Real Estate Appraisal in Sudan: Challenges and Potentials

Akram Elkhalifa1 and Dr. Mohamed Yagoub Shaddad2
1B.Sc. (Arch.), M.Sc. in Real Estate Management (Sweden)
Ph.D Candidate, University of Camerino, Italy akram.elkhalifa@unicam.it & akrelk@uofk.edu
Dean, Faculty of Architecture, University of Khartoum myshaddad@uofk.edu

Abstract

Nowadays, investment in real estate is a unique investment for a diversity of reasons. The RE investment is characterized by high risk associated with the relatively high returns. Investment in the sector of real state is more risky in developing countries, Sudan in not an exception despite the general perception of being safe. Substantial fund is required for investing in real estate; therefore most of the developing countries find it difficult to establish organized markets for real estate. Politicians and planners in these countries face difficulties in the allocation and reallocation of funds available for development required for different sectors in the economy. More attention is drawn to the sector of real estate as tool for sustainable development.

Appraisal/valuation has recently been christened as an ‘Emerging Global Profession’. The assessment of real properties value is crucial to eliminate risks and uncertainties in real estate investment. The political and economical stability, in addition to the availability, accuracy, and reliability of information are considered key stone in the efficiency of real estate markets. Most of the developing countries, Sudan is not an exception, face severe problems in getting accurate and reliable information; if any is available. The absence information sources and knowledge sharing concept makes it difficult for investors to participate in the real estate market making the real estate appraisal more difficult. Moreover, the absence of professional institutions and codes of conduct set a barrier in providing a professional appraisal services.

This paper reviews the real estate investment in Sudan and its environment. A special focus is drawn to the practice of real estate appraisal in Sudan. The Authors provide clear definitions to terms related to the Real Estate Appraisal Process and the objectives behind Appraisal Process and the most common methods of valuation. The study highlights the challenges and limitations with which the appraisal practice in Sudan is faced. A general review of the appraisal practice in the global context help setting guidelines for a more professional practice of real estate appraisal. The study draws some conclusions and recommendations for the development of the real estate appraisal as a profession.

Keywords: Real Estate Appraisal, Appraiser, Professional Real Estate Appraisal, Real Estate Market

1 Real Estate Investment in Sudan: Potentials and Performance

1.1 Overview

Investment in real estate is characterized by the high risk associated with the relatively high returns. The sector of real state is more risky in developing countries than it is in other countries in the world. Substantial fund is required for investing in real estate; therefore most of the developing countries find it difficult to establish organized markets for real estate. Politicians and planners in these countries face difficulties in the allocation and reallocation of funds available for development required for different sectors in the economy. Accordingly, politicians and planners draw more attention for the sector of real estate. Moreover, real estate investments are long term investments. This fact calls for stability in the economy, to persuade investors be exposed to the risk associated with investing in real estate. When an economy experience instability, investors will shift to sector with short term investments. Economy instability contributes to the unattractivity of investing in real estate.

Availability, accuracy, and reliability of information are considered key stone in the efficiency of real estate markets. Most of the developing countries face severe problems in getting accurate and reliable information; if any is available. The absence of accessed and trustful information database makes it difficult for investors to participate in the real state market. Investments in developing countries are mainly sponsored by the private sector and foreign investor. Availability of information is crucial for foreign investors to enter any market; therefore, they rarely invest in real estate. Transparency in getting information facilitates the task of actors in the real estate market in decision making. Transparency is missed in developing countries, even from governmental authorities; therefore entering the real estate market becomes less attractive. Planners in developing countries try to solve problems of fund availability by establishing financial firms specialized in offering fund for real estate. These specialized firms make credible attempts to attract the private sector to invest in real estate. The private sector, therefore, participate in the real estate market by investing indirectly in it. The firms attract private sectors capital in exchange to its shares; returns of investing in real estate come in form of dividends to share holders. The policy of establishing such kind of firms contributes to the attractivity of real estate markets in developing countries.

1.2 Real Estate Market in Sudan

Sudan as one of developing countries experiences the absence of organized real estate market. Many of the above mentioned reasons are responsible of the absence of organized markets for real estate. The government didn’t show any kind of encouragement for the private sector to launch the market of real estate. The Sudanese Real Estate Bank (SREB), which was established in year1967 according to a parliament decision, was the only bank having the right to invest in Real Estate. Some of the policies and plans might have contributes indirectly to attract private sector to make substantial investment. It’s not till the beginning of 2000s when private sector invests in this sector. Before that, governmental authorities, firms, and banks
where the only actors in the real estate market. Many factors stand behind the entry of private sector into the market, some of which are:

a. Demand
The increasing demand for real estate from private sector, specially foreign companies and investors, made it more attractive to enter the market. The performance in the building and construction and its contribution to the GDP represents the general trend in demand for space. Despite the growth that the construction sector enjoyed during the 1995-2007 (fig-2), the share of this sector to GDP shows a decreasing pattern (fig-3). The contribution of other growing sectors to GDP was greater than the construction sector did. The oil sector share to GDP was relatively high resulting in the reduction of other sectors shares. The increase in the amount spent on construction was caused by oil production; setting the infrastructure for oil production.

Fig (2): Construction Sector Shares in Amount in GDP during 1995-2007(source:CBOS)

Fig (3): Construction Sector (% Shares in GDP during 1995-2007(source:CBOS)

Until the near past, most of the buildings, especially residential buildings, were single storey buildings. Costs associate with horizontal expansion (i.e. infrastructure) calls for vertical expansion in buildings and cities profile. Therefore the demand for multi storey buildings increased significantly in the last 10 years. Many new projects are under construction, and some are subject to the approval of the governmental authorities

b. Policies made by the Central Bank of Sudan (CBOS)
It wasn’t allowed for banks other than the Sudanese Real Estate Bank (SREB) to finance real estate investments or construction projects. Since 2001 CBOS has made it possible for all banks to invest, finance, and trade in real estate

c. Economy Performance
The economy stability that Sudan experienced during the last 7 years made investing in real estate less risky. For instance, Inflation rates dropped from 121% in 1991 to 8.1% in 2007. The exchange rates tend to be stable on average resulting in a more attractive environment for investment.

d. Oil Production
Oil started to be produced in large scale since 1997, the government started to build modern oil infrastructure according to the international standards, this construction movement resulted in higher demand. Many foreign companies invested in oil production. The need of these companies to build, buy, and rent created new demand in real estate market for residential and offices space. Private sector was encouraged to enter the market because of high demand and feasibility of investing in real estate. The real growth that the construction sector experienced in Sudan was negative till the mid 1990s, it became positive in 1997. The shift from negative to positive growth was a result of the national development projects those were going on that time such as national roads, bridges housing projects and redeveloping of some projects and infrastructure. After 2000 the amount spent on construction continues to increase because of the entry of foreign companies and investors.

Khartoum, as the biggest city and the capital of Sudan, is witnessing an undeniable boom in its urban context in comparison to other cities in the Sudan. The majority of construction activities and investment are concentrated in the state of Khartoum due to the increasing demand for space. It becomes a favorite market for real estate for both local and international investors. As a part of the Sudanese Real Estate market, the RE Market in Khartoum severely suffers from the lack of accurate, reliable, and up-to-date information. The residential sector becomes the more favorite sector for investors in real estate, in means of developing, buying, selling, and renting. The demand for office space has increased, as well, especially after the mass production of oil in Sudan. The entry of foreign investors acts as a driving force for increasing demand for office and residential buildings. The demand for other buildings increased as well (i.e., Hotels, multi-purpose halls, restaurants, shopping centers, etc). The following submarkets represent the most active and growing ones in the RE market in Khartoum:

Residential Real Estate Market
Lately, the real estate market for residential buildings experiences an increasing demand in a way that affects both the quantity and quality of space. Most of the new construction, to satisfy the demand needs, was carried out in Khartoum and Khartoum North. All the investments in the residential sectors made targeted mostly the high income groups. The supply of residential space takes different forms in Khartoum;
• Un-Organized Residential Real Estate; in forms of properties developed/owned by individuals or small investors put into the market for sale or rent.
• Organized Residential Real Estate; properties developed/owned by specialized investors in the real estate with substantial investments in forms of big complexes with different types of residential buildings including Apartments (ownership/rent), Villas, Vacant Land (developed with all basic services)

Real Estate Market for Office and retail
Beside the existing properties in the market, many office and retail complexes are developed recently; some are still under-construction and expected to enter the market in the near future (i.e., Wahat Al Khartoum, Alsunut Project, Hamza Plaza, Burj Al Khartoum, Burj Alitsalat). These projects will shorten the gap between demand and supply if demand is maintained in the same level. Investors are reluctant to enter the market for office building due to the driving forces in the market that determine the demand. Demand is subject to many factors such as: economical performance, political stability, investment policies, etc. Most of the demand for office space is concentrated in the city of Khartoum with very little demand in Khartoum North and Omdurman.

Hotels
Similar to other type of properties, hotels sector experienced increasing demand recently. The economical performance and entry of foreign capital is a main force driving demand to increase. Some Hotels enjoy an average occupancy rate that reaches 100%. The supply of this submarket varies from 5 star hotels to 2 star hotels.

2 Real Estate Appraisal Process in Theory

2.1 Definitions
For the purpose of clearly understanding the appraisal process and its requirement, definitions are required. The following part provides the key definitions in the profession of real estate practice.

2.1.1 The Real Estate Appraisal
The appraisal is often said to be “an art not a science, but this relates to the techniques employed to calculate value not to the underlying concept itself (N. French 2007). Appraisal (valuation) is defined as:

“A written justification of the most probable selling price of a property, or a land primarily based on an appraisal analysis according to the valuation approaches (comparable sales of similar properties or lands near by, Income capitalization approach, and Cost Approach). To develop an opinion of a certain type of value including:”

- Market value
- Value-in-use
- Insurable value
- Taxable Value
- Investment value
- Business Value

Similar to any process, the process of developing an opinion of value can have the same broad definition of process. It is a model that can be adapted to a wide variety of questions related to value. According to the Dictionary of Real Estate Appraisal, Third Edition, 1993, the definition of an Appraisal Process is:

“An analysis, opinion, or conclusion relating to the nature, quality, value, or utility of specified interests in, or aspects of, identified real estate. (Code of Professional Ethics of the Appraisal Institute). In this usage, appraisals cover a variety of assignments, including valuation, consulting, and review.”

“The act or process of developing an opinion of value; an estimate of value.”

The appraisal process begins when the appraiser agrees to get an assignment and ends when the conclusions of the appraisal are reported to the client. The most common appraisal assignment is performed to render an opinion of market value. The valuation process contains all steps appropriate to this type of assignments and provides the framework for developing an opinion of other defined values. The valuation process is accomplished through specific steps. The number of steps followed depends on the nature of the appraisal assignment and the availability of data. As suggested by the Appraisal of Real Estate 12th edition, the general steps in a valuation process are shown in Fig (1).

2.1.2 Appraiser
An individual or a group qualified by education, training, and experience to estimate the value of real properties and personal properties. The role of the appraiser is to provide objective, impartial, and unbiased opinions about the value of real property—providing assistance to those who own, manage, sell, invest in, and/or lend money on the security of real estate.

2.1.3 Appraised value
An opinion of a property's fair market value, based on an appraiser's knowledge, experience, and analysis of the property

1 ASB (USPAP), 2008-2009 edition
2.2 Purpose of Appraisal

For any valuation assignment, the appraisal of a property must state clearly the purposes of the valuation, which might be one of the following:

- Financing
- Mortgage lending purposes
- Negotiation between buyers and sellers
- Insurance
- Tax assessments and appeals of assessments
- Government acquisition of private property for public use
- Business mergers or dissolutions
- Splitting up the property
- Salvage Value Assessment
- Liquidation
- Lease negotiations

2.3 Appraisal Approaches

To make an appraisal, is to solve a problem. First, an appraiser must articulate the problem clearly. Next, the facts relevant to the problem must be assembled and analyzed, and the irrelevancies discarded. Finally, an appraiser must deduce from the analysis the solution to the problem. One of the synthesis results from the data analysis is the selection of the most reliable valuation methods to apply on the appraisal of a property. Generally, the purpose of the valuation is paramount to the selection of the appropriate method to apply. The purpose of the valuation or the requirements of the intended users may call for a special method to be used. The literature recommends three methods to be employed for the purpose of valuation. These methods differ significantly in terms of concept and approach; however, all the three methods might draw similar conclusions. The three approaches to value are; the cost approach, the sales comparison approach, and the income approach.

The next part briefly describes the concept of each appraisal method and its conditions of use and applications.

2.3.1 Cost Approach

One of the 3 major approaches to value estimation. The basic premise of the cost method is that a property will sell at a price relative to a newly constructed version of itself. Generally people will not pay more for a property than it would otherwise cost to buy a similar site and build a similar addition upon it. Therefore, under stable market conditions, this approach tends to set an upper limit to value. Nonetheless, applying this approach is more difficult on some special purpose properties types such as historic properties; this is a result of many reasons such as:

- The reproduction cost estimate for old buildings is difficult because the constructions methods and materials of old buildings are no longer available.
- History and extraordinary craftsmanship cannot be built into a replica.
• Time distorts the relation between development cost and market value as building technology changes.
• Site value premised on highest and best use is not valid when historic buildings cannot be demolished.

The core idea for this approach is that the value of a property will equal the land value plus cost new after deducting the depreciation. The Value will be according to the following formula

\[ V_s = L_s + C_s - D_t \]

Where;
- \( V_s \): Property Value;
- \( L_s \): Land Value of the subject;
- \( C_s \): Cost New of the subject; and
- \( D_t \): Total Depreciation.

### 2.3.1.1 Land value

Estimating land value is the starting point in the application of the cost approach. When land is improved with a property, it can be valued as though vacant and the value will be based on the highest and best use analysis conclusions. Similar to the valuation of any site, the appraiser must take note of any adverse influences and any externalities that affects the value of the subject facility site depending on the use of the property.

**Adverse influences** including:
- Poor accessibility to a busy arterial;
- Heavy industry;
- Pollution;
- Inconsistent land uses;
- Flood hazard areas;
- Lack of residence in the area;
- Areas of population decline; and
- Areas with use/legal restrictions

**Positive attributes** including:
- Proximity to traffic patterns (easy entry and exit or light-controlled access to nominally busy streets);
- Recognizable address (easy to find);
- Topography that allows easy construction; and
- Aesthetically pleasing environment.

### 2.3.1.2 Cost new

A distinction between the two terms of cost new is to be made; reproduction (replication) cost new versus replacement cost. Reproduction cost new is defined as "The estimated cost of constructing an exact duplicate of the existing improvements at today’s costs". Replacement cost is defined as "The estimated cost of constructing, at current prices, a building with equivalent utility". Using one of these two approaches in estimating cost new depends on the property characteristics and its age. Using reproduction cost may be misleading for old properties that are built in excessive building standards or with unusual materials because building standards may have changed and labor and/or materials are simply not available to reproduce the facility. For newer facilities such a distinction may not be required where reproduction cost and replacement cost are often the same. The purpose of the appraisal may determine which of the cost new approaches to be used. As the appraisal for insurance purposes might specially request reproduction or replacement cost.

The first step in the cost approach to be taken in the estimation of the cost new is a careful inspection of the subject property. There are many sources of cost new; the most common sources are actual cost and cost comparables which are described below;

**a. Actual cost**

Actual cost is considered as the best indication of the total cost or cost new of a facility assuming that the construction is relatively new and that no donated labor or materials were available during the construction. When using this approach, it is important to determine that all the cost components taken into consideration. Different estimating techniques are used to estimate the cost of new building (J. Demkin, 2002); each one of the estimating techniques has its advantages and disadvantages; such a fact adds to the risks and uncertainties of the appraisal these techniques include;

- **Single unit rate method** includes,
  - Cost per place (Accommodation Units Method); i.e., Cost/bed (hospitals), cost/seat (theatres)
  - Cost per space (Area and Volume Method) including;
    - Square Meter (Foot) Method
    - Cubic Meter (Foot) Method
    - Functional (Used) Area Method; i.e., Cost/ office sq meter (foot), Cost/corridor sq meter (foot)
    - Surface (Storey) enclosure Method; i.e., Cost/ external wall sq meter (foot), Cost/roof sq meter (foot)
- **Quantity survey method-Master-format**
  This method involves detailed calculation of all the components necessary to construct a building, followed by the price of each component.
- **Elemental (Assemblies and subsystems method) Method**
  An approach that falls between the single unit method and details quantity survey method involves measuring basic building systems or elements.

When applying this method it is important to ensure that the costs provided are of the same date, otherwise adjustments are required for old prices and costs depending on cost and price indices which show how are costs and prices changed during a given period of time. The best providers of actual cost new are contractors and architects.

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2 The Appraisal of Religious Facilities
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b. Cost comparables

Similar to the concept of the sales comparison approach, the cost comparables method indicates that the cost new of a facility will be derived from the cost new of similar facilities. This method is used also as an excellent check on the reasonableness of other methods of developing cost new. Applying this approach implies that a careful analysis is needed to identify the facilities that are similar to the subject; otherwise the whole valuation will be misleading. The appraiser task is to pick the most similar facilities to the subject and carefully analyze the data provided for each of the comparables such as items included in the cost, additional features, and whether it is built by donated labor or materials. Relying on cost comparables is conditional to:

- Confirmation and reliability of comparables costs
- Similarity of comparables
- Similarity in sites characteristics
- Similarity in construction time for comparables

According to this method the cost of a subject religious property will be according to the following formulas:

\[ C_s = C_{cs} \times A_s \]

Where:
- \( C_s \): Cost new of subject property
- \( C_{cs} \): Average cost of comparables per square meter; and
- \( A_s \): Area of subject property.

2.3.1.3 Depreciation

After estimating the land value and cost new for a subject property, the next step in the valuation process is to estimate the depreciation. Depreciation (deviation from the ideal) is defined as “A loss in property value from any cause; the difference between reproduction or replacement cost of an improvement on the effective date of the appraisal and the market value of the improvement on the same date”. Depreciation may be curable (where the value gained is greater than or equal to the cost to repair) or incurable (where the cost to repair exceeds the value gained). There are three forms of depreciation are:

- Physical deterioration (deviation from a new condition);
- Functional obsolescence (deviation from ideal design); and
- External obsolescence (a determent to the property from external influence)

The formula for depreciation is as follow:

\[ D = D_1 + D_2 + D_3 \]

Where:
- \( D_1 \): Estimated depreciation due to functional obsolescence; and
- \( D_2 \): Estimated depreciation due to external influences

Consequently, the formula of a subject property value becomes as follow:

\[ V = L + C_s - D_p - D_f - D_e \]

2.3.2 The Sales Comparison Approach

The second approach to value that can be applied in the appraisal of a property is the sales comparison approach. The main concept behind this approach is that the value of the subject property is derived from properties similar to the subject that are sold in the market. This concept is based on the definition of market value “The most probable price, as of specified date, or in terms equivalent to cash, or in other precisely revealed terms, for which a specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self interest, and assuming that neither is under undue duress”.

Data about the subject property and comparable sales is to be available, valid, and reliable to reach a reliable opinion of value. The appraiser needs to know the characteristics of both the subject and the comparables. Usually, this is neglected because it is time consuming. In addition to the typical information gathered in the sales comparison approach for any type of properties (i.e., date of sale, buyer/seller, conditions of the sale, land area, built area, total area zoning…etc), it is recommended that the land value to be extracted from each of the sales in order to be able to compare the contributory to value of the improvements. By doing so, most locational adjustments are eliminated by assuming that land value accounts for the quality of the location and land-to-building ratios are accounted for, as are variances in sites and value.

2.3.2.1 Units of comparison

To organize the data, an appraiser selects common denominator or units of comparison, that apply to the appraised property and comparables and which will allow these properties to be compared. The most common unit of comparison that is used for most property types is the price per square meter. For some of the special properties where the areas of the comparables may differ significantly, other units of comparison may be used.

2.3.2.2 Adjustments

After collecting all the required data about the subject and its comparables, the following step is to analyze the sales and adjust their prices for any differences between the subject and its comparables. To account for vastly different physical facilities, amenities, quality, and location, it is necessary for the appraiser to take a broader view of the comparability of the sales. Adjustments are to be done for the conditions of the sale, financing terms, market conditions, size, quality, building condition, and location.

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4 The appraisal of Real Estate 12th Edition
5 The appraisal of Real Estate 12th Edition
a. Conditions of the sale
Conditions of the sale tend to be unique for some facilities; often when a buyer, that needs to expand or contract its facility, finds “exactly what he needs”, he will be willing to pay significantly more than anyone in the market. This condition of the sale is difficult to determine and typically shows up as an aberrated sale price. The sale price should be adjusted by taking out the additional amount a buyer paid in excess of its land and depreciated value.

b. Financing
Comparable sale should be adjusted for any differences in terms of financing. These terms include insufficient down payments, a below market interest rate, and any specific terms for the loan to buy the facility. The appraiser needs to investigate how each of the comparable sales was financed and analyze the terms and the conditions of the loan to calculate cash equivalency adjustments.

c. Market Conditions (time)
Usually, it is difficult to find comparable sales over a reasonable period of time. According to this fact and due to the change in the market conditions from time to time, adjustments for a sale price is required. The sale prices should be adjusted for any changes in the market conditions from the sale date to the valuation date.

d. Location
Improvements in a superior location often contribute more than a similar facility in an undesirable location. By eliminating the land value from the sale, location is typically accounted for in most cases. Adjustments for any differences in locational attributes are required when the value is not eliminated from the sale price.

e. Size
A typical rule of thumb is that larger facilities generally sell for less per square meter than equally similar smaller facilities. Therefore, size adjustments for different facilities are required when difference in size among these facilities exist.

f. Quality
An appraiser should make adjustments in the sale price for any differences in the quality of construction between the subject and its comparables.

g. Age/ Condition (Total depreciation)
When selecting comparable sales for the subject property, it is important to pick the most similar ones to the subject in terms of the building condition. Adjustments are needed for any differences in the conditions of the comparables. All physical depreciation, functional obsolescence, and external obsolescence would be included. Therefore, this adjustment compares the contributory to value of improvements of the sales to that of the subject.

2.3.2.3 Applying the Method Using the Area
After adjusting the sale prices to any dissimilarity between the subject and its comparables and selecting a unit of comparison, the appraiser will be able to reach an opinion of value for the subject facility based on the sales prices of its comparables. The most common method that is used in the appraisal of different properties within the sales comparison approach is the area method. This method implies that the market value of the subject facility will be according to the following formula indicating that the value of the subject property will be the area of subject multiplied by the average price from the comparable sale;

\[ V_s = A_s \times \sum_{i=1}^{N} \frac{P_i}{A_i} \]

Where;

- \( V_s \): Estimated value of the subject facility.
- \( A_s \): Area of the subject facility.
- \( P_i \): Price of comparable sale “i”.
- \( A_i \): Area of comparable sale “i”.
- \( N \): Number of comparables.

2.3.3 Income Capitalization Method (Income Approach)
One of the 3 major approaches to value estimation. It is based on the idea that a property’s ability to generate net income creates value. That is, a future net income stream commands a price in the market place for which there are buyers and sellers. This relationship can be expressed as follows:

\[ V_s = \frac{I}{R} \]

Where:

- \( V_s \): value of the property or investment
- \( I \): net income generated over a given time period, usually per year
- \( R \): rate of return, capitalization rate, usually per year

So, in order to estimate value by way of the Income Approach, two components need to be established: annual net income and rate of return. Of course, since it is a simple equation, as long as any two components are known, the third can be calculated. Despite its simplicity, the application of the income approach is quiet difficult in practice; the method is based on future projections for income, costs, and rates of return which seems not to be an easy task.
3 The Practice of Real Estate Appraisal in Sudan

3.1 Appraisal Practice Potentials
The six basic types of real estate, residential, retail, office, industrial, land, and special purpose properties (J. Creedy & N. F. Wall 1979), form the submarkets of RE market in the Sudan. The absence of organized RE market makes each one of these submarkets performs solely. No professional or common institutions bring the actors in the RE market and its submarket together. Knowledge and information sharing is an absent concept that dominates the investment environment in the Sudan. No doubt, the establishment of organized and a healthy market for real estate depends on information availability, accuracy and reliability. Investors and actors in the RE market in Sudan are reluctant to share information.

Appraisal is, usually, carried out, by architects and engineers through engineering companies or engineering departments in banks, companies, organization, etc. Most those who are responsible for the appraisal of RE in Sudan rely on the cost approach as a method of valuation. Moreover, the area method is the only method employed for the cost approach to develop an opinion of value in, almost, all the appraisal tasks. Each property type has its unique characteristics that differentiate it from other types of real estate; consequently, different methods of appraisal should be applied for different types of real estate. For instance, the income approach is more suitable for income generating properties than other approaches to value. The sales comparison approach is more convenient for properties that are frequently sold in the market. Appraisers might employ more than one approach to develop an opinion of value for a property; other methods serve as a check for the main method employed.

The absence of organized RE market and lack of reliable and accurate information contributes significantly to the limitation of professional use of the three approaches to value. For instance, without accurate and reliable information about rents and rates of return the application of the income approach becomes impossible. Brokers, buyers, and sellers are reluctant to reveal the information they obtain about sale prices and conditions to other parties, therefore, the sales comparison approach won’t be reliable if used. Following are the recommended appraisal method to be applied for each type of properties.

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Recommended method of valuation</th>
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<tbody>
<tr>
<td>Land</td>
<td>Sales Comparison</td>
</tr>
<tr>
<td>Residential</td>
<td>Income Approach, Sales Comparison</td>
</tr>
<tr>
<td>Retail</td>
<td>Income Approach, Cost Approach</td>
</tr>
<tr>
<td>Industrial</td>
<td>Income Approach, Cost Approach</td>
</tr>
<tr>
<td>Special Purpose Properties*</td>
<td>Cost Approach</td>
</tr>
</tbody>
</table>

*Special purpose properties includes; Educational Facilities, Health Care Facilities, Recreational Facilities, and Social Facilities (i.e., clubs, museums, mosques, churches, libraries etc). For this kind of properties which are rarely sold in the market and are not classified as income generators, the cost approach is the most appropriate, although applied with some difficulty. Additional values may be added to the property value such as historical traditional, cultural and religious values.

Usually the cost method is employed in the appraisal process in Sudan. Market information about construction cost is paramount to the process since it provides the cost of developing similar properties; Appraiser used to gets this information’s from the actors in the construction market (architects, contractors, constructors’ managers, etc). Appraisers use the Final opinion of value for the property subject to valuation as the basis of appraisal fees estimation. Different factors influence the value of developed properties, the most important factors that Appraisers put into consideration when appraising a property are:

- Type of ownership
- Location
- Plot Area
- Built Area
- Quality of Construction
- Building Condition
- Landscaping
- Property Specific Amenities
- Services (Electricity, Water Supply, Sanitary…etc)

3.2 Limitations, Challenges, Risks and Uncertainties

The environment surrounding real estate investment and valuation practice as discussed before gives rise to particular limitations and challenges that appraiser faces when applying conventional valuation methods in accordance to the international standards and provisions. Many factors stand as barriers in the professional practice of real estate appraisal; these factors add more risks and uncertainties to the appraisal process and its conclusions. Hereafter are some of the factors that add to risks and uncertainties in the appraisal of real estate;

a. Market Identity
The real estate market in Sudan is fragmented and unorganized, no organizations or institutes gather the actors in the market. This fact hampers any attempts to develop the sector of real estate despite its importance to the nation’s development. Transferred knowledge from other countries experience will be beneficiary as a first step towards a professional practice.

b. Absence of Professional Institutes
Due to the absence of organizations or institutes that govern the professional practice of appraisers, it is quiet difficult to improve or develop the performance of the profession. It’s high-time to establish a professional body that cover all the actors in the real estate industry with other bodies based on specialization. Such Institutes will set the guide lines for the professional practice and its standards; it will specify the minimum requirements to qualify as an appraiser.
c. Information
Without up-to-date, accurate, and reliable information pool all the efforts to develop the profession will be in vain. The lack of data is the first barrier in carrying out a professional appraisal task in Sudan. Absence of transparency, information providers, studies, and research in the field of appraisal and related fields justify the lack of information. Brokers are considered a main source of information, however in Sudan, a perception about not trusting information provided by brokers dominates. The absence of professional or trained brokers justifies such a perception. Generally speaking, brokerage in Sudan is a job for a person who doesn’t have one.

d. Type and Assurance of Ownership
It is quiet common that valuation tasks are carried out and final opinions of value are developed according to information provided by clients. A client may provide the appraiser with false information or fraud certificates. Appraisers have limited accessibility to information that proves the ownership of a property to a prospect client. Moreover, a client might provide valid certificates regarding the ownership of the subject property, however, orients the appraiser to a different property during the inspection visit. Provision of invalid and misleading information put the appraisal under questioning and adds more risks and uncertainties to the appraisal process.

e. Legislations and professional practice rules and codes of conduct
Legislations, rules, and codes of conduct that controls the appraisal profession are completely absent in Sudan. Beside the establishment of professional institutes, legislations that organize the profession should be developed, maintained and revised regularly. Binding acts and rules are required to specify the role of the appraiser and his/her performance.

f. Education and Training
Most of the appraisal tasks are carried out by architects and/or engineers who gain the knowledge through experience solely. Not a single university or institute provides any special academic programs regarding the real estate appraisal or even has such a specialization in its organizational structure. Without an academic knowledge or specialization, the accuracy and reliability of appraisals will be questionable. It doesn’t matter who carries out the appraisal task once he/she has the basic knowledge, education, and training to perform such a task.

g. Research and Studies
Similar to other professions, research and studies are keystones in the development of the appraisal profession. Research on real estate market performance, economy, policies, and appraisal practice are crucial to the development and sustainability of the appraisal profession which lack such activities.

h. Political and Economical Instability
Political stability and economical performance are driving forces for the best performance in any market; real estate market is not an exception. Stability in the economy performance judges on the reliability of the appraisal since some appraisal methods relies on projections of the economical performance and market trends. The more stable the economical performance, the easier becomes the task of an appraiser.

i. Planning
The lack of strategic planning and continuous change of planning decisions and regulations is an avoidable risk that face the real estate market in general and the profession in specific. Usually, the appraiser bases his analysis to draw an opinion of value considering the planning laws, regulations, and proposed growth and extensions. Changing of plans in an unpredictable manner adds significantly to risks and uncertainties of the appraisal.

j. Corruption
Corruption fell into many principal categories; i.e., embezzlement of public funds, and investment in the mercantile sphere. The most common ways of embezzling public funds are; acquiring liquid assets from banks or government agencies, selling the state's assets, selling state land, and smuggling. Overestimation of property value for the purpose of getting bank loans form the most common way of corruption, furthermore bank loans might be made to businessmen whose business is fictitious. Selling real estate in at below the market price is another form of corruption.

k. Quality of Property Structure
When an appraiser inspects a property for appraisal, he/she observes the general condition of the property; some unseen elements aren’t count for. Highly reputative structural firm, having special interest in repair and maintenance, reported that about 90% of the building projects reviewed by the firm were critically defective. Such a fact adds more risks and uncertainties to the appraisal task and thus the final opinion of value reached.

l. Methods of appraisal
Most the appraisers rely extensively on the cost approach as a method of appraisal. To reach a reliable market value of a property using such an approach, a huge amount of data is required to be collected and analyzed. The absence of transparency and the lack of information put the conclusions that an appraiser draws to questioning. Moreover, the cost approach method might not be viable for all the property types. For income generating properties, for instance, income approach might be more suitable to be employed. Limitations in and challenges of the professional application of the three methods in Sudan are shown below;
### Method of Valuation Limitations of application in Sudan

**Sales Comparison**
- Sales data aren’t available and/or reliable
- No formal source or channels of data collection
- Buyer, sellers, and brokers are reluctant to reveal information about prices, sales conditions, … etc
- Sales prices tend to be irrational
- Brokers intentionally tend to overestimate a property when selling and underestimate a property when buying
- Difficulties in selecting comparable properties
- No common criteria to agree upon for selecting comparables

**Income Approach**
- Market data aren’t available and/or reliable (i.e., rents, rates of return, maintenance and operating costs…etc)
- Investors used to provide false information about income and costs
- Investors are reluctant to reveal and/or share their income information
- Owners are reluctant to reveal and/or share their information about leases and their conditions
- Difficulties in developing future predictions and projections due to the instability of the RE market, continuing changing policies, and the unclear, *(if any)* strategic plans

**Cost Approach**
- Unavailability of up-to-date (costs of construction)
- Contractors are reluctant to provide information about actual costs of construction
- Owners of similar properties are reluctant to reveal information about actual costs of construction.
- Difficulties in estimating depreciation

### 3.3 The needs of Appraisal profession in Sudan given its Potentials

For the purpose of improving the performance of the appraisal practice and the real estate market in Sudan, organizing the profession is the first step towards perfection and the highest efficiency.

- ** Establishment of Professional Institutes**
  Establishment of professional institutes which take responsibility of;
  - Setting the standards of the profession
  - Specifying the role and responsibilities of appraisers
  - Setting the rules and professional codes of conduct
  - Provision of academic knowledge, educational programs, and training to the prospect appraisers
  - Enhancement of the research and scientific studies in the field of real estate investment, finance and appraisal to open the way for the field to be more attractive,
  - Held workshops, conferences and seminars to develop and improve the profession

- **Establishment of Information Pool**
  Building information database will make it possible for appraisers to apply all the professional scientific techniques in appraisal process, because all the tasks in real estate field such as real estate finance analysis, real estate investment analysis, real estate market analysis and appraisal depend mainly on the availability, accuracy of the information and the transparency of the real estate sector. Through an information pool, the appraiser can get use of some or all the information that is available in this database and come out with a market value of the subject property within a short period of time. Such a data base could be updated regularly. The sales information could be collected through different channels (i.e., government authorities, buyers, seller, brokers, investors …etc). New regulations regarding the registration and authentication of properties ownership certificates will be an effective tool for collecting data about sales in the RE Market. The information pool might include data on

  **General Data** including;
  - Macro-Economic indicators statistics
  - Demographic statistics
  - The general trends in the Sudanese markets
  - Capital market indicators
  - Prices of shares and bonds
  - Legislations

  **Real Estate Specific Data** including;
  - The Urban growth
  - Demand and supply statistics
  - Trends in the RE Market
  - Market Preference
  - Prices of recently and old (if possible) sold properties (vacant land/improved)

  **Sales Data:** detailed description of the recently sold properties in the market including;
  - Price
  - Location
  - Area
  - Building to area ratio
  - Type of the property
  - Quality of construction
  - Type of construction
  - Date of construction
  - Rehabilitations
  - Conditions of the sale
  - The purpose of the sale
  - The date of the sale
• **Inter and Intra-Industry Relationships**
  Encourage appraisers and appraisal companies to build strong relationship with active actors in real estate market, both locally and internationally, such as real estate companies and real estate agencies to co-operate with to improve the real estate sector in Sudan in general and real estate appraisal specifically.

• **Appraisal Firms Information Systems**
  Encourage appraisal firms to build their own information systems to provide all needed information concerning real estate in Sudan to add more transparency to the Sudanese real estate market which is missed in the current situation and very important to improve this sector. The creation of a professional database for real estate market in Sudan will help appraisers performing their tasks more properly and professionally. Moreover appraisal firms might have the right to use this database for business purposes; to sell this information in the real estate market to companies, real estate agencies and clients.

• **Knowledge and Technology Transfer**
  Learn the lessons from the experience of the real estate sectors in developed countries and their systems to transfer these experiences in building real estate information systems and organized real estate market regulations, appraisal process guidelines and all what is related to the real estate sector.

• **Total Quality Management: Performance Analysis for Development:**
  It’s highly required to encourage appraisal firms to employ total quality management system for the sake of the profession and firms. Appraisal firms might employ process modeling tools for the purpose of analyzing the process of RE Appraisal. IDEF0 models, for instance, clearly describe how a system of a RE Appraisal company works. The authors (2004) developed a model for the theoretical appraisal process, another model for the appraisal process at a Swedish Company was developed as well. The theoretical appraisal process could act as a benchmark for companies that seek development and improvement of performance. A. Abdelmagid (2006) employed the theoretical model developed by (A. Elkhalifa 2004) to propose a similar one for the SREB. Such models show what a system does right and what it does wrong. The models developed by the authors (2004) are attached in the Appendix.

### 4 Real Estate Appraisal in a Global Context

Valuation/appraisal has recently been christened as an ‘Emerging Global Profession’. This suggests that there is an upcoming process of world-wide integration of professional valuation and appraisal practice. A huge potential of benefits to those in the valuation and appraisal profession would be offered by this development. The professionals stand to gain from new markets opened by cross-border practice (K. Ndungu et al 2002).

The social and economic environment in which real estate appraisal is performing is undergoing major changes, including real estate securitization, and increasing cross-border transaction. It is generally recognized in developed countries that the uniformity of real estate appraisal standards is very important in terms of the infrastructure supporting real estate markets, a lesson that has been learned through severe market cycles including bubbles and subsequent bursts (T. Watanabe 2008).

The following part identifies the characteristics of the existing laws, appraisal standards, guidance notes, and guidelines which underline the appraisal system in a global context.

#### 4.1 UK- RICS

In the UK, real estate appraisal is known as *property valuation* and a real estate appraiser is a *land valuer* or *property valuer* (usually a qualified chartered surveyor who specializes in property valuation). Property valuation in the UK is regulated by the **Royal Institution of Chartered Surveyors (RICS)**, founded in 1881, a professional body encompassing all of the building and property-related professions. The RICS professional guidelines for valuers are published in the **RICS Appraisal and Valuation Standards**, commonly known as the **Red Book**. While based in the UK, RICS is a global organization and has become very active in the US in recent years.

#### 4.2 Japan- JARA

The **Japanese Association of Real Estate Appraisal**, established in 1965, is the only certified association and is regulated by the Ministry of Land, Infrastructure, Transportation and Tourism. **The Real Estate Appraisal Act of 1963** established a legal and administrative framework for appraisal, which plays an important role in contributing to appropriate pricing in the real estate market by providing the market with information about property values by authorized professionals such as **Licensed Real Estate Appraisers (LREAs)**. In addition, various standards were unified in the Japanese Real Estate Appraisal Standards of 1964. In Japan, only appraisals performed by an LREA in accordance with the Japanese Real Estate Appraisal Standards are permitted.

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6 Integration Definition for Function Modeling (IDEF0): a method that is designed to model the decisions, actions, and activities of an organization or system
4.3 Malaysia
The Valuers are governed by *The Board of Valuers, Appraisers and Estate Agents* under provision of Valuers, Appraisers and Estate Agents Act 1981. Its primary function is to regulate the Valuers, Appraisers and Estate Agents practicing in Malaysia.

4.4 Real Estate Appraisal Practice– USA Experience
4.4.1 The Appraisal Foundation
Appraisal practice in the US is regulated by the various states; all the states are demanded to develop systems for licensing and certifying real estate appraisers. *The Appraisal Foundation*, a private nonprofit corporation, was established under the Federal Institutions Reform, Recovery and Enforcement Act (FIRREA) of 1989. It is composed of eight major appraisal organizations including the Appraisal Institute (founded 1930). Other leading appraisal organizations include the *American Society of Appraisers, National Association of Independent Fee Appraisers*, and the *National Association of Master Appraisers, Massachusetts Board of Real Estate Appraisers* (MBREA, founded in 1934). The Appraisal Foundation, through the Appraisal Standards Board (ASB), has developed and administered uniform appraisal standards called the *Uniform Standards of Professional Appraisal Practice* and Advisory Opinions (USPAP). These standards apply to appraisal services to be performed with professionalism, independence, fairness, and objectivity on the part of appraisers. The standards gain legal force when they are invoked in federal and state legislation and administrative matters, and in private appraisal contracts. The USPAP include the following standards:

| STD 1: Real Property Appraisal, Development | STD 6: Mass Appraisal, Development and Reporting |
| STD 2: Real Property Appraisal, Reporting | STD 7: Personal Property Appraisal, Development |
| STD 3: Appraisal Review, Development, and Reporting | STD 8: Personal Property Appraisal, Reporting |
| STD4: Real Property Appraisal Consulting, Development | STD 9: Business Appraisal, Development |
| STD 5: Real Property Appraisal, Consulting, Reporting | STD 10: Business Appraisal, Reporting |

In addition to Statements on Appraisal Standards, the ASB also issues Advisory Opinions. This type of communication by the ASB does not establish new standards or interpret existing standards. Advisory Opinions do not constitute legal opinions of the ASB. Advisory Opinions are issued to illustrate the applicability of appraisal standards in specific situations and to offer advice from the ASB for the resolution of appraisal issues and problems. Each Advisory Opinion is labeled to its applicability to the various appraisal disciplines. The abbreviations are:

- Real Property- RP
- Personal Property- PP
- Intangible Property-IP (includes Business Interests)
- All Disciplines- ALL

To date the ASB has approved 32 Advisory Opinions for general distribution as shown below:

- AO-1. Sales History (RP)
- AO-2. Inspection of Subject Property Real Estate (RP, PP)
- AO-3. Update of a Prior Appraisal (ALL)
- AO-4. Standards Rule 1-5 (b) (RP)
- AO-5. Assistance in the Preparation of an Appraisal- Retired
- AO-6. The Appraisal Review Function- Retired
- AO-7. Marketing Time Opinions (RP, PP)
- AO-8. Market Value vs Fair Value in RP Appraisal- Retired
- AO-9. The Appraisal of RP that may be impacted by environment contamination (RP)
- AO-10. The appraiser- Client Relationship
- AO-12. Use of the Appraisal Report Options of Standard Rules
- AO-13. Performing Evaluations of RP Collateral to conform with USPAP (RP)
- AO-14. Appraisal for Subsidized Housing (RP)
- AO-15. Using the Departure Rule in developing a limited appraisal
- AO-16. Fair Housing Laws and Appraisal with Proposed Improvements (RP)
- AO-17. Appraisals of RP with proposed improvements (RP)
- AO-18. Use of an Automated Valuation Model (AVM) (ALL)
- AO-19. Unacceptable Assignment Conditions in RP Appraisal Assignment (RP)
- AO-20. An Appraisal Review Assignment that includes the Reviewer’s own opinion of value (ALL)
- AO-21. USPAP Compliance (ALL)
- AO-22. Scope of Work in Market Value Appraisal Assignment (RP)
- AO-23. Identifying the relevant characteristics of the subject property of RP Appraisal Assignment (RP)
- AO-25. Clarification of the client in a federally related transaction (RP)
- AO-26. Readdressing (transferring) a report to another Party (ALL)
- AO-27. Appraising the same property for a new Client (ALL)
- AO-28. Scope of Work Decision, Performance, and Disclosure (ALL)
- AO-29. An Acceptable Scope of Work (ALL)
- AO-30. Appraisals for use by a federally regulated Financial Institution (RP)
- AO-31. Assignments involving more than one Appraiser (ALL)
- AO-32. Property Tax Appraisal and Mass Assignments (RP, PP)

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7 ASB (USPAP), 2008-2009 edition
4.4.2 Required Qualifications of Appraisers
All states require appraisers to be state licensed or certified in order to provide appraisals to federally regulated lenders. Some states require appraisers to be licensed or certified to provide appraisals for other parties as well. To become licensed or certified, the appraiser must pass an examination that is administered by the state’s appraisal board. Appraisers who become designated members of the Appraisal Institute have gone beyond these requirements. They have fulfilled rigorous education and experience requirements and must adhere to strict standards and a code of professional ethics.

4.4.3 Categories of Real Estate (Real Property) Appraisers
The Appraiser Qualifications Board (AQB) of The Appraisal Foundation is authorized by Congress to establish the minimum requirements for Certified General Real Property Appraiser and Certified Residential Real Property Appraiser classifications, and the AQB provides recommended minimum requirements for the Licensed Real Property Appraiser and Trainee classifications. Descriptions for the four categories can be found below;

Appraiser Trainee:
Someone who is qualified to appraise those properties, which the supervising certified appraiser is qualified to appraise.*

Licensed Real Property Appraiser
Someone who is qualified to appraise non-complex one to four units having a transaction value less than $1,000,000 and complex one to four residential units having a transaction value less than $250,000. This classification does not include the appraisal of subdivisions.*

Certified Residential Real Property Appraiser
Someone who is qualified to appraise one to four residential units without regard to value or complexity. This classification does not include the appraisal of subdivisions. To be a state certified residential appraiser qualified to do appraisals for federally related transactions, a state must have requirements that meet or exceed this minimum standard.

Certified General Real Property Appraiser
Someone who is qualified to appraise all types of real property. To be a state certified general appraiser qualified to do appraisals for federally related transactions, a state must have requirements that meet or exceed this minimum standard.

4.4.4 Education- How to become an appraiser
The AQB has set the following minimum criteria (table 2) for experience for different certified levels:

<table>
<thead>
<tr>
<th>Level</th>
<th>Hours of Experience Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainee</td>
<td>Subject to direct supervision by a supervising appraiser who is</td>
</tr>
<tr>
<td></td>
<td>certified in good standing</td>
</tr>
<tr>
<td>Licensed Residential Real</td>
<td>2,000 hours (effective 1/1/08, these hours must be obtained in</td>
</tr>
<tr>
<td>Property Appraiser</td>
<td>no fewer than 12 months)</td>
</tr>
<tr>
<td>Certified Residential Real</td>
<td>2,500 hours in no fewer than 24 months</td>
</tr>
<tr>
<td>Property Appraiser</td>
<td>3,000 hours in no fewer than 30 months</td>
</tr>
</tbody>
</table>

Table (2): criteria for required for different appraisers categories
Source: Appraisal Institute, USA

4.4.5 Experience
The AQB has set the following minimum criteria (table 2) for experience for different certified levels:
4.5 An Example from abroad: The Swedish Experience

For the purpose of introducing an experience from abroad, the authors provide an example from a Swedish company. This example has been reviewed by the authors in a previous study (see A. Elkhalifa 2004). The main purpose of providing this example is to try to get some lessons on how to carry out an appraisal task professional. Such an example might be adaptable to the appraisal profession in Sudan. The following part will show how appraisers at Svefa AB now known as (NAI Svefa), a Swedish company specialized in real estate, do their work; it give a general introduction to Svefa AB, then a description of how the work is carried out by the company.

4.5.1 Introduction to Svefa AB

Svefa AB is one of the largest property consultancy companies in Sweden with approximately 70 consultants based in just over 20 offices across the company. Svefa was established on July 1st 1995. Appraisal is the main field with which Svefa works and most of the appraisers at Svefa are authorized appraisers. Svefa also carry out some special services within Property Law, Real Estate Economics, and Brokerage concerning any types of properties. Svefa is a well-known company that works with the appraisal of special purpose properties and it is considered as a reference for many companies. Svefa carry out appraisal assignments for large buildings, small houses, land, forests, and agricultural land. Svefa appraisals include apartments, commercial and industrial properties as well as development rights. It appraise property holdings for real estate companies for annual accounting purposes, and as a due diligence for Swedish and international investors. It also appraises apartment buildings on the behalf of tenants-owners’ associations or property owners in connection with conversation to ownership rights. Svefa also provides investment analysis services to help investors taking the right decisions. Svefa takes an ideal position to provide impartial legal and financial advice regarding property issues including investment consultancy. This includes the determination of compensation for noise or other environmental disturbances, valuation in connection with road construction or establishing nature reserves. This may also apply when seeking a correction if the tax assessment of a client’s property that does not reflect the market value.

Svefa appraises individual area of forests facing encroachment, or complete real estate holding which may involve farmland with fields and meadows or buildings and forestland that need to be appraised to change in a family ownership for example. Svefa conducts negotiations on the behalf of various parties, (i.e. to reach an agreement between the state and any forest land owners affected by the establishment of a nature reserve). Svefa is one of the promoters of the Swedish Internet site www.fastighetspris.nu, where prices information on sold properties can be found. Svefa is also providing market information regarding open market rents on profit requirements. It works with property agents who can help clients buying and selling properties. In addition, Svefa provides access to surveys and measurements of indoor and outdoor environment.

4.5.2 The Appraisal System in Svefa

At Svefa, several automatic appraisal systems are developed. These systems reduce costs and increase the quality of the appraisals. The appraisal system makes it easier to obtain a simple and quick appraisal of the properties used as collateral for loans grants. The FPwin property pricing system is an expert system used by Svefa for the appraisal and analysis of the property market. The system incorporates information about property sold all over Sweden and includes all types of property (large buildings, land and forest, special properties, and single family houses) sold since 1986. Lantmäteriverket provides the main data about comparable sales that the appraisers at Svefa employ in the application of the valuations methods. The data that Svefa includes about the sales in its system includes:

- Property Name
- Municipality
- County
- Address
- Sale Date
- Buyer
- Seller
- Price
- Price/Area
- Price/Base Value Ratio
- Value Year
- Total Area
- Site Area
- Residential Area
- Office Area
- Commercial Area
- Production area (for industrial properties)
- Storage Area (for industrial properties)
- Offices Area (for industrial properties)
- Year of construction
- Type Code according to the taxation codes
- Code for the number of transactions
- Type of transaction
- A statement telling whether the community took the right to buy the property first; in Sweden the community has the priority to buy a property when the owner wants to sell it out.
- The parish to which a religious facility belongs (when the sale is for a religious facility)

The appraisers at Svefa mainly employ the sales comparison and income approach in the appraisal assignments. For the income approach, Svefa has its own software that enables the appraisers to estimate a value of a property in a short period of time. Infrequently used, the cost approach is only employed as a check for the value estimate concluded by the two other approaches to value.

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8 For further information about Svefa look at www.svefa.se
4.5.3 The Appraisal Process at Svefa

Usually, Svefa gets appraisal assignments through direct contacts; often through phone calls, fax, and e-mails are the mechanisms of getting the task. Some appraisal assignments may be got through bidding with other companies. After getting the task, a registration number is assigned for the task for administrative purpose such as payments. This number is written in the valuation report and considered as a reference number for the task in the future when it is needed. Determining who will do the job depends on many factors such as:

- Appraiser’s skills;
- Appraiser’s experience;
- Property to be appraised;
- Number of properties to be appraised;
- Location; and
- The work-load on each appraiser

The first step in the process after identifying the task is the data collection. The appraisers in general and in Svefa in specific consider this stage as the most difficult stage in the process. It may be a difficult task to get the accurate and reliable data for special properties that are infrequently sold in the market. For some types of properties there may be no enough comparable sales to be used for the valuation. The main sources that the appraisers at Svefa get the information from are: information systems, means of communications, direct contacts with colleagues and friends, news, articles, and from actors in the market. The informal information systems are not incorporated in the theoretic process model. It is the appraiser task to ensure the accuracy and reliability of data that he/she employs in the appraisal. Following the stage of data collection, the appraiser makes a property inspection.

The appraisers at Svefa mainly employ the sales comparison and/or income approach in the appraisal assignments. Usually they start with the sales comparison approach and then apply the income approach. Which method to be used, mainly depends on the property type, the nature of the task, and the availability of data. Normally the appraisal of common types of properties takes about 12-15 hours, while the appraisal of special purpose properties may take 15-50 hours. Most of the time is devoted for the data analysis stage. The longer the time an assignment takes, the higher the fees will be. In some cases the client may call for a task without a written report. The quality of the written report depends on the purpose of the appraisal, the fees, and the client requirements. The report includes all the data that the appraiser collects about the property and its comparables. Sometimes the client may require that no photos should be put in the report. Svefa may terminate a task when it discovers that the client tries to provide wrong information (i.e. when the client gives false information about the contracts and actual rents). A feedback from the client may call for a revision or recollection of data. After the report submission, it is the economic department responsibility to send the bills and collect the fees.

5 Conclusions

The appraisal process can be defined in many ways; all definitions revolve about deriving an opinion of value of a real property. Three approaches to value, the cost approach, the sales comparison approach, and the income approach, are usually applied for the purpose of valuation. The purpose of appraisal and the type of property are the main determinant of which method to employ. In the Sudan, appraisers rely extensively on the cost approach in their practice. Most appraisers in the globe rely on the sales comparison approach and the income approach, the cost approach is use a check of the two other methods. The applicability of the three approaches to value in the Sudan is limited due to lack of education and availability, accuracy, and reliability of relevant information. The absence of professional institution and the codes of conduct set a barrier against the improvement and development of the profession in general. No doubt, the provision of educational and training programs is highly needed for the sake of a more proper professional practice. Research and studies that enhance the development of the appraisal practice are crucial as well. Information pools are needed to be established inorder to make the conclusions that an appraiser draws more reliable.

The authors review some of the experiences of appraisal practice in the globe, most of the countries set standards and rules for the practice of appraisal profession. National and international institutions and committees are responsible for the quality of appraisers and their work; these institutes provide the profession with educational and training programs to keep the profession and their members more efficient. The study reviewed the institutional system responsible for the performance and development of the real estate appraisal in the USA. It shows the minimum requirements set by the state for practicing the profession and the experience requirement. Moreover, the authors provide a practical example form a Swedish company, Svefa Ab. These international examples provide a good criteria for the development of the RE appraisal profession in the Sudan. The performance of such international institutions and companies might be a Benchmark for the development of profession and improvement of performance. Process modeling could be the trigger for the performance improvement on companies’ level.
6 References


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Sudanese Real Estate Bank (2002), SREB Annual Report, Khartoum


SREB (2005), Process Guide of Real Estate Appraisal, Khartoum

Appendix A: Proposed IDEF0 Model for the Theoretic Appraisal Process

According to the IDEF0 Method criterion, most of the model is interpreted through the diagrams, text is employed only when needed. As the rules of the IDEF0 Method state, the proposed model for the appraisal process doesn’t show the sequence, it shows the main steps of the valuation instead and how they can be broken down for the purpose of understanding the process. Therefore, the model only shows the steps and tasks incorporated in the appraisal process but not sequentially. For simplicity, the model doesn’t include the cost associated with each phase of the process. The model is named “Estimate a market value of a property”, fig (5) shows the top-level diagram, which is decomposed into six main steps. Fig (4) shows the breakdown of the top-level diagram into the six steps. Similar to other IDEF0 Models, the model consists of input, control, output, and mechanism arrows that stand for any factor that is incorporated in the appraisal process. Fig (5) shows all the inputs, controls, outputs and mechanisms employed by the model. Hereafter is a highlighting of the inputs, controls, outputs, and mechanisms incorporated into the proposed IDEF0 Model for the theoretic appraisal process.

Fig (4): The decomposition of the top level IDEF0 diagram into six steps

Figures (5) to (11) shows the IDEF0 model, which the study suggests, for the theoretic appraisal process, it is based on what the literature and the international valuations associations recommend (i.e., Appraisal Institute). The valuation process that is recommended by the appraisal institute (fig. 1) was the reference for building the model. The titles of the step may look different to comply with the IDEF0 Model rules. Some of the steps are included with others steps and broken down, since the number of the models activities shouldn’t exceed six boxes.
Fig (5): IDEF0 Diagram A-0 “Estimate a Market Value of a Property”

Fig (6): IDEF0 Diagram A0 “Estimate a Market Value of a Property”
Fig (7): IDEF0 Diagram A1 “Identify the Valuation Task”

Fig (8): IDEF0 Diagram A2 “Plan the Appraisal Task”
Fig (9): IDEF0 Diagram A3 “Collect the Data”

Fig (10): IDEF0 Diagram A4 “Analyze the Data”
Fig (11): IDEF0 Diagram A5 “Apply the Valuation Methods”