & collection loss data were determined by using the last two years' data of the property.
- ✓ The interest rate is taken from the commercial bank of Ethiopia. Also, the Exit is derived from the subtracting of growth rate from the interest rate.

4.7. Expropriated land value in income approach and the paid displacement Compensation based on 455/2005 proclamation

When the land is expropriated for a public purpose, the government pays ten-year displacement compensation for the affected people by calculating the crop products on the land. It is insufficient in amount. Thus, for better compensation, the researcher estimated the land value by using the appropriate valuation approach. Figure 4.2 below shows the estimated land value in the income approach and the paid amount of compensation for one hectare of land. The paid compensation is 250,147 birr by using ten years as a multiplying rate, however, in the income approach, the value of the land is 506,329 birr by using ten years' income on the land. The variation between the two is 256,182 birr. Therefore, if the compensation of the land was estimated by the income approach, the affected people had the possibility of getting 506,329 birr amount compensation. See the detailed calculation of the land value in the income approach based on the revenue generated in appendix A-2.

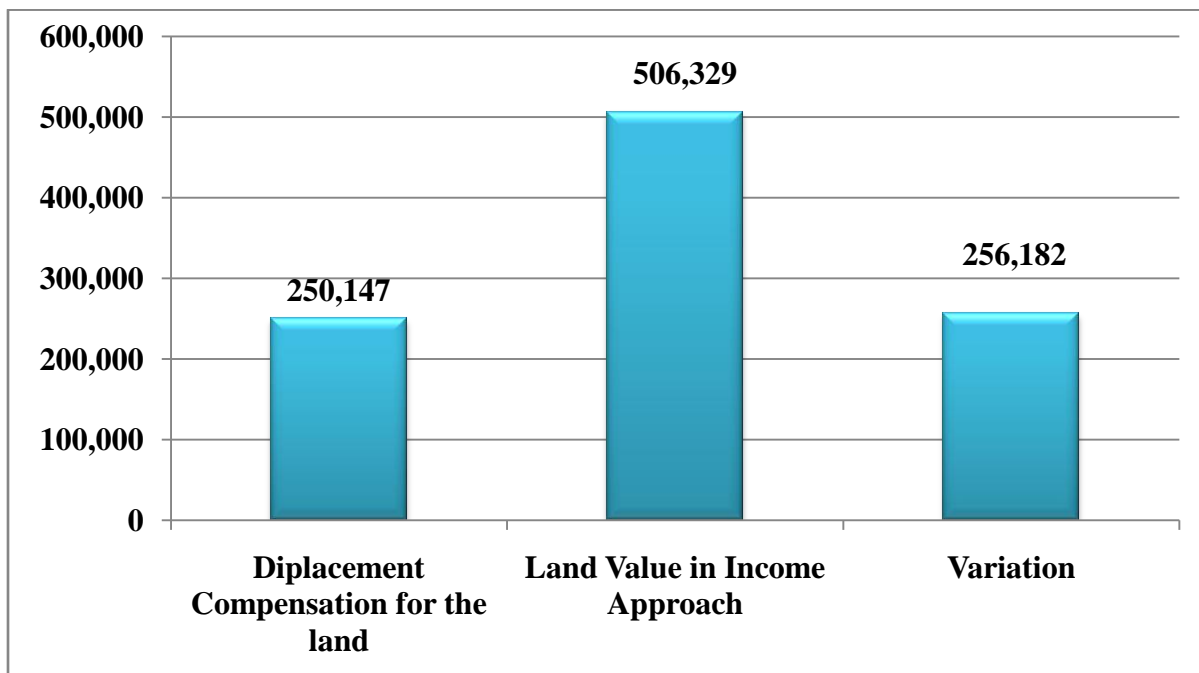


Figure 4.2: Displacement compensation paid for the land-based on 455/2005 proclamation and its value in the income approach

Source:fieldsurveyandcomputebytheResearcher (2020)

4.8. Expropriated land value in income approach and paid Compensation after the new proclamation is adopted

Starting from September 11, 2012, the previous expropriation proclamation No 455/2005 is changed by another 1162/2019 new proclamation. Thus, the displacement compensation multiplication rate for the land is changed from ten years to fifteen years. Figure 4.3 below shows based on the new expropriation proclamation the compensation paid for one hectare of land is 925,503 birr. But, if the government will pay the compensation by using the income approach, the amount of compensation will be 1,877,063 birrs. But so far the compensation amount for the land is not enough when we compare the benefits get on the land for the unlimitedly future generation. So we cannot say that the complaint of the affected people is answered by the new proclamation. See the detailed calculation on appendix A-2.

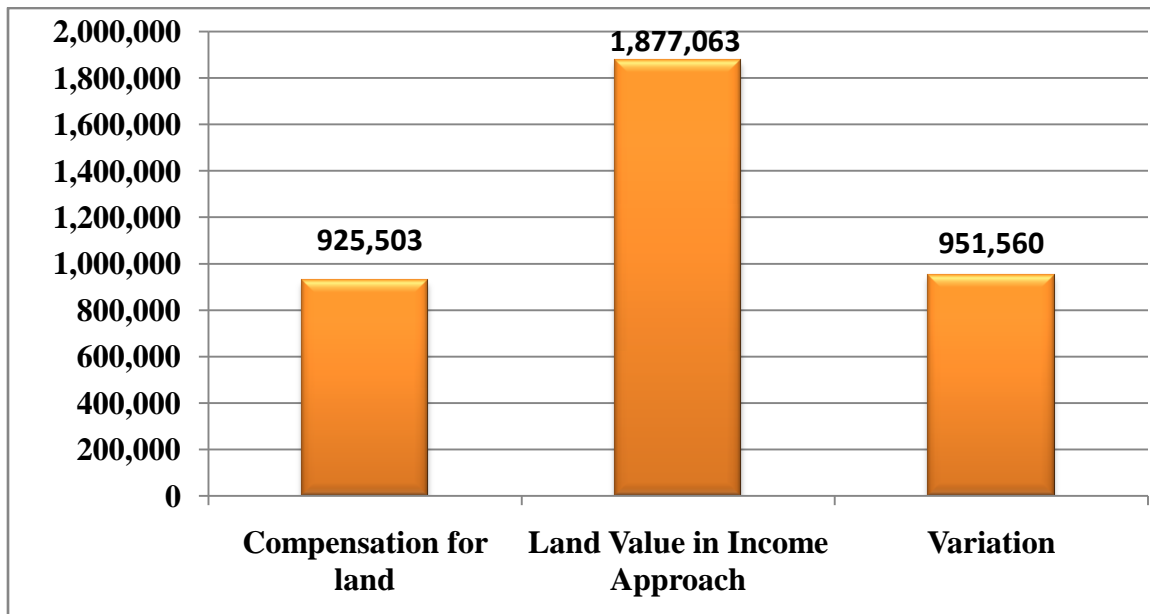


Figure4.3: Expropriated land value in income approach and paid compensation after the new proclamation is adopted

Source: field survey and computed by the researcher (2020)

4.9. Compensation amount when the land is expropriated permanently and temporarily

According to the expropriation proclamation No 1161/2019, the government can expropriate the land temporarily and permanently. When the land is expropriated permanently, fifteen*the highest income on the land for the last three years is paid a displacement compensation. Whereas when the land is expropriated temporarily the compensation is, the highest income on the land for the last three years*the time until repossession of the land. The government can expropriate the land temporarily for fifteen years. However as shown in table 4.4, the amount of compensation is the same when the land is expropriated in the two types of expropriation period. It is an unfair way of compensation; due to the problem of expropriation proclamation.

Table 4.4. Amount of compensation when the land expropriated permanently and temporarily

								When the land is expropriated permanently	When the land is expropriated temporarily	
Expropriated Land area	Type of crop produced	Land usage in area	Crop product / hectare	Crop product/quintal for each crop type	Price/quintal	Total price/ birr	Sum	Highest Income * 15	Highest Income * 10	Highest Income * 15
1hectar	Maize	0.33 hectare	55 quintal	18.15 quintal	861 birr	15627.15	45829.46 birr	687441.9 birr	458294.6 birr	687441.9 birr
	Finger Millet	0.33 hectare	25 quintal	8.25 quintal	1331 birr	10980.75				
	Teff	0.34 hectare	23 quintal	7.82 quintal	2458 birr	19221.56				

Source: Field survey (2020)

4.10. Value of the expropriated house in the alternative approach

Table 4.4 below shows the value of expropriated property in the income approach, and its value is higher than the compensation amount paid by the government. The affected people said that the given compensation amount is not sufficient since it cannot buy the same property in the market, cannot rebuild house the same to the previous, and cannot live as the previous situation. Hence if the government estimates the value of the expropriated property by applying the income approach, the affected people have the probability of receiving such amount of compensation.

Also, table 4.4 below shows the expected market value of the expropriated house. In Ethiopia, because of the property market is not undertaken by the control of the government, the brokers have a significant role in price determination of the real property. Thus, the market values of the expropriated house were determined by discussing with known brokers in the BahirDar city. According to brokers; location, type of building materials of the house, infrastructures (especially road), and neighborhood conditions are the main determinant factors for the house value in Bahir Dar city. Based on the table result below; the expected market value of the expropriated property is higher than the paid compensation by the government. Therefore if the government has a trend of paying compensation depending on the market value of the property, the affected people can buy a property that has the equivalent location and utility. See the detail of how the value of the house is generated in the income approach in appendix A-1.

Table4.5: The value of the house in the alternative approach

Affected People	Area of land	Type of house	Total Compensation Amount in ETB	Value of house in income approach In ETB	Expected Mv of the house In ETB
Eskelalem Awoke	450m ²	Mud	5,399,852	6,558,341	6,000,000
Tesfaye Adugna	450m ²	Sand gravel	6,900,000	8,253,481	8,000,000
Worku Ayenew	450m ²	Mud+ Sand gravel	5,654,891	7,106,926	6,200,000
Tewachew Tesfa	450m ²	Mud	4,751,000	5,901,156	5,200,000
Teshome Tegegne	450m ²	Mud	5,876,501	6,806,745	6,500,000
Ergoye Kassie	450m ²	Mud+ Sand gravel	5,800,000	8,340,578	6,600,000
Merso Wale	450m ²	Mud	5,495,000	6,735,545	5,800,000

Chanyalw Nigussie	450m ²	Mud	5,149,206	5,766,358	5,300,000
Tesfaye Tirfie	450m ²	Mud+buliket	6,100,470	7,370,511	6,800,000

Source: Field survey and computed by the researcher (2020)

4.11. Unpaid Compensation for affected people

According to the proclamation, No 1161/2019 on article 12(1) A landholder whose land is expropriated shall be paid compensation for the property on the land and the permanent improvement made on the land. Also, article 14(1) states that a person who lost economic benefits either permanently or temporarily without being displaced as a consequence of land expropriation shall be paid compensations. However as shown in figure 4.4 below, the government did not completely record the expropriated property data; consequently, the affected people were not compensated for the loss of vegetables. See the detail of how the value of vegetables is generated in the income approach in appendix A-1.

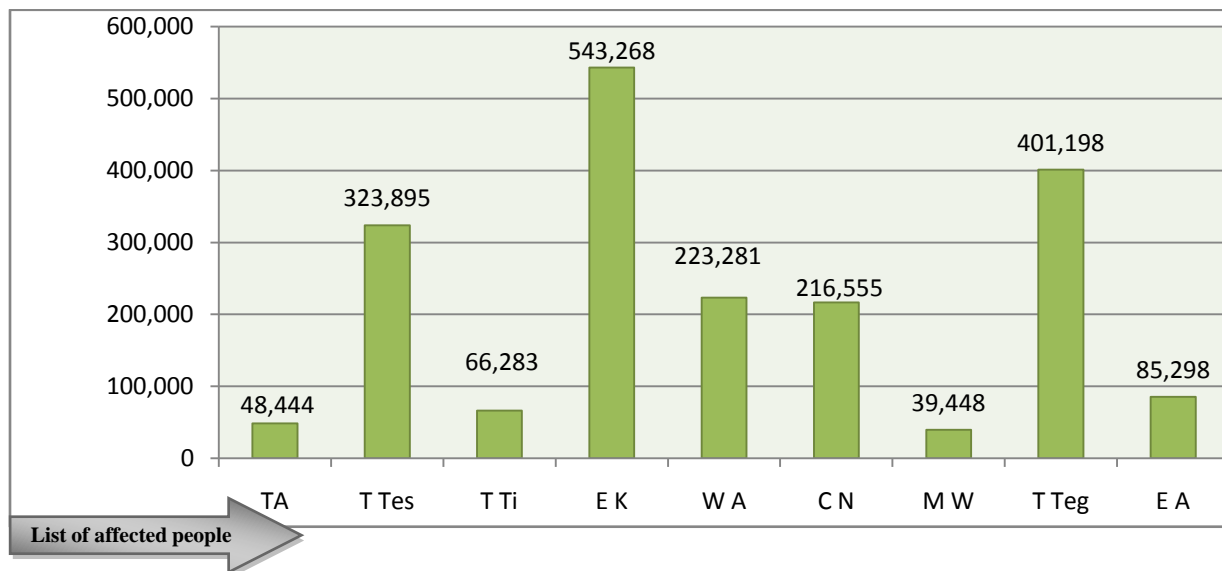


Figure4.4: Unpaid compensation for the expropriated vegetable

Source: Field survey and computed by the researcher (2020)

4.12. Valuation variance and inaccuracy

As table 4.5 shown below because of the complaint of the affected people on the amount of compensation, the value of the expropriated property is estimated two and three times by the valuers of the different institutions (Bahir Dar city municipality and urban development office). However, the valuers generated different values. This shows that the existence of valuation variance. According to the affected people, the cause for the valuation variance is; the careless measurement of the property, using incomplete data and wanting of birr from affected peoples. Also, the expected market value and the estimated value of the expropriated property for the compensation have a difference; it is valuation inaccuracy.

Table4.6: Estimated value and market value of expropriated property

Affected people	The estimated value of the expropriated House for Compensation in ETB	Total Compensation Amount	Expected Market value of the Expropriated house	Variation
TesfayeAdugna	1 st =1900000,2 nd =2400000	6,900,000birr	8,000,000birr	1,100,000birr
TesfayeTirfie	1 st =900000,2 nd =1,600,470	6,100,470birr	6,800,000birr	699,530birr
TeshomeTegegne	1 st =1900000,2 nd =1,376,501	5,876,501birr	6,500,000birr	623,499birr
ErgoyeKassie	1 st =1100000,2 nd =985000 3 rd =1300000	5,800,000birr	6,600,000birr	800,000birr
WorkuAyenew	1 st =700000,2 nd =1,154,891	5,654,891birr	6,200,000birr	545,109birr
ChanyallewNigussie	1 st =400000,2 nd =600000 3 rd =649,206	5,149,206birr	5,300,000birr	150,794birr
MersoWalle	1 st =1150000,2 nd =995000	5,495,000birr	5,800,000birr	305,000birr
TewachewTesfa	1 st =45000,2 nd =226210 3 rd =251000	4,751,000birr	5,200,000birr	449,000birr
Eskelalem Awoke	1 st =550000,2 nd =700,000 3 rd =899,852	5,399,852birr	6,000,000birr	600,148birr

Source: Field survey and computed by the researcher (2020)

4.13. Factors for the payment of insufficient compensation

The factors for the payment of an insufficient amount of compensation have been stated directly and indirectly in the above discussion and literature part. However, according to the affected people, as shown in figure 4.5, three main factors are stated. In total, 54.5% of the affected people said that the implementation problem of the law is the factor for the payment of insufficient compensation. In total, 27.3% of them are said that poor Valuation systems (absence valuer qualification and valuation standard and technical problem) are the factors for the payment of insufficient compensation. Also, the remaining 18.2% of affected people said that problems of the expropriation proclamation law are the factors for the payment of the insufficient amount of compensation.

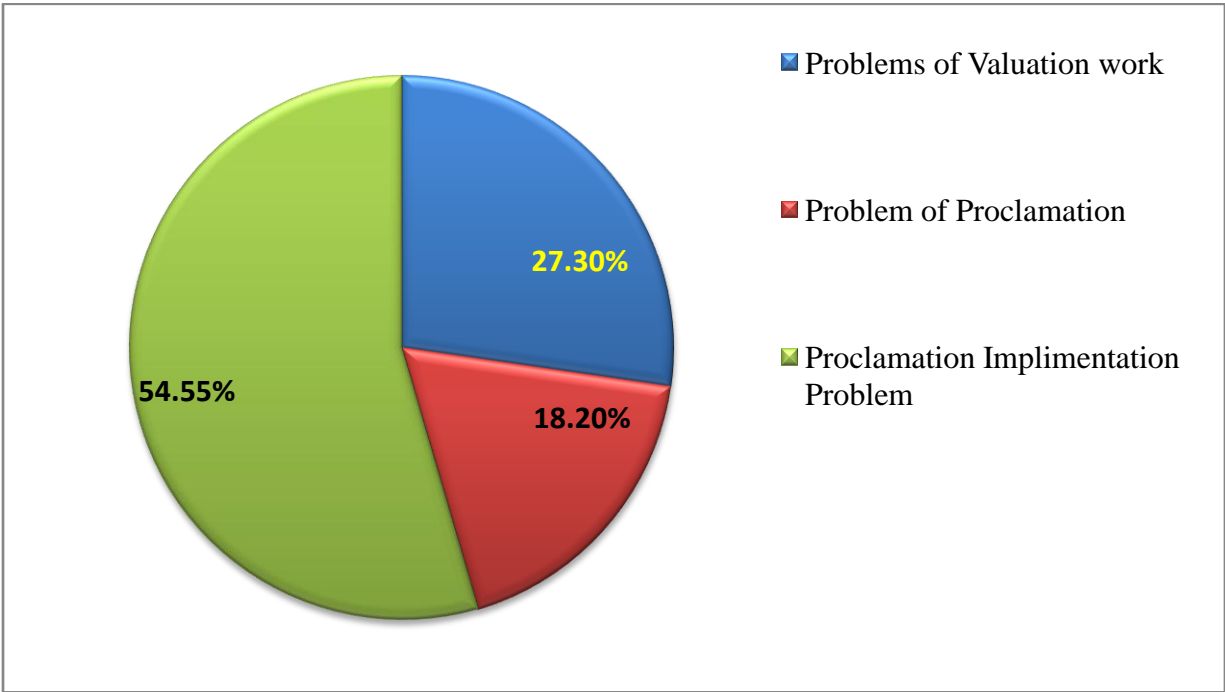


Figure4.5: Factors for the payment of insufficient compensation

Source: Field survey (2020)

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1. Conclusion

Real property valuation is one of the most appreciated and productive businesses in several nations with a well-performing economy, whereas it is a discouraging business in Ethiopia. Property valuation is used for; taxation, Insurance, Sale report, Loan security, and expropriation. In Ethiopia, Property valuation has not a national valuation standard in which bases and techniques of valuation are taken. Also, there is neither an independent and developed valuation system, nor recognized by the concerned organ of the government and are not available professionals in the field. Hence, the amount of compensation paid for the affected people in case of expropriation is not commensurate, adequate, and it could not substitute the property expropriated. Therefore, this study attempts to examine the practice of real property valuation for expropriation compensation in Bahir Dar city. Specifically, the issue needs to be addressed are; to assess the fairness of compensation paid to the affected people, identify the gap between the legal framework and the actual practice of the expropriation legislation on real property valuation for compensation, assess the real property valuation procedure, and identify the main factors for the payment of insufficient compensation in the study area. The primary and secondary data sources were used for the final output of the study. For this study to analyze the data descriptive statistics were used. The data were analyzed by employing Microsoft excel. The analyzed quantitative data was presented by using statistical tools such as tables, graphs, bar charts, and pie charts. However, the qualitative data were presented by narratives, figures, maps, and photographs.

As it is indicated in the discussion part of the study, it is concluded that the valuers in the Bahir Dar city municipality did not follow and apply the full procedures of the cost approach. For instance, land valuation and depreciation calculations are omitted. The Absence of clear guidelines and standards and the limitation of the legal framework on the valuation approach are the main challenges for the real property valuation.

The study finding identified that what the expropriation law says has not been implemented correctly and the valuation work for the compensation is not based on the standardized valuation procedure. Even though the new expropriation proclamation is enacted, the grievance of the

affected people on the compensation amount for the expropriated land is not answered. Likewise, the affected people were not accessing different infrastructures such as; a road, water, school, health center, warship place or religious institution, and others in the substituted land. Even extra cost is asked by the municipality for the fulfillment of this infrastructure. Displaced people are not compensated for this locational value of the place they were in. When we compare the value of expropriated property estimated in the income approach to the compensation amount paid by the government, it has a big difference. Also, the expropriated property is not completely recorded and compensated by the government. Consequently, the paid compensation for the expropriated property is insufficient.

The other thing is that from the field survey it has been found that because of complaints on the estimated compensation amount by the municipality valuers, the urban development office valuer were estimating the value again. However, the results were not similar. Also, the estimated value and the market value of expropriated improvement property are not the same. Consequently, it is the cause of the existence of inconsistency in property valuation. Finally, the study concluded that; the problem of the expropriation proclamation, implementation problem of the law, and problem of valuation work are the main causes for the payment of the insufficient amount of compensation for the affected people in the study area.

5.2. Recommendation

Therefore, based on close examination and analysis of the research findings, the following recommendations are suggested to:

- ✓ The cost replacement approach is allowed in the law as the only valuation approach for improvement property; it cannot fairly value the income-generating and old properties. It is, therefore, necessary to apply the income approach based on the expropriated property type for the precise estimation.
- ✓ The farmers hold the land for an unlimited lifetime and generate the income permanently, hence, they have to be compensated fairly and they have to be rehabilitated properly.
- ✓ In Ethiopian the valuation profession is not yet created; the state should certify the students who are graduated in property valuation from different universities and also has a great task to encourage those who are participating in the market as a valuer by giving training about property valuation.

- ✓ The government should apply what the expropriation law says and the compensation should be calculated and paid in line with the legal framework.
- ✓ According to the expropriation proclamation, the compensation which is given to the affected people should cover the costs of reproducing an equivalent property. But in the ground, this valuation base denies the market worth of the expropriated property. Therefore, the government should use the market value as a base of real property valuation.
- ✓ Private valuation consultation companies in the country that could serve as alternative valuer are essential for the estimation of the property for cross-checking.

5.3. Area for further research

This study has focused on the limitation of the current practice of property valuation for compensation purposes. In Ethiopia, real property is sold through the intervention of brokers. When the real property is sold, the buyer pays money for the government to transfer the title. However, the buyer and seller are set the minimum selling price and the exact selling price agreement of the property. Consequently, the buyer pays the transfer title based on the minimum price selling agreement secretly. This is the cause of the inexistence of a clear real estate market and reduction of government revenue. Therefore, the informal market of real property needs to investigate and conduct further research.

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Appendix

AppendixA-1: Cash Flow Proforma For House and Vegetable

Tesfaye Adugna

Rent Data For House											
year	Owner name	Area of land	Object address	Type of use	type of house	Quantity	Building Area	Number of Class	Rent/menth	rent per year	Total rent
2012	Tesfaye Adugna	450	Bahir Dar	residential	dorimitory	6	120m2	1	800birr	9600birr	57600 birr
			Bahir Dar	residential	main house in construction	1		4	6900birr	84000birr	82800birr
			Bahir Dar	residential	main house in mood	1			4700birr	57600birr	56400birr
sum											196800birr
2011									750 birr	9000birr	54000birr
									6500birr	78000birr	78000birr
									4600birr	55200birr	55200birr
sum											187200birr

Income from vegetable

				2011	2012	2011	2012
Vegetable Type	Quantity	product/leg/kg	Total Product/kg	Price/Kg	Price/Kg	Total Price	Totall Price
Mango	4	0.35 kun(35kg)	1.4 kun(140 kg)	20birr	22birr	2800 birr	3080 birr
Orange	3	0.024ku(2.4kg)	0.072ku(7.2kg)	35birr	40birr	252 birr	288birr
Coffee	10	0.0033(0.33kg)	0.033ku(3.3kg)	140birr	150 birr	462birr	495 birr
Buckthorn	20	0.0028ku(0.28kg)	0.056ku(5.6kg)	45 birr	50 birr	252birr	280birr
Sum	37				262 kg	3766 birr	4143 birr
sum*10							414,430

Cost data for house				Cost data for vegetable				Growth Rate	
Year	Cost type	birr Per month	birr Per Year	Year	Cost type	Per month	Per Year	Growth rate for rent	
2011	Income tax		15480 birr	2011	for water	80birr	960 birr	discount rate	5.50%
	water cost	760birr	9120birr		for labour	25 birr	300 birr	Exit Yield	1.5000%
	electricity cost	2800birr	33,600birr	sum			1260 birr	O&M cost huse	5%
	maintenance cost		11,000birr	2012				Growth rate for vegitable income	10%
	soil and roof tax		50birr		for water	90 birr	1080 birr	V&CL for house	-50%
	sum		69250 birr		for labour	25 birr	300 birr	O&M cost for vegitabe	9.50%
2011	Income tax		17160birr						
	water cost	780birr	9360birr						
	electricity cott	2900birr	34800birr						
	maintenance cost		11,300birr						
	yafer ena yetaria tax		50birr						
			72670birr						

Cash Flow Proforma for house																						
CFP	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PGI for house	180000	188900	200944.5	211363.4475		222988.4371	235253	248191.7052	261842.249	276243.5727	291437	307466	324376.6326	342217	361039.3015	380896.4631	401845.8	423947.3	447264.3866	471863.9279	497816.4	525196.3
V&CL for house	1600	800	400	200		100	50	25	12.5	6.25	3.125	1.5625	0.78125	0.39063	0.1953125	0.09765625	0.048828	0.024414	0.012207031	0.006103516	0.003052	0.001526
Egi for house	178400	189100	199944.5	211163.4475		222888.4371	235203	248166.7052	261829.749	276237.3227	291433.8	307464.4	324375.8514	342217	361039.1062	380896.3655	401845.7	423947.3	447264.3744	471863.9218	497816.4	525196.3
O&M cost	62,750	65824.75	69050.16275	72433.62072		75982.86814	79706	83611.62408	87708.99366	92006.31475	96514.62	101243.8	106204.789	111409	116867.856	122594.3809	128601.5	134903	141513.2253	148447.3734	155721.3	163351.6
NOI for house	115,650	123,275	130,894	138,730		146,906	155,497	164,555	174,121	184,231	194,919	206,221	218,171	230,808	244,171	258,302	273,244	289,044	305,751	323,417	342,095	361,845
Discount NOI for house	108084.1121	107673.3776	106848.7696	105836.3206		104741.6404	103614	102476.6343	101340.0977	100209.4617	99087.05	97973.92	96870.56088	95777.2	94693.82061	93620.52617	92557.27	91504.02	90460.73238	89427.37066	88403.89	
Sum of DNOI	1971200.801																					
Salvage Value	24122980.58																					
Discount Salvage Value	6233836.586																					
Market value	8205037.387																					

Cash Flow Proforima for vegetable																				
CFP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PGI for vegetable	4143	4557.3	5013.03	5514.333	6065.7663	6672.34	7339.577223	8073.534945	8880.88844	9768.977	10745.88	11820.46251	13002.5	14302.75964	15733.03561	17306.34	19036.97	20940.67039	23034.73743	25338.21
V&CL for vegetable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EGI for vegetable	4143	4557.3	5013.03	5514.333	6065.7663	6672.34	7339.577223	8073.534945	8880.88844	9768.977	10745.88	11820.46251	13002.5	14302.75964	15733.03561	17306.34	19036.97	20940.67039	23034.73743	25338.21
O&M cost	2,280	2496.6	2733.777	2993.485815	3277.866967	3589.26	3930.244441	4303.617662	4712.46134	5160.145	5650.359	6187.14306	6774.92	7418.539207	8123.300432	8895.014	9740.04	10665.34413	11678.55182	12788.01
NOI for vegetable	1,863	2,061	2,279	2,521	2,788	3,083	3,409	3,770	4,168	4,609	5,096	5,633	6,228	6,884	7,610	8,411	9,297	10,275	11,356	12,550
Discount NOI for vegetable	1741.121495	1799.895187	1860.549385	1923.142248	1987.733694	2054.39	2123.16111	2194.126182	2267.348153	2342.897	2420.843	2501.261208	2584.23	2669.819375	2758.118224	2849.207	2943.171	3040.098269	3140.079952	3243.209
Sum of DNOI	48444.39376																			
Total Property Value	8253481.78																			

Tesfaye Tirfie

Income from house renting												
year	Owner name	Area of land	Object address	Type of use	class of house	type of house	Quinty	Building Area	Number of Class	Rent/menth	rent per year	Total rent
2011	Tesfaye Tirfie	450m2	Bahir Dar	residential	dorimitory	Mood	18	120m2	1	650 birr	7800 birr	140400 birr
			Bahir Dar	residential	main house	Buliket	1		4	4500birr	54000birr	54000 birr
sum												194400 Birr
20112							18			700birr	8400 birr	151200 birr
							1			5000birr	60000birr	60000 birr
sum												211200 birr

Income Data For Vegetable							
				2011	2012	2011	2012
Vegetable	Quantiy	product/leg/kg	Total Product/kg	Price/Kg	Price/Kg	Total Price	Tottal Price
Mango	4	0.35 kun(35kg)	1.4 kun(140 kg)	20birr	22birr	2800 birr	3080 birr
Avocado	3	0.024ku(2.4kg)	0.072ku(7.2kg)	35birr	40birr	252 birr	288birr
Buckthorn	7	0.0028ku(0.28kg)	0.0196ku(1.96kg)	45 birr	50 birr	88.2birr	98birr
Sum	19		150.8 kg			3371.2 birr	3713 birr
sum*10							37,130 birr

Cost data for house			Cost data for vegetable			Growth rate data	
Type of cost	Amount of birr	per year	Year	Type of cost	Amount of birr		
income tax		16740 birr	2011	per month	per year	House rent	8.60%
water cost	300 birr	3600 birr		water cost	40 birr	480 birr	
electriciccy cost	1000 birr	12000 birr		labour cost	25 birr	300 birr	
maintainance cost		1500 birr		sum		780 birr	
soil and roof tax		55 birr	2012				
sum		33895 birr		water cost	48 birr	580 birr	
	2012			labour cost	25 birr	300 birr	
income tax		19680 birr		sum		880 birr	
water cost	350 birr	4200 birr					
electriciccy cost	1050 birr	12600 birr		water cost	48 birr	580 birr	
maintainance cost		2000 birr		labour cost	25 birr	300 birr	
soil and roof tax		55birr		sum		880 birr	
sum		39535 birr					

Cash Flow Proforima for house																						
CFP	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
PGI for house		211200	229363.2	249088.4352	270510.0006	293773.9	319038.4599	346475.7074	376272.6834	408632.1	443774.8977	481939.1045	523385.868	568397.1	617279.2	670365.2	728016.6177	790626.0469	858619.9	932461.2	1012652.9	1099741.006
V&CL for house		650	325	162.5	81.25	40.625	20.3125	10.15625	5.078125	2.539063	1.26953125	0.634765625	0.317382813	0.158691	0.079346	0.039673	0.019836426	0.009918213	0.004959	0.00248	0.0012398	0.000619888
EGI for house		210550	229038.2	248925.9352	270428.7906	293773.3	319018.1474	346465.6112	376267.6053	408629.6	443773.2282	481938.4698	523385.55	568396.9	617279.1	670365.2	728016.5979	790626.037	858619.9	932461.2	1012652.9	1099741.005
O&M cost		43935	50832.795	58813.54382	68047.27019	78730.69	91091.4102	105392.7616	121939.4252	141083.9	163234.0896	188881.8416	218513.151	252819.7	292512.4	338436.9	391571.4461	453048.1632	524176.7	606472.5	701688.65	811853.7663
NOI for house		166615	178205.405	190112.3914	202381.5204	215002.6	227926.7372	241072.8496	254328.1861	267545.7	280539.1386	293076.6282	304872.399	315577.2	324766.7	331928.3	336445.1518	337577.8738	334443.2	325988.7	310964.21	287887.2392
Discount NOI for house		155714.95	156651.5023	155188.3415	154395.8929	153293.9	151877.2089	150128.0548	148021.3164	145527.1	142611.8725	139238.9948	135366.991	130993.3	125993.1	120306.1	113965.6132	106866.5096	98949.66	90138.6	80399.061	
Sum of DNOI		265459.7																				
Salvage Value		17992952																				
Discount Salvage Value		4649720.8																				
Market value		7304227.5																				

Cash Flow Proforima for vegetable																					
CFP	year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PGI for vegetable		3713	4091.726	4509.082052	4969.008421	5475.847	6034.383703	6649.890841	7328.179706	8075.654	8899.370748	9807.106564	10807.4314	11909.79	13124.59	14463.3	15938.55212	17564.28444	19355.84	21330.14	23505.811
V&CL for vegetable		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EGI for vegetable		3713	4091.726	4509.082052	4969.008421	5475.847	6034.383703	6649.890841	7328.179706	8075.654	8899.370748	9807.106564	10807.4314	11909.79	13124.59	14463.3	15938.55212	17564.28444	19355.84	21330.14	23505.811
O&M cost		900	1008	1128.96	1264.4352	1416.167	1586.107515	1776.440417	1989.613267	2228.367	2495.770882	2795.263388	3130.69499	3506.378	3927.144	4398.401	4926.209183	5517.354285	6179.437	6902.969	7751.4855
NOI for vegetable		2813	3083.726	3380.122052	3704.573221	4059.68	4448.276188	4873.450424	5338.56444	5847.287	6403.598966	7011.843177	7676.73644	8403.411	9197.444	10064.89	11012.34294	12046.93015	13176.4	14408.17	15754.326
Discount NOI for vegetable		2628.972	2693.445716	2759.186455	2826.201173	2894.496	2964.074247	3034.939994	3107.094273	3180.537	3255.265459	3331.276183	3408.56279	3487.117	3566.927	3647.981	3730.261556	3813.74957	3898.423	3984.255	4071.2172
Sum of DNOI		66283.982																			
Total Property Value		7370511.5																			

Teshome Tegegne

Income from house renting												
year	Owner name	Area of land	Object	Type of use	class of house	type of house	Quantity	Building Area	Number of Class	Rent/month	rent per year	Total rent
2011	Teshome Tegegne	450m2	Bahir Dar	residential	dorimitory	Mood	7	120m2	1	650 birr	4550 birr	31850birr
			Bahir Dar	residential	main house	Sand grav	1		4	5500 birr	66000birr	66000 birr
sum												97850 Birr
20112							7			700birr	8400 birr	58800 birr
							1			6000birr	72000 birr	72000 bir
sum												103800 birr

income from vegetable							
				2011	2012	2011	2012
Vegetable Type	Quantiy	product/le	Total Product/kg	Price/Kg	Price/Kg	Total Price	Tottal Price
Mango		10	0.35 kun(3	3.5 kun(350 kg)	20birr	22birr	7000 birr
sum		10		350 kg			7000 birr
sum*10							77,000 birr

Cost data for vegetable				Cost data for house				Growth rate data	
Year	Type of cost	Amount of birr		Type of cost	Amount of birr				
		per month	per year		per month	per year			
2011				income tax		3937.5 birr	House rent	6.00%	
	water cost	30 birr	360 birr	water cost	280 birr	3360 birr	Vegetable income	10.00%	
	labour cost	25 birr	300 birr	electriccity cost	1150 birr	13800 birr	O&M cost for house	9%	
	sum		660 birr	maintainance cost		2700 birr	O&M cost for vegeta	9.00%	
				soil and roof tax		55 birr	V&CLI for house	-66%	
				sum		23852.5 birr	Discount Rate	7%	
2012				income tax		4830 birr	Exit Yield	1.00%	
	water cost	35birr	420 birr	water cost	300 birr	3600 birr			
	labour cost	25 birr	300 birr	electriccity cost	1200 birr	14400 birr			
	sum		720 birr	maintainance cost		3000 birr			
				soil and roof tax		55birr			
				sum		25885 birr			

Cash Flow Proforima for house																						
CPF	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PGI for house		103800	110028	116629.68	123627.4608	131045.1084	138907.815	147242.284	156076.8	165441.4301	175367.916	185889.9909	197043.3904	208866	221397.9534	234681.8306	248762.7	263688.5049	279509.8	296280.404	314057.2	332900.662
V&CL for house		650	221	75.14	25.5476	8.686184	2.9530256	1.00412287	0.341402	0.116076604	0.03946605	0.013418455	0.004562275	0.001551	0.000527399	0.000179316	6.1E-05	2.07289E-05	7.05E-06	2.3963E-06	8.15E-07	2.7701E-07
EGI for house		103150	109807	116554.54	123601.9132	131036.4223	138904.862	147241.28	156076.5	165441.3141	175367.876	185889.975	197043.3858	208866	221397.9529	234681.8304	248762.7	263688.5048	279509.8	296280.404	314057.2	332900.662
O&M cost		25885	28085.225	30472.46913	33062.629	35872.95247	38922.1534	42230.5365	45820.13	49714.84329	53940.605	58525.55639	63500.22869	68897.75	74754.05672	81108.15154	88002.34	95482.54369	103598.6	112404.437	121958.8	132325.314
NOI for house		77265	81721.775	86082.07088	90539.2842	95163.4698	99982.7082	105010.743	110256.3	115726.4708	121427.272	127364.4211	133543.1571	139968.2	146643.8962	153573.6789	160760.4	168205.9632	175911.3	183875.967	192098.4	200575.348
Discount NOI for house		72210.28037	71378.96323	70268.61169	69071.98642	67850.23876	66622.7001	65395.4133	64170.2	62947.53236	61727.4675	60509.91898	59284.75883	58081.85	56871.03122	55662.16864	54455.11	53249.69963	52045.79	50843.237	49641.88	
Sum of DNOI		1222298.833																				
Salvage Value		20057534.81																				
Discount Salvage Value		5183248.144																				
Market value		6405546.577																				

Cash Flow Proforima for vegetable																					
CPF	year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PGI for vegetable		7700	8470	9317	10248.7	11273.57	12400.927	13641.0197	15005.12	16505.63384	18156.1972	19971.81694	21968.99664	24165.9	26582.48835	29240.73719	32164.81	35381.29199	38919.42	42811.3633	47092.5
V&CL for vegetable		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EGI for vegetable		7700	8470	9317	10248.7	11273.57	12400.927	13641.0197	15005.12	16505.63384	18156.1972	19971.81694	21968.99664	24165.9	26582.48835	29240.73719	32164.81	35381.29199	38919.42	42811.3633	47092.5
O&M cost		720	784.8	855.432	932.42088	1016.338759	1107.80925	1207.51208	1316.188	1434.645102	1563.76316	1704.501846	1857.907012	2025.119	2207.379321	2406.04346	2622.587	2858.320234	3115.896	3396.3267	3701.996
NOI for vegetable		6980	7685.2	8461.568	9316.27912	10257.23124	11293.1178	12433.5076	13688.93	15070.98873	16592.4341	18267.3151	20111.09163	22140.78	24375.10903	26834.69373	29542.22	32522.67176	35803.53	39415.0366	43390.5
Discount NOI for vegetable		6523.364486	6712.551315	6907.159994	7116.27912	7327.23124	7549.1178	7782.5076	8027.93	8284.98873	8552.4341	8831.3151	9121.09163	9422.78	9735.10903	10059.69373	10404.22	10770.67176	11159.53	11573.0366	12045.5
Sum of DNOI		401198.5177																			
Total Property Value		6806745.494																			

Ergoye Kassie

Income from house renting												
year	Owner name	Area of land	Object ad	Type of use	class of house	type of house	Quantity	Build Area	No of class	Rent/menth	rent per year	Total rent
2011	Ergoye Kassie	450m2	Bahir Dar	residential	dorimitary	Mood	13	120m2	1	1400birr	16800 birr	218400 birr
			Bahir Dar	residential	main house	mood	1		4	4900birr	57600 birr	58800birr
sum												277200 birr
20112							13			1500 birr	18000 birr	234000 birr
							1			5000 birr	60000 birr	60000 birr
sum												294000 birr

Income from Vegetable							
Vegetable Type	Quantiy	product/le	Total Product/kg	2011		2012	
				Price/Kg	Price/Kg	Total Price	Tottal Price
Mango	12	0.35 kun(3	4.2 kun(420kg)	20birr	22birr	8400 birr	9240 birr
Coffie	2	0.0033(0.3	0.0.0066ku(0.66kg)	140birr	150 birr	92.4birr	99 birr
Buckthorn	3	0.0028ku(0	0.0084ku(0.84kg)	45 birr	50 birr	37.8 birr	42birr
Zeitoni	1	0.1096ku(1	0.1096ku(11kg)	15 birr	20 birr	165 birr	220 birr
Avokado	1	0.26ku(26	26kg	15 birr	25 birr	390 birr	650 birr
Sum	19			432.5		9085.5 birr	10251 birr
Sum*10							102,510 birr

Cost data for house			Cost data for vegetable			Growth rate data	
Type of cost	Amount of birr	per year	Year	Type of cost	Amount of birr	House rent	5.00%
income tax		31020 birr	2011	per month	per year	Vegetable income	12.80%
water cost	280 birr	3360 birr		water cost	40 birr	O&M cost for house	11%
electriccity cost	500 birr	6000 birr		labour cost	25 birr	O&M cost for vegeta	12.00%
maintainance cost		4500 birr		sum	780 birr	V&CLl for house	-33%
soil and roof tax		55 birr	2012			Discount Rate	7%
sum		44935 birr		water cost	48 birr	Exit Yield	2.00%
income tax		34170 birr		labour cost	25 birr		
water cost	300 birr	3600 birr		sum	880 birr		
electriccity cost	600 birr	7200 birr					
maintainance cost		5000 birr					
soil and roof tax		55birr					
sum		50025 birr					

Cash Flow Proforima for house																						
CPF	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Pgi for house	294000	308700	324135	340341.8	357358.8	375226.7794	393988.1	413687.5	434371.9005	456090.4955	478895.0023	502839.7713	527981.7599	554300.848	582099.9	611204.8847	641765.129	673853.4	707546.0547	742923.4	780069.525	
V&CL for house	3000	2010	1346.7	902.289	604.5336	405.0375321	271.3751	181.8213	121.8203033	81.61960319	54.68513414	36.63903987	24.54815671	16.447265	11.01967	7.383177258	4.946728763	3.314308	2.220586542	1.487793	0.9968213	
Egi for house	291000	306690	322788.3	339439.5	356754.3	374821.7418	393716.7	413505.7	434250.0802	456008.8759	478840.3351	502803.1322	527957.2117	554364.401	582088.9	611197.5016	641760.1823	673850.1	707543.8341	742921.9	780068.528	
O&M cost	50025	55677.83	61969.42	68971.96	76765.8	85440.33037	95095.09	105840.8	117800.8467	131112.3424	145928.0371	162417.9053	180771.1286	201198.266	223933.7	249238.1749	277402.0886	308748.5	343637.1079	382468.1	425686.997	
NOI for house	240975	251012.2	260818.9	270467.5	279988.5	289381.4115	298621.7	307864.9	316449.2335	324896.5335	332912.2981	340385.227	347186.0831	353166.135	358155.2	361959.3267	364358.0936	365101.5	363906.7262	360453.8	354381.532	
Discount NOI for house	225210.28	219243.8	212905.9	206338.4	199627.9	192827.0532	185966.6	179063.8	172127.4159	165160.9228	158164.2346	151135.1115	144069.8813	136963.916	129811.9	122608.1469	115346.4414	108020.4	100623.2422	93148.1		
Sum of DNOI	3218363.3																					
Salvage Value	17719077																					
Discount Salvage Value	4578946.1																					
Market value	7797309.4																					

Cash Flow Proforima for vegetable																					
CFP	year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pgi for vegetable	10251	11563.13	13043.21	14712.74	16595.97	18720.25377	21116.45	23819.35	26868.22835	30307.36158	34186.70386	38562.60196	43498.61501	49066.4377	55346.94	62431.3503	70422.56314	79436.65	89604.54258	101073.9	
V&CL for vegetable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Egi for vegetable	10251	11563.13	13043.21	14712.74	16595.97	18720.25377	21116.45	23819.35	26868.22835	30307.36158	34186.70386	38562.60196	43498.61501	49066.4377	55346.94	62431.3503	70422.56314	79436.65	89604.54258	101073.9	
O&M cost	880	985.6	1103.872	1236.337	1384.697	1550.860681	1736.964	1945.4	2178.847595	2440.309307	2733.146423	3061.123994	3428.458873	3839.87394	4300.659	4816.737868	5394.746412	6042.116	6767.1659	7579.23	
NOI for vegetable	9371	10577.53	11939.34	13476.4	15211.27	17169.39309	19379.48	21873.95	24689.38076	27867.05227	31453.55744	35501.47796	40070.15614	45226.5638	51046.28	57614.61244	65027.81673	73394.54	82837.37268	93494.69	
Discount NOI for vegetable	8757.943925	9238.823	9746.055	13476.4	10845.43	17169.39309	12068.57	21873.95	13429.38728	27867.05227	14943.55856	35501.47796	16627.69022	45226.5638	18501.52	57614.61244	20586.14144	73394.54	22905.22383	93494.69	
Sum of DNOI	543268.8223																				
Total Property Value	8340578.2																				

WorkuAynew

Income from house renting												
year	Owner name	Area of land	Object address	Type of use	class of h	type of h	Quantity	Build Area	No of class	Rent/menth	rent per year	Total rent
2011	Worku Aynew	450m2	Bahir Dar (keble 11)	residential	dorimitar	Mood	11	120m2	1	550birr	6600 birr	72600 birr
			Bahir Dar (keble 11)	residential	main house	mood	1		3	3500 birr	42000 birr	42000 birr
sum												114600 birr
20112												
										600 birr	7200 birr	79200 birr
							1			3600 birr	43200 birr	43200 birr
sum												122400 birr

Income from Vegetable							
Vegetable Type	Quantity	product/leg/kg	Total Product/kg	2011	2012	2011	2012
				Price/Kg	Price/Kg	Total Price	Tottal Price
Mango	11	0.35 kun(35kg)	3.85 kun385kg)	20birr	22birr	7700 birr	8470 birr
Coffie	9	0.0033(0.33kg)	0.0297ku(2.97kg)	140birr	150 birr	415 birr	435 birr
Buckthorn	2	0.0028ku(0.28kg)	0.0056ku(0.56kg)	45 birr	50 birr	25.2 birr	28 birr
Zeitoni	1	0.1096ku(11 kg)	0.1096ku(11kg)	15 birr	20 birr	165 birr	220 birr
Orange	1	0.024ku(2.4 kg)	2.4 kg	15 birr	25 birr	36 birr	60 birr
Sum	24		401.93 kg			8341.2 birr	9231 birr
Sum							92,310 birr

Cost data for house				Cost data for vegetable				Growth rate data	
Type of d	Amount of birr		Year	Type of cost	Amount of birr			House rent	6.80%
	per month	per year							
Income tax		6450 birr	2011						
water cost	150 birr	1800 birr			per month	per year			
electriccit	1400 birr	12000 birr			water cost	50 birr	600 birr		
maintainance cost		2000 birr			labour cost	25 birr	300 birr		
soil and roof tax		55 birr			sum		900 birr		
sum		27105 birr							
Income tax		8340 birr	2012						
water cost	200 birr	2400 birr							
electriccit	1500 birr	18000 birr			water cost	55 birr	660 birr		
maintainance cost		2500 birr			labour cost	25 birr	300 birr		
soil and roof tax		55birr			sum		960 birr		
sum		31295 birr							
								V&CLI for hou	-46%
								Discount Rate	7%
								Exit Yield	0.20%

Cash Flow Proforima for house																						
CPF	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PGI for house	127200	135849.6	145087.4	154953.3	165490.1	176743.5	188762	201597.8	215306.5	229947.3	245583.7566	262283.452	280118.7	299166.8	319510.1	341236.8323	364440.9	389222.9206	415690.0792	443957	474146.1	
V&CL for house	1200	654	356.43	194.2544	105.8686	57.6984	31.44563	17.13787	9.340137	5.090375	2.774254906	1.5119686	0.824023	0.44909247	0.244755	0.133391692	0.072698	0.039620667	0.021593264	0.011768	0.006414	
EGI for house	126000	135195.6	144730.9	154759.1	165384.3	176685.8	188730.6	201580.7	215297.2	229942.2	245580.9823	262281.94	280117.9	299166.351	319509.9	341236.6989	364440.9	389222.8809	415690.0576	443957	474146.1	
O&M cost	31295	35676.3	40670.98	46364.92	52856.01	60255.85	68691.67	78308.5	89271.69	101769.7	116017.491	132259.94	150776.3	171885.018	195948.9	223381.769	254655.2	290306.947	330949.9196	377282.9	430102.5	
NOI for house	94705	99519.3	104060	108394.1	112528.3	116429.9	120038.9	123272.2	126025.5	128172.5	129563.4913	130022	129941.6	127281.333	123561	117854.9298	109785.6	98915.9339	84740.13795	66674.08	44043.56	
Discount NOI for house	88509.35	86924.01	84943.93	82693.37	80231.1	77582.17	74754.2	71745.54	68549.5	65156.41	61554.68138	57731.3231	53672.15	49361.8955	44784.18	39921.54226	34755.32	29265.65559	23431.35428	17229.85		
Sum of DNOI		1192798																				
Salvage Value		22021779																				
Discount Salvage Value		5690846																				
Market value		6883644																				

Cash Flow Proforima for vegetable																					
CFP	year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PGI for vegetable	9231	10209.49	11291.69	12488.61	13812.4	15276.52	16895.83	18686.79	20667.59	22858.35	25281.336	27961.1576	30925.04	34203.0946	37828.62	41838.45662	46273.33	51178.30633	56603.2068	62603.15	
V&CL for vegetable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EGI for vegetable	9231	10209.49	11291.69	12488.61	13812.4	15276.52	16895.83	18686.79	20667.59	22858.35	25281.336	27961.1576	30925.04	34203.0946	37828.62	41838.45662	46273.33	51178.30633	56603.2068	62603.15	
O&M cost	960	1023.36	1090.902	1162.901	1239.653	1321.47	1408.687	1501.66	1600.77	1706.421	1819.044318	1939.10124	2067.082	2203.50933	2348.941	2503.97105	2669.233	2845.402526	3033.199093	3233.39	
NOI for vegetable	8271	9186.126	10200.79	11325.71	12572.75	13955.05	15487.14	17185.13	19066.82	21151.93	23462.29168	26022.0564	28857.96	31999.5853	35479.68	39334.48557	43604.1	48332.9038	53570.0077	59369.76	
Discount NOI for vegetable	7729.907	8023.518	8326.883	8640.33	8964.198	9298.838	9644.614	10001.9	10371.09	10752.57	11146.76577	11554.1042	11975.03	12409.9909	12859.47	13323.95115	13803.94	14299.96221	14812.55353	15342.27	
Sum of DNOI		223281.9																			
Total Property Value	7106926																				

ChanyallewNigussie

Income from house renting												
year	Owner name	Area of land	Object address	Type of use	class of house	type of house	Quantity	Build Area	No of class	Rent/menth	rent per year	Total rent
2011	Chanyallew Nigussie	450m2	Bahir Dar (keble	residential	dorimitary	Mood	9	120m2	1	550birr	6600 birr	59400 birr
			Bahir Dar (keble	residential	main house	mood	1		4	3900 birr	42000 birr	46800 birr
sum												106200 birr
20112							9			600 birr	7200 birr	64800 birr
							1			4000 birr	48000 birr	48000 birr
sum												112800 birr

Income from Vegetable							
					2011	2012	
Vegetable	Quantiy	product/leg/kg	Total Product/kg	Price/Kg	Price/Kg	Total Price	Tottal Price
Mango	10	0.35 kun(35kg)	3.5 kun(350kg)	20birr	22birr	7000 birr	7700 birr
Coffie	5	0.0033(0.33kg)	0.0165ku(1.65kg)	140birr	150 birr	231 birr	247 birr
Buckthorn	2	0.0028ku(0.28kg)	0.0056ku(0.56kg)	45 birr	50 birr	25.2 birr	28 birr
Zeitoni	5	0.1096ku(11 kg)	2.74 ku(274kg)	15 birr	20 birr	4110 birr	6850 birr
Orange	25	0.024ku(2.4 kg)	0.6 ku(60 kg)	35 birr	50birr	2100 birr	3000 birr
Sum	47		686.21 kg			13466.2 birr	17825 birr
Sum*10							178,250 birr

Cost Data For House			Cost data for vegetable			Growth Rate Data	
Type of cost	Amount of birr per month	per year	Year	Type of cost	Amount of birr per month	per year	
income tax		5190 birr	2011	water cost	100birr	1200birr	House rent 6.20%
water cost	70 birr	840 birr		labour cost	33.3 birr	400 birr	Vegetable inco 3.20%
electriccitty cost	750birr	9400 birr		sum		1600 birr	O&M cost for 14%
maintainance cost		900 birr	2012	water cost	124 birr	1440 birr	O&M cost for 18.00%
soil and roof tax		55 birr		labour cost	33.3 birr	400 birr	V&CLI for hou -66%
sum		15665 birr		sum		1888birr	Discount Rate 7%
income tax		6180 birr		water cost	124 birr	1440 birr	Exit Yield 0.80%
water cost	80 birr	960 birr		labour cost	33.3 birr	400 birr	
electriccitty cost	800 birr	9600 birr		sum		1888birr	
maintainance cost		1000 birr					
soil and roof tax		55birr					
sum		17795 birr					

Cash Flow Proforima for house																						
CPF	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PGI for house	112800	119793.6	127220.8	135108.5	143485.2	152381.3	161828.9	171862.3	182517.8	193833.9073	205851.6	218614.4	232168.5	246562.9	261849.9	278084.5	295325.7854	313635.9841	333081.4151	353732.4628	375663.876	
V&CL for house	1100	374	127.16	43.2344	14.6997	4.997897	1.699285	0.577757	0.196437	0.066788692	0.022708	0.007721	0.002625	0.000899	0.000303	0.000103	3.50797E-05	1.19271E-05	4.05521E-06	1.37877E-06	4.6878E-07	
EGI for house	111700	119419.6	127093.6	135065.3	143470.5	152376.3	161827.2	171861.8	182517.6	193833.8405	205851.6	218614.4	232168.5	246562.9	261849.9	278084.5	295325.7853	313635.9841	333081.4151	353732.4628	375663.876	
O&M cost	1795	20286.3	23126.38	26364.08	30055.05	34262.75	39059.54	44527.87	50761.78	57868.42393	65970	75205.8	85734.62	97737.46	111420.7	127019.6	144802.3512	165074.6804	188185.1336	214531.0546	244565.402	
NOI for house	93905	99133.3	103967.3	108701.2	113415.5	118113.6	122767.7	127333.9	131755.8	135965.4166	139881.6	143408.6	146433.9	148825.5	150429.1	151064.9	150523.4341	148561.3037	144896.2794	139201.4082	131098.473	
Discount NOI for house	87761.6822	86586.86	84868.25	82927.61	80863.67	78704.05	76453.56	74109.48	71666.44	69117.92327	66456.73	63675.13	60764.86	57717.09	54522.44	51170.92	47651.86441	43953.92912	40065.02869	35972.28909		
Sum of DNOI		131509.82																				
Salvage Value		16387309.2																				
Discount Salvage Value		4234792.09																				
Market value		5549801.91																				

Cash Flow Proforima for vegetable																					
CFP	year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PGI for vegetable	17825	18395.4	18984.05	19591.54	20218.47	20865.46	21533.16	22222.22	22933.33	23667.19637	24424.55	25206.13	26012.73	26845.14	27704.18	28590.71	29505.61662	30449.79636	31424.18984	32429.76391	33475.88533
V&CL for vegetable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EGI for vegetable	17825	18395.4	18984.05	19591.54	20218.47	20865.46	21533.16	22222.22	22933.33	23667.19637	24424.55	25206.13	26012.73	26845.14	27704.18	28590.71	29505.61662	30449.79636	31424.18984	32429.76391	33475.88533
O&M cost	1840	1898.88	1959.644	2022.353	2087.068	2153.854	2222.778	2293.906	2367.311	2443.065431	2521.244	2601.923	2685.185	2771.111	2859.786	2951.299	3045.741071	3143.204785	3243.787338	3347.588533	
NOI for vegetable	15985	16496.52	17024.41	17569.19	18131.4	18711.61	19310.38	19928.31	20566.02	21224.13094	21903.3	22604.21	23327.54	24074.02	24844.39	25639.41	26459.87555	27306.59157	28180.4025	29082.17538	
Discount NOI for vegetable	14939.2523	14408.7	13896.99	13403.45	12927.44	12468.33	12025.53	11598.46	11186.55	10789.27194	10406.1	10036.54	9680.101	9336.322	9004.752	8684.957	8376.518975	8079.035123	7792.116119	7515.386762	
Sum of DNOI		216555.812																			
Total Property Value	5766358																				

MersoWalle

Income from house renting												
year	Owner name	Area of land	Object address	Type of use	class of house	type of hous	Quantity	Build Area	No of class	Rent/menth	rent per year	Total rent
2011	Merso Walle	450m2	Bahir Dar (keble	residential	dorimitary	Mood	7	120m2	1	600birr	7200 birr	50400 birr
			Bahir Dar (keble 1	residential	main house	mood	4		3	2000 birr	24000 birr	96000 birr
sum												146400 birr
20112							7			650birr	7800birr	54600 birr
							4			2100 birr	25200 birr	100800 birr
sum												155400 birr

Income from Vegetable							
				2011	2012	2011	2012
Vegetable	Quantiy	product/leg/kg	Total Product/kg	Price/Kg	Price/Kg	Total Price	Tottal Price
Mango	3	0.35 kun(35kg)	1.05kun(105kg)	20birr	22birr	2100 birr	2310 birr
Buckthorn	1	0.0028ku(0.28kg)	0.28 kg	45 birr	50 birr	12.6 birr	14 birr
Sum	4		105.28 kg			2112.6 birr	2324birr
Sum*10							23,240 birr

Cost data for vegetable				Cost Data Dfor House			Growth rate data	
Year	Type of	Amount of birr		Type of cost	Amount of birr		House rent	6.14%
		per month	per year		per month	per year		
2011				income tax		8340 birr	Vegetable income	10.00%
	water cos	15birr	180 birr	water cost	100 birr	1200 birr	O&M cost for hou	15%
	labour cos	16.6 birr	200 birr	electricity cost	650birr	7800 birr	O&M cost for veg	15.00%
	sum		380 birr	maintenance cost		1150 birr	V&CLI for house	-46%
				soil and roof tax		55 birr	Discount Rate	7%
				sum		18545 birr	Exit Yield	0.86%
2012				income tax		9915 birr		
	water cos	20 birr	240 birr	water cost	150birr	1800 birr		
	labour cos	16.6 birr	200 birr	electricity cost	700 birr	8400 birr		
	sum		440birr	maintenance cost		1200birr		
				soil and roof tax		55birr		
				sum		21370 birr		

Cash Flow Proforima for house																						
CPF	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PGI for house	155400	164941.6	175069	185818.2	197227.4	209337.2096	222190.5143	235833	250313.159	265682.3868	281995.3	299309.8	317687.417	337193.4	357897.1	379872	403196.1228	427952.3647	454228.6	482118.3	511720.3	
V&CL for house	650	352.3	190.9466	103.4931	103.4931	56.093237	56.093237	30.40253	30.4025345	16.47817367	16.47817	8.93117	8.93117013	4.840694	4.840694	2.623656	2.623656263	1.422021694	1.422022	0.770736	0.770736	
EGI for house	154750	164589.3	174878	185714.7	197124	209281.1164	222134.4211	235802.6	250282.756	265665.9086	281978.8	299300.9	317678.486	337188.6	357892.3	379869.4	403193.4991	427950.9427	454227.2	482117.5	511719.6	
O&M cost	21370	24575.5	28261.83	32501.1	37376.26	42982.7031	49430.10856	56844.62	65371.3186	75177.01636	86453.57	99421.6	114334.845	131485.1	151207.8	173889	199972.3581	229968.2118	264463.4	304133	349752.9	
NOI for house	133380	140013.8	146616.2	153213.6	159747.7	166298.4133	172704.3125	178958	184911.438	190488.8922	195525.2	199879.3	203343.641	205703.5	206684.4	205980.4	203221.141	197982.7309	189763.8	177984.5	161966.7	
Discount NOI for house	124654.21	122293.4	119682.5	116885.9	113897.9	110811.6545	107551.566	104155.2	100579.57	96834.89353	92892.63	88748.78	84380.3819	79775.37	74911.95	69772.67	64334.60885	58575.94613	52471.26	45994.59		
Sum of DNOI	1829205																					
Salvage Value	1883333																					
Discount Salvage Value	4866891.2																					
Market value	6696096.2																					

Cash Flow Proforima for vegetable																				
CFP year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PGI for vegetable	2324	2556.4	2812.04	3093.244	3402.568	3742.82524	4117.107764	4528.819	4981.70039	5479.870434	6027.857	6630.643	7293.70755	8023.078	8825.386	9707.925	10678.71722	11746.58894	12921.25	14213.37
V&CL for vegetable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EGI for vegetable	2324	2556.4	2812.04	3093.244	3402.568	3742.82524	4117.107764	4528.819	4981.70039	5479.870434	6027.857	6630.643	7293.70755	8023.078	8825.386	9707.925	10678.71722	11746.58894	12921.25	14213.37
O&M cost	440	506	581.9	669.185	769.5628	884.9971625	1017.746737	1170.409	1345.97006	1547.865568	1780.045	2047.052	2354.11005	2707.227	3113.311	3580.307	4117.353184	4734.956162	5445.2	6261.98
NOI for vegetable	1884	2050.4	2230.14	2424.059	2633.006	2857.828078	3099.361027	3358.41	3635.73033	3932.004865	4247.812	4583.591	4939.5975	5315.852	5712.076	6127.618	6561.364036	7011.63278	7476.048	7951.393
Discount NOI for vegetable	1760.7477	1790.899	1820.459	1849.303	1877.297	1904.291516	1930.12628	1954.625	1977.59641	1998.83189	2018.105	2035.169	2049.75735	2061.579	2070.319	2075.636	2077.15982	2074.489134	2067.19	2054.791
Sum of DNOI	39448.371																			
Total Property Value	6735544.6																			

Tewachew Tesfa

Income from house renting												
year	Owner name	Area of land	Object address	Type of use	class of house	type of house	Quantity	Build Area	No of class	Rent/me	rent per	Total rent
2011	Tewachew Tesfa	450m2	Bahir Dar (keble	residential	dorimitory			120m2				
			Bahir Dar (keble 1	residential	main house	mood	1		4	3800 birr	42000 birr	45600 birr
sum												45600 birr
20112												
								1		4050 birr	48000 birr	48600 birr
sum												48600birr

Income from Vegetable							
				2011	2012	2011	2012
Vegetable	Quantiy	product/leg/kg	Total Product/kg	Price/Kg	Price/Kg	Total Price	Totall Price
Mango	15	0.35 kun(35kg)	5.25 kun(525kg)	20birr	22birr	10500 birr	11550 birr
Coffie	2	0.0033(0.33kg)	0.0066ku(0.66kg)	140birr	150 birr	92.4 birr	99 birr
Buckthorn	2	0.0028ku(0.28k	0.0056ku(0.56kg)	45 birr	50 birr	25.2 birr	28 birr
Banana	27	0.041ku(4.1 kg)	1.107 ku110.7kg)	25 birr	30 birr	2767.5 birr	3321 birr
Sum	37		636.92 kg			13385.1 bi	14998 birr
Sum*10							149,980 birr

Cost data for vegetable				Cost Data for House			Growth rate data	
Year	Type of cost	Amount of birr		Type of cost	Amount of birr			
		per month	per year		per month	per year		
2011				income tax		1690 birr	House rent	6.20%
	water cost	80birr	960 birr	water cost	40birr	480 birr	Vegetable income	12.00%
	labour cost	25birr	300 birr	electriccity cost	200 birr	2400 birr	O&M cost for house	5%
	sum		380 birr	maintenance cost		400 birr	O&M cost for vegeta	9.50%
2012				soil and roof tax		55 birr	V&CLl for house	-50%
	water cost	90birr	1080 birr	sum		5025 birr	Discount Rate	7%
	labour cost	25 birr	300 birr	income tax		1770 birr	Exit Yield	0.80%
	sum		440birr	water cost	50 birr	600 birr		
				electriccity cost	200birr	2400 birr		
				maintenance cost		450 birr		
				soil and roof tax		55birr		
				sum		5275 birr		

Cash Flow Proforima for house																						
CPF	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Pgi for house	46800	49701.6	52783.1	56055.65135	59531.10173	63222.03	67141.8	71304.58725	75725.47	80420.45	85406.519	90701.72	96325.23	102297.4	108639.8325	115375.5022	122528.8	130125.6	138193.4	146761.341	155860.5	
V&CL for house	3800	1900	950	475	237.5	118.75	59.375	29.6875	14.84375	7.421875	3.7109375	1.855469	0.927734	0.463867	0.231933594	0.115966797	0.057983	0.028992	0.014496	0.00724792	0.003624	
EGl for house	43000	47801.6	51833.1	55580.65135	59293.60173	63103.28	67082.42	71274.89975	75710.63	80413.03	85402.808	90699.87	96324.3	102296.9	108639.6006	115375.3862	122528.7	130125.5	138193.3	146761.334	155860.5	
O&M cost	6475	6798.75	7138.688	7495.621875	7870.402969	8263.9231	8677.119	9110.975237	9566.524	10044.85	10547.093	11074.45	11628.17	12209.58	12820.05711	13461.05996	14134.11	14840.82	15582.86	16362.0025	17180.1	
NOI for house	36525	41002.85	44694.41	48085.02948	51423.19877	54839.357	58405.3	62163.92451	66144.1	70368.18	74855.715	79625.42	84696.13	90087.35	95819.5435	101914.3262	108394.6	115284.7	122610.5	130399.331	138680.4	
Discount NOI for house	34135.514	35813.48	43873.05	36683.83876	51450.98154	36541.779	53678.11	36179.97004	66515.4	35771.61	75293.951	35354.64	85199.2	34937.45	96393.46669	34521.90831	109048.3	34108.59	123354.7	33697.6651		
Sum of DNOI	1097553.56																					
Salvage Value	17335054.7																					
Discount Salvage Value	4479707.56																					
Market value	5577261.12																					

Cash Flow Proforima for vegetable																					
CPF	year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pgi for vegetable	14998	16797.76	18813.49	21071.11014	23599.64336	26431.601	29603.39	33155.79975	37134.5	41590.64	46581.511	52171.29	58431.85	65443.67	73296.91005	82092.53926	91943.64	102976.9	115334.1	129174.2	
V&CL for vegetable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EGl for vegetable	14998	16797.76	18813.49	21071.11014	23599.64336	26431.601	29603.39	33155.79975	37134.5	41590.64	46581.511	52171.29	58431.85	65443.67	73296.91005	82092.53926	91943.64	102976.9	115334.1	129174.2	
O&M cost	5275	5776.125	6324.857	6925.718278	7583.661515	8304.1094	9093	9956.834723	10902.73	11938.49	13072.651	14314.55	15674.43	17163.51	18794.03938	20579.47312	22534.52	24675.3	27019.46	29586.3049	
NOI for vegetable	9723	11021.64	12488.63	14145.39187	16015.98185	18127.491	20510.39	23198.96502	26231.76	29652.14	33508.861	37856.74	42757.41	48280.16	54502.87067	61513.06614	69409.12	78301.58	88314.65	99587.8949	
Discount NOI for vegetable	9086.91589	9626.723	10194.45	10791.45173	11419.17371	12079.113	12772.84	13502.00886	14268.34	15073.65	15919.818	16808.85	17742.81	18723.88	19754.34854	20836.60372	21973.15	23166.61	24419.74	25735.4045	
Sum of DNOI	323895.864																				
Total Property Value	5901157																				

Eskelalem Awoke

Income from house renting												
year	Owner name	Area of land	Object address	Type of use	class of house	type of house	Quantity	Build Area	No of class	Rent/menth	rent per year	Total rent
2011	Eskelalem Awoke	450m2	Bahir Dar (kebl	residential	dorimitary	Mood	10	120m2	10	600birr	7200 birr	72000 birr
			Bahir Dar (keble	residential	main house	mood	1		4	3800birr	24000 birr	46800 birr
sum												118800 birr
20112							10		1	650birr	7800birr	78000 birr
							1		4	4000 birr	25200 birr	48000 birr
sum												126000 birr

Income from Vegetable							
				2011	2012	2011	2012
Vegetable	Quantiy	product/leg/kg	Total Product/kg	Price/Kg	Price/Kg	Total Price	Tottal Price
Mango	5	0.35 kun(35kg)	1.75 kun(175kg)	20birr	22birr	3500 birr	3850 birr
Coffie	5	0.0033(0.33kg)	0.0165ku(1.65kg)	140birr	150 birr	231 birr	247 birr
Buckthorn	2	0.0028ku(0.28kg)	0.0056ku(0.56kg)	45 birr	50 birr	25.2 birr	28 birr
Sum	12		177.21 kg			3756 birr	4125 birr
Sum*10							41,250 birr

Cost data for vegetable				Cost Data For House			Growth rate data	
Year	Type of cost	Amount of birr		Type of cost	Amount of birr		House rent	6.00%
		per month	per year		per month	per year		
2011	water cost	25 birr	300 birr	income tax		7080 birr	Vegetable inc	10.00%
	labour cost	25 birr	300birr	water cost	450 birr	5400 birr	O&M cost for	10%
	sum		600 birr	electriccity cost	1100birr	13200 birr	O&M cost for	10.00%
2012	water cost	30 birr	360 birr	maintainance cost		4900 birr	V&CLI for hou	-46%
	labour cost	25 birr	300 birr	soil and roof tax		55 birr	Discount Rate	7%
	sum		660 birr	sum		30635 birr	Exit Yield	1.00%
				income tax		8160 birr		
				water cost	500birr	6000 birr		
				electriccity cost	1200birr	14400 birr		
				maintainance cost		5000birr		
				soil and roof tax		55birr		
				sum		33615 birr		

Cash Flow Proforima for house																						
CPF	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
PFI for house	126000	133560	141573.6	150068	159072.1	168616.4	178733.4	189457.4	200824.8574	212874.3	225646.8	239185.6	253536.8	268749	284873.9	301966.3323	320084.3123	339289.371	359646.7	381225.5373	404099.0695	
V&CL for house	1300	704.6	381.8932	206.9861	112.1865	60.80507	32.95635	17.86234	9.681388423	5.247313	2.844043	1.541472	0.835478	0.452829	0.245433	0.133024811	0.072099448	0.0390779	0.02118	0.01147968	0.006221987	
Egi for house	124700	132855.4	141191.7	149861	158959.9	168555.6	178700.5	189439.6	200815.176	212869.1	225644	239184.1	253535.9	268748.5	284873.7	301966.1993	320084.2402	339289.332	359646.7	381225.5258	404099.0633	
O&M cost	33615	36808.425	40305.23	44134.22	48326.97	52918.04	57945.25	63450.05	69477.80174	76078.19	83305.62	91219.66	99885.52	109374.6	119765.2	131142.9363	143601.5152	157243.659	172181.8	188539.0784	206450.2909	
NOI for house	91085	96046.975	100886.5	105726.8	110632.9	115637.6	120755.2	125989.5	131337.3743	136790.9	142338.3	147964.4	153650.4	159373.9	165108.4	170823.263	176482.725	182045.673	187464.9	192686.4474	197648.7724	
Discount NOI for house	85126.1682	83891.1477	82353.42	80658.48	78879.76	77054.2	75200.27	73327.04	71438.82953	69537.56	67623.92	65697.97	63759.45	61807.93	59842.89	57863.7493	55869.91108	53860.7457	51835.61	49793.83958		
Sum of DNOI	1365422.89																					
Salvage Value	19764877.2																					
Discount Salvage Value	5107619.87																					
Market value	6473042.76																					

Cash Flow Proforima for vegetable																					
CFP	year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PFI for vegetable	4125	4537.5	4991.25	5490.375	6039.413	6643.354	7307.689	8038.458	8842.303841	9726.534	10699.19	11769.11	12946.02	14240.62	15664.68	17231.1487	18954.26357	20849.6899	22934.66	25228.12481	
V&CL for vegetable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Egi for vegetable	4125	4537.5	4991.25	5490.375	6039.413	6643.354	7307.689	8038.458	8842.303841	9726.534	10699.19	11769.11	12946.02	14240.62	15664.68	17231.1487	18954.26357	20849.6899	22934.66	25228.12481	
O&M cost	660	726	798.6	878.46	966.306	1062.937	1169.23	1286.153	1414.768615	1556.245	1711.87	1883.057	2071.363	2278.499	2506.349	2756.983792	3032.682171	3335.95039	3669.545	4036.49997	
NOI for vegetable	3465	3811.5	4192.65	4611.915	5073.107	5580.417	6138.459	6752.305	7427.535227	8170.289	8987.318	9886.049	10874.65	11962.12	13158.33	14474.16491	15921.5814	17513.7395	19265.11	21191.62484	
Discount NOI for vegetable	3238.31776	3329.11713	3422.451	3518.408	3617.055	3718.468	3822.724	3929.903	4040.087034	4153.361	4269.81	4389.524	4512.595	4639.116	4769.185	4902.900428	5040.364926	5181.68357	5326.964	5476.318559	
Sum of DNOI	85298.3472																				
Total Property Value	6558341.1																				

AppendixA-2: CashFlowProformaForLand

income from the crop product in 2010										
Land holder	Land area						2010	2011	2010	2011
ቢተላ ደመን ገናንላ	1 hectar	Crop Type	usage per percent	usage per hectare	product/hectar /kg	Total Product/hectar/kg	Price/kun	Price/kuntal	Total Price	Tottal Price
		Teff	33%	0.33 hectar	15.21 ku(1521 kg)	5.02 kun(502kg)	1958.2 birr	2178.66 birr	9830.16 birr	10936.87 birr
		Maize	33.00%	0.33 hectar	55 kun(5500kg)	18.15 ku(1815kg)	711 birr	859.5 birr	12904.65 birr	15599.93birr
		Finger Millet	34%	0.34 hectar	35.73ku(3573 kg)	12.15ku(1215kg)	1068.95 birr	1311.5 birr	12987.74 birr	16088.72 birr
		sum				177.21 kg			35722.55 birr	42625.53 birr

Vacancy & Collection Loss Data

	2010	2011
Eating by cattle	0.25 kuntal for all crop	0.022 kuntal for all crop type
Natural hazard	0.75 kuntal for all crop	0.88 kuntal for all crop type
Total	1 Kuntal= 1*1246.05=	0.902 kunal= 1.22*1449.88=1307.79 birr

Growth Data		Cost data for corp production on land		
			2010	2011
Crop income	23.00%	Type of cost	Birr/yearr	Birr/yearr
cost growth	1.50%	seed cost	410 birr	480 birr
V&CL	5%	Fertilizer cost	3852.5 birr	4075 birr
Discount rate	7%	Labour cost	13800 birr	13890 birr
		Soil Tax cost	150 birr	155 birr
		Crop product transport	3150 birr	3150 birr
		sum	21362.5birr	21700birr

Cash flow Proforma for land income											
CFP	Year	1	2	3	4	5	6	7	8	9	10
PGI		35722.55	43938.7365	54044.6459	66474.91	81764.145	100569.8981	123700.975	152152.199	187147.2045	230191.0616
V&CL		1246.05	1308.3525	1373.77013	1442.459	1514.5816	1590.310641	1669.82617	1753.31748	1840.983356	1933.032524
EGI		34476.5	42630.384	52670.8758	65032.46	80249.563	98979.58743	122031.148	150398.881	185306.2212	228258.029
O&M Cost		21362.5	21682.9375	22008.1816	22338.3	22673.379	23013.47953	23358.6817	23709.062	24064.69788	24425.66835
NOI		13114	20947.4465	30662.6942	42694.15	57576.184	75966.1079	98672.4667	126689.819	161241.5233	203832.3607
DNOI		12256.0748	18296.31103	25029.8922	32571.16	41051.024	50619.42527	61448.2532	73734.6283	87704.70522	103618.0363
Sum of DNOI		506329.514									

AppendixA-3: Photographs of some of the Expropriated properties



Appendix A-4: Questionnaires

Questionnaire: 1

1. Questionnaire for affected people

General Direction

The main aim of this questionnaire is to gather facts from the sample respondents concerning to the practice of property valuation for expropriation compensation. Your cooperation is very helpful so as to make the study fruitful and to meet the objective. So dear respondents, you are kindly requested to give the response for this questionnaire freely. The researcher is an academic staff of Bahir Dar University and the information you supply will be confidentially used for academic purpose only. Thank you for your kind cooperation.

I. General information

- a. Name.....Sex.....Age..... Family size.....
- b. Educational Level: Illiterate Reading and Writing from grade 1-8
From grade 9-12 Diploma Degree

II. Issues related to the practice of property valuation for expropriation compensation

1. What are the properties taken by the government for public purposes?
.....
2. To what extent do you know the rules and regulations related to expropriation, valuation and compensation?
I know very well partially knowledgeable on't know at all
3. Did you get a description by the valuation committee about the calculation system of compensation for your expropriated property?
Yes No
4. If your answer for question No 3 is yes can you clarify it?
.....
5. Have you participated in the expropriation, valuation and compensation process?
Yes No
6. If your answer for question No 5 is yes in which activity have you participate?

.....
7. If your answer for question No 5 is No state the reason why?
.....

8. How much the amount of paid compensation?
.....

9. What else have you been paid in addition to compensation for house and substituted land?.....

10. If your answer for question No 8 is yes what are additional the compensations?
.....

11. Have you got additional compensation for other damages and disturbance?

Yes No

12. Was the compensation made according to the expropriation compensation law?

Yes No

13. If your answer for question No 11 is No what are the reason?
.....

14. Was the compensation made according to the current market value?

Yes No

15. If your answer for question No 13 is No what was the base to determine the compensation amount?.....

16. Did you get a sufficient amount of compensation for your expropriated property that enables you to live as the previous situation?

Yes No

17. If your answer is No for question No 15 what are the factors for not benign paid enough compensation?

✚ Because we do not know the law

✚ Because the compensation law itself has a problem

✚ Because the provisions of the expropriation proclamation law are not properly applied

✚ Because the professionals who make the compensation are not qualified

✚ Because they take a certain amount of compensation in a way that we do not know

✚ Because we were not involved in the compensation work

18. Have you been given any other land for the land you have lost?

Yes No

19. If your answer is yes; is the give substituted land the same to the previous land in location, size, fertility, and distance for farming?

The same in fertility the same in size e same in distance

The same in location

20. Can the compensation amount substitute a property that has a similar function and location?

Yes No

21. Can the compensation amount you have been paid able to rebuild the same type of home?

Yes No

22. What is the problem that faced you after your property is taken by the city administration?

.....

23. Have you been affected by the lack of adequate compensation?

Yes No

24. If your answer is yes what type of impact did you get?

.....

25. What are your living conditions after you have been get compensation?

.....

26. In what job do you participateafter you have been get compensation?

.....

27. Would you tell us the main problems related to expropriation, valuation and compensation exercised in your area?

28. According to your opinion what measures should be taken by each stake holders overcome theproblem?.....

.....

.....

I thank you very much for your kind cooperation!

Questionnaire: 2

Interview guide for government valuer group

I. Participant Profile

- a. Name.....Sex.....
- b. Educational level: diploma first degree second degree
- c. What is your educational background (Field of study).....

1. Have you taken any training in property valuation?

Yes No

2. How many years of real property valuation experience do you have?

1 2 3 above 3

3. Do you know about the three techniques of property valuation?

Yes No

4. If your Answer is yes what are they? Which one do you use?

.....

5. Does your institution use all three traditional approach of valuation?

Yes No

6. If your answer for question No 5 is No what are the challenges that make the institution not using this approach in a standard way as other country?

.....

7. Which valuation standard you adopted for valuation work?

Ethiopian valuation standard

Standards prepared by the organization itself

International valuation standard

8. Do you know the techniques of valuation that are set in the expropriation proclamation?

Yes No

9. If your answer is yes what is that methods?

.....

10. What are the procedures of valuation for compensation?

1..... 2.....

3..... 4.....

5..... 6.....

7..... 8.....

11. Does the valuation method used differ as the type of property?

Yes it is differ No it does not differ

12. What is the base of valuation for expropriation compensation?

Market value replacement cost of the property

10. Do you think the valuation method stated in the expropriation proclamation is appropriate for our country?

Yes No

13. If your answer is no what is the reason?

- Put your justification

.....

14. Do you think this valuation method needs to change?

Yes No

15. Do you feel the valuation system for compensation had problems?

Yes No

16. If your answer is yes for question No 13 what are the problems?

.....
.....

16.1. Would you say the compensation amount calculated by current Ethiopian valuation system is appropriate and sufficient when we compare to the benefits get from the land for unlimited periods? Yes No

- Put your justification

.....
.....

17. Is there another compensation for affected people in addition to compensation for house and substituted land?

.....
.....

16. Was the compensation made according to the current market value?

Yes No

17. If your answer for question No 16 is No what was the base to determine the compensation amount?.....

18. Do you calculate a depreciation value on your property valuation system?

.....

19. Also as the expropriation proclamation “, a land holder who is to be displaced permanently shall be a substitute for a reasonable proportion of the land taken from the area, shall be given a substitute land if it is available.”

19.1. But did you consider the location, size, distance, infrastructure and other factors when you give the replacement land?

Yes No

19.2. Also have you give the replacement land that are similar to the previous land by location, size, fertility, accessibility of infrastructure and the distance for farming and others?

Yes

No

The same in fertility the same in size the same in distance from CBD

The same in location

20. Is the compensation mount done by the law the same to the market pricing of that expropriated property?

Under estimation

Over estimation

21. Can the compensation amount purchase or substitute a property that has a similar function and location?

Yes

No

22. In your view, as a valuer do you say that the displaced people have received fair and adequate compensation that enables to live as the previous situation?

Yes

No

23. If your answer for question No 22 is No what are the factors for not being adequately compensated?

.....
.....
.....

24. Does the source of budget is the cause for the payment of sufficient and insufficient compensation?

Yes

No

25. What are the main challenges or problems related to property valuation and compensation?

.....
.....
.....

26. General comments about the real property valuation for expropriation?

.....
.....

Questionnaire:3

Interview guide for selected higher officials

Personal Profile

a. Name.....

b. Position.....

1. Currently by whom the property valuation work is done?

By Certified valuer valuation committee Governmental valuer group

2. Do you feel the valuation system for compensation had problems?

Yes No

3. If your answer is yes for question No 2 What are those problems?

.....
.....

4. Have been recognized by the concerned institution for the need for a standardized property valuation system?

Yes No

5. What are the factors for the absence of a standardized real property valuation system and certified valuer in our country Ethiopia?

.....

6. On Article 17 (1) of the 1161/2019 expropriation proclamation states that “compensation for the property situated on land to be expropriated shall be evaluated by certified private institutions or individual consultant valuers on the basis of national approved valuation method”.

6.1. Is it really the valuation work is done by the certified valuer and national valuation method? Yes No

6.2. If your answer is No for question No 6.1 what is the cause?

.....

7. General comments about the real property valuation for expropriation.

.....

Appendix A-5: Checklist for the characteristics of the expropriated house

Main House		
Name of the Owner		
Land Area		
House Area		
Location of House		
Distance From the main Road		
Accessibility of the other infrastructure		
House use Type	Residential	Commercial
The way of acquiring the land	Lease	Allotment
Building Type of the house	Mood	Bulket
Age of House		
No of room		
Type of living room	Concrete	Ceramic
Type of cronies		
Wall Painting	Panted	Not Panted
Dormitory		
No of Dormitory		
Building Type of the Dormitory	Mood	Bulket
Area of Dormitory		
Age of Dormitory		
No of room		
The selling price of the house		
List of participating brokers		
Signature		
1.		
2.		
3.		

1. What are the main factors that affect the value of the house?