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AN INVESTIGATION INTO PATTERNS OF PROPERTY VALUES IN NAIROBI

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&

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DECLARATION

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DEDICATION

This study is dedicated to the 2006 world cup football fans.

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ABBREVIATIONS

U.NO: United Nations Organization.

M.L.S: Ministry Of Lands and Settlement.

S.I.D: Society for International Development.

I.S.K: Institution of Surveyors of Kenya.

B.C.R: Business Cum Residential.

E.L.S.T: Educational Low-Priced Sponsored Texts.

Krex: Kenya Real Estate Index.

N.S.S.F: National Social Security Fund.

I.V.S.C: International Valuation Standards Committee.

C.B.S: Central Bureau of Statistics.

ABSTRACT

Real property markets are well known for being remarkably imperfect. This therefore, complicates investment decision making owing to the high risks involved. This study addresses the problem of avoiding poor decisions by recognizing the pitfalls likely to be faced by different types of investors.

Poor decisions in real property transactions are not likely to be merely random occurrences, but mostly systematic behaviors by different types of parties according to the roles that they play in the markets. The quality of decision making depends on the extent to which any type of party is able to come to terms with imperfect market environments. This study investigates decision making trends that are likely to be occasioned by market imperfections affecting different types of parties in different ways. The objectives of the study are to investigate the types of parties in real property transactions that are likely to make poor decisions and the extent of the resultant losses.

Differences in figures from the three common methods of valuation are recognized as losses or gains to different types of actors in the real property industry. This is because the methods give figures indicative of the values the main actors may give or receive in respect of any property. The parties are developers as indicated by the cost method, landlords and tenants as indicated by the income method and buyers and sellers as indicated by the sales comparison method.

Properties numbering 398, already valued in the process of being bought or sold over a period of not less than three years using the three methods are randomly sampled out from 19 randomly selected estates of Nairobi. They are then statistically tested for the existence of three patterns, theoretically derived through literature review and market observations. The patterns are

related to three social-economically different zones of Nairobi and are indicative of decision making trends by different types of parties namely, developers, landlords and tenants, buyers and sellers, rich, middle class and poor.

The main finding of the study is that the patterns of property values or decision making trends are prevalent in most areas. The types of parties which make gains or losses in each type of zone are identified and the magnitude of the losses or gains estimated.

Policy makers are informed of the happenings in the markets. They are also directed by the patterns to the markets in which they can intervene with better taxation, subsidy, advisory and participatory policies. Investors are informed of the consequences of investing in each of the differently classified areas of the city and advised on better investment approaches. Valuation professionals are given a better approach of assisting their clients in making prudent transactional decisions.

CHAPTER ONE INTRODUCTION

1.1 Background

"In the next two years, we will continuously collect and analyze real estate data and later publish real estate market quarterly reports" (Krex Promoters March, 2006). The occasion was the launching of a new initiative aimed at developing a Kenyan property index to guide investors in decision making. They also said that they would start with Nairobi. Low quality real property information was deplored as one of the causes of imperfections in real property markets in Kenya.

Market imperfections manifest themselves in the form of illogical behaviors by players in the market. For example, buying a cheaply constructed house at a high price believing that it is worth it, or not being aware of what else is available in the market. Having a vague or no idea about the income generating capacity of a property has the same results. Krex will be addressing only a half of the negative aspects of the phenomenon of market imperfections which have better information as a palliative measure.

The second and more devastating aspect is absence of level play ground in any transaction. An imperfect market is one of price setters and price takers. One method commonly used by valuers in carrying out market research is presenting themselves as prospective buyers looking for property. The question what the price of a property fitting some description is likely to be is often given a rather disappointing answer, "It is just what you may agree with the owner." Is what many people including some real estate professionals say. The answer is usually qualified with a wide range like "They are

ranging between Ksh.150, 000 and Ksh.250, 000." This observation is derived from my personal working experience.

This means that different buyers may get different bargains and that poor decisions are made by some people, who pay more than others for similar properties. That discriminative ability of the sellers has something to do with the types of parties they are dealing with. The more desperate a party to a transaction is, the more tilted the bargaining becomes against him. This view is supported by the theory of price discrimination which is related to imperfect markets (Lipsey, 1970).

Nairobi, like many other cities, is characterized by people of different means and even real property is historically segregated along income lines. Ownership motives and perceptions of values are similarly of different levels (Wameyo, 1992; Kironde, 1994). The low class is mostly concerned about property as a basic source of shelter or food production for own consumption, the middle class seeks the same, plus investment opportunities to satisfy it's ambitions while the high class perceives the widest range of values as imaginable including prestige, future and uncertain values. This view is supported by the theory of different motives in real property investments (Britton et al, 1980).

This scenario is likely to give the city some distinctive patterns of values with each class perceiving the value of the land in which it is dominant in terms of as few or as many ownership motives as it can pursue. Valuers and indeed all stakeholders in property issues have keen eyes on patterns of values because they are likely to hold the keys to better decision making. Patterns may be defined as excellent examples, models of types

or arrangements of items or events (Fowler and Fowler, 1976). They make identifications, interpretations and predictions possible.

Interactions between class zones in Nairobi appear like a social disaster which tends to push the poor into slums, (Draft National Land Policy Report, June 2005).

The pattern in low class zones envisaged in this study is expected to progressively ascend and become economically justifiable as less and less land is left in the hands of the poor. Examples of formally backward areas which have changed status in recent years following sales are easy to come by. In the case of Nairobi, Lavington West, Suna and Santack Estates were backward parts of Dagoretti until they fell in the hands of new owners.

Prices of such properties change status as soon as the sales are sealed, sometimes a long time before any developments take place. This predatory behavior of the new owners is speculation which means trying to reap unearmed benefits by way of hoarding. Such benefits may be accrued in terms of high selling prices in economically favorable seasons or high rental incomes which can result from the control of real property by a few people. Controlling land has always been a desirable source of power as evidenced by the following description by a historian, "In his lands, a great noble man like the Count of Champagne was all powerful. He would hold the right of high justice, the middle and the low, which means that he had the power of life and death over everyone in his territory. He could levy taxes and tolls, control fairs and markets, coin his own money, and give charters to the founding of towns. Such towns would pay their taxes in money, and may also pay the furnishing of soldiers; in this way, they would meet their feudal obligations of service" (Williams, 1966). One result of the feudal system in Europe was migration of

some Europeans to new places like Kenya. "Most of the settlers were running away from the condition that made them subject to tenancy conditions in Europe" (Aritho, 1993). Now the Europeans and Asians who founded Nairobi were armed with the awareness of such glorious pasts and possibilities in future while their bargaining partners, the Africans, had none. It was a false start with rather persistent vestiges. The false start sowed the seeds of market imperfections in the city.

1.2 Problem Statement

Some happenings in the real property markets in Nairobi are indicative of poor decision making leading to enormous losses. For instance, the need felt by prominent investors in real property for a real property index is prompted by the need to make better decisions. "Some people invest or divest at wrong moments" (Krex Promoters, 2006).

Examples of such poor decisions are the selling of prime plots on Ojijo road in Parklands at low prices by Kenya Railways and the buying of a poor quarry land by the N.S.S.F in Embakassi. More illustrative is the buying of L.R.No 209/8192/7 in Kileleshwa at an exorbitant price of 29 million shillings in 1998 by Kenya Pipeline and reselling it at only 21 million shillings in 2007. Such only come to the limelight because of the public interest, but are likely to be only the tip of the iceberg because real property markets are well known for being imperfect and the doctrine of *caveat emptor* is a permanent and appropriate advice to any potential buyer or seller. White elephant projects like Geomaps Centre in Upper Hill area, Kazi Plaza in Ngando village opposite Ngong Racecourse, and Karuga Plaza at Ruthimitu village are monuments of poor decision making by private entities. Little or no returns have been realized from them years after their constructions were completed. Carefulness is not always enough because some poor decisions are sometimes like bitter pills which have to be taken knowingly but under compelling

circumstances. What differences do different circumstances and points of view have on capacities to make good decisions when dealing in different types of property? Or where and by whom are poor decisions in real property transactions likely to be made? It is only by recognizing these details that appropriate policies aimed at shielding vulnerable groups by creating smoothly functioning real property markets can be effectively fashioned and targeted. The following observations give us hints on how some parties make poor decisions:

Prime properties allocated by the government to poor or not very rich people are well documented to have been sold as letters of allotment to rich people (Ndung'u Report, 2004). Many of those original alottees are well known and are still poor. The question which arises is where did they take the money? The answer is documented because in order to sell a freshly allocated plot, the alottee had to apply for consent with good reasons and the reasons had to be ascertained. It is simply that alottees needed money urgently to address some basic needs and the money they could get from the sales was not much. Similar poor decisions are made in mortgages in which debtors pay too much interest and still end up losing their properties because no businesses can enable them to repay such loans (Ndung'u, 2001).

A notable trend of advertising low-class properties in Nairobi for sale in newspapers is as follows:

These appeared in the Daily Nation of 19th, July, 2006. Similar advertisements appear almost every day. The curious and common thing about them is that they are trying to

[&]quot;Githurai 45, 24 rooms rent 30,000 shillings per month price 2.2 million."

[&]quot;Githurai 45, 28 rooms rent 45,000 shillings per month price 2.7 million."

catch the eyes of prospective buyers through competitive pricing: By comparing so many rooms, which are yielding so much money per month, with prices which can hardly buy single maisonettes in other areas, the sellers are alerting prospective buyers of opportunities to own substantial properties at prices well below their construction costs or their income generating capacities. And as though that is not enough, the advertisements sometimes add that the prices are negotiable, and that there are no agents involved, meaning that the price will not include agent's fees. The question that arises is; have the forces of demand and supply conspired to benefit buyers of properties belonging to poor people to the detriment of the sellers?

The message being passed here is that the sellers are not desperate, the price is not negotiable and that a prospective buyer should hurry up because the property is in high demand. Another observation is that some properties in Nairobi have been given permanent tags of "Property on Sale" and that permanence can last for several years. The question that arises is; have the hands of demand and supply conspired to be rewarding rich people with high prices for their properties to the detriment of buyers? Worse still,

are the same hands ready to suspend their operations until some people are overrewarded? Beneficiaries of high or low prices realized in any market may become fond of
the market mechanisms because freely operating forces of demand and supply are often
presented as good examples of progressive societies. That would be perfectly right if
every group has an equal chance of being a beneficiary like any other, and any loss
making can only be blamed on imprudent decisions by individuals, or if the losses or
benefits are not too substantial, and the losers may absorb them as normal business risks.
But the hints from the observations made earlier in this section point in the opposite
direction. This study therefore, sets out to find answers to the questions:

- Do different types of actors get similarly favorable or unfavorable deals in real property transactions?
- How great are the gains or losses in transactions in real property in Nairobi
 and to which factors can they be attributed to?

The purpose of this study is therefore to investigate the decision making trends in real property transactions which are likely to depend on how the different types of investors are able to cope with imperfect market environments.

1.3 Objectives of the Study

- To find out which types of parties benefit or make losses in real property transactions in the city of Nairobi.
- (b) To estimate the extent of benefits or losses which result from poor decisions in real property transactions in Nairobi.
- To recommend measures that can be implemented to create a better balance

1.4 Research Hypotheses

Null Hypothesis; The phenomenon of market imperfections in real property does not cause different poor decision making trends in transactions which affect parties according to their types.

Alternative Hypothesis; The phenomenon of market imperfections in real property causes different poor decision making trends in transactions which affect parties according to their types.

1.5 Significance of the Study

This study seeks to investigate what an investor can expect to get if he chooses to invest in any of the distinctive zones dominated by any class of society. Those keen on market values don't need to undertake constructions in low class zones because ready houses there are cheap and the owners of such properties are likely to face circumstances which force them to make poor decisions regarding selling of properties. Similarly, every shilling spent on rental or mortgage houses makes more sense in the middle class zones because most members of that class face circumstances which tend to make them perpetual tenants or perennial mortgagors, paying too much rents or rates of interest. Capital gains are at the maximum in high class zones because that class perceives, pursues and realizes the widest range of values because of its ability to wait for the right moments to transact. These different circumstances and points of view are the foot prints of market imperfections in real property in Nairobi.

The study also brings out a scenario in which the low class zones are an easy prey and eye - catcher to prospective speculators. Although done in respect of only one city, the

study may be applicable to any other geographical area where class patterns are similar to those of Nairobi. These are likely to be the rules rather than the exceptions.

properties as valued by different valuers or as realized in market sales without paying attention to the types of parties (Gitari, 2001; Kiptoo, 1999; Konyimbi, 1997; Karori, 1989). All of them captured the information aspect of market imperfections but failed to address the aspect of level play ground. This study is therefore significant in that its approach captures differences in values in respect of both aspects by improvising a comprehensive measure of the phenomenon of market imperfections which incorporates different types of parties and properties.

1.6 Definitions of Terms

Market value: In this study, this term has two meanings as follows:

- The estimated amount for which an asset should exchange on the date of valuation between a willing seller and a willing buyer in an arm's length transaction after proper marketing wherein the parties had acted knowledgeably, prudently and without compulsion. OR,
 - 2. A value arrived at by analysis of sales evidence of comparable properties.

All valuation methods try to estimate the first meaning. The second meaning is a figure arrived at using one valuation method, the comparison method. It is the second meaning which is the subject of comparison with figures arrived at using other methods.

Investment value: A value in which the basis is the series of incomes that a property may generate over a period of time. "The basic concept is that an investor wishes to

invest capital to obtain an annual return in the form of a net income which represents an acceptable rate of return" (Britton et al, 1980).

Replacement cost value: Value based on the estimated total expenditure needed to replicate an existing property. "The value of a property is derived from the value of an alternative site plus the cost of building. This cost of replacement approach is sometimes referred to as the contractors' approach or contractors' test" (Britton et al, 1980). "The approach also takes into consideration the physical deterioration and all relevant forms of obsolescence and optimization based on the observed condition of the property being valued" (I.S.K, 2000).

Forced sale value: Value realizable in restricted market conditions. "Here the valuer recommends an estimated price at which the property should sell based on the prevailing market conditions" (I.S.K., 2000). Market conditions can be erratic, in the control of some players and may therefore not favour some participants in transactions.

Any condition which limits the capacity of any party to make a good decision in a transaction can be listed as an example of a restricting condition.

These definitions are in line with the I.V.S.C.ones. The definitions are necessary at this stage because they are the different ways in which the main players in the market view properties

In this study, primary quantitative data of properties valued using the three common methods of valuation are collected and analyzed as detailed in chapters three and four. Primary and secondary qualitative data from text books, journals and newspapers are incorporated as detailed in chapter two. Both are seen to independently support the propositions of this study.

CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

In this chapter, concepts of value and valuation are highlighted. The phenomenon of market imperfections is extensively defined and its effects on all types of transactions as documented in previous studies presented and discussed as viewed by several writers. The chapter ends by introducing a conceptual framework, which estimates the causes and consequences of decision making trends in real property transactions based on the literature and current events in the real property markets in Nairobi.

2.2 Determinants of Value in Real Property

These have been identified as property and non-property data (Wurtzerbach, 1995). Property or site characteristics include location, size of land, size of building, type and quality of construction and the terrain of the site, the design, the age and conditions of the improvements as well as the interior configurations. Non- site characteristics relate to verified sale prices and market data of sales within the neighborhood, financial terms and conditions of sale. The striking thing here is the long list and the obvious difficulties which are bound to arise when it comes to collecting and particularly ascertaining some of the details.

The same long and complicated list is the one expected to be addressed by non-valuers. In fact a valuer's role is usually only to estimate the willingness to pay and the willingness to receive payment by potential players in the market.

If any aspect in the long list of factors which determine the value of a property is only perceived by the valuer and not the players in the market, the valuer has no choice but to ignore it because if he does not do so, his figure may not function. In other words, his prediction of the value realizable may not materialize. Worse still, the value of a property also depends on the parties to a transaction, "In many cases, the valuer will require to know details of the circumstances of the person for whom the valuation is being prepared because the value of a particular interest may be different to different individuals according to, for example, their liability to income tax" (Britton et al, 1980). The list of examples of reasons why the value of a property can be different to different people can be long as follows: Urgent need for money on the side of the seller, urgent need for property on the side of the buyer, special attachment to a property or a location making the buyer to offer a higher price in a bid to achieve his choice, lack of information about alternatives, different impressions on the costs and qualities of the features of a property. The list is as long as all potential dealers in a particular property because not two people will have an exactly similar impression of each aspect in the long list of aspects which determine the value of property.

Even experts are affected by the same differences of perceptions as evidenced by the following statement. "Although the aim of the valuer is to provide an estimate of the market value, it should not be assumed that the valuer's estimate of the market value and the market price or the market value will always be the same. Different valuers could well place different values on a particular interest at a particular time because they are making estimates and there are certain limits for differences of opinion.

In the majority of cases this is the most serious difference which can arise between two competent valuers in times of stable market conditions because market prices result from estimates of value made by vendors and purchasers on the basis of prices paid for other similar interests; but in times when market conditions are not stable, more serious differences can arise. In such unstable times the valuer's estimate of value will be based on prices previously paid but he must adjust that basis to allow for changes since the previous transactions took place. The accuracy of his estimate will, therefore depend on his knowledge of the changes and his skill in quantifying the effect" (Britton et al, 1980).

The long lists of determinants of value and differences of perceptions, preferences and opinions are symptoms of the phenomenon of market imperfections which rule real property transactions.

2.3 Valuation Methods and their Application

Valuation has been defined as, "The estimation of the money worth of a defined interest in some property, in a given geographical location at a particular time for a particular purpose" (Konyimbi, 1998). Valuation methods are the analytical means with which a valuation process is approached. "The valuation process is a praxeology, that is a method of deductive reasoning that starts from first principles of a priori logic and builds analytical means (valuation methods) without which conclusions are invalid" (Syagga, 1999). The principal methods of valuation and the logics behind them are as follows:

Market Approach: "The value is estimated by use of the latest sales of comparable items" (Okoth, 2003). The logic here is that no reasonable person can agree to buy

property at a higher price than that being paid for similar properties by other buyers in the market. Or from the seller's point of view, no reasonable person can agree to sell his property at a price lower than that being realized for similar properties by other sellers in the market.

Investment Approach: "Determines the present worth of future benefits (income) of ownership" (Okoth, 2003). The logic here is that the value of an interest in property is not more or less than all the benefits receivable from it by virtue of owning that interest for the whole period of owning it.

"When economists evaluate benefits and costs which extend over more than one time period, they can use one or two approaches. In the first case, they must give allowance for the fact that individuals view more distant benefits and costs differently than more immediate ones. Generally, the pattern observed is that we prefer costs to be postponed and benefits to be received as soon as possible. This situation is referred to as time preference and is mimicked by financial institutions in that they must pay interest on deposits, reflecting the need to return a higher amount to the individual at a later date in order to make use of these funds in the interim. To account for time preference in valuation and cost-benefit studies, economists use the discount rate to weight benefits and costs occurring in different time periods, similar to the payment of interests on bank accounts. Since we would prefer having a sum of money in the present to waiting until a later period for it, we weight the current values more heavily than ones in distant periods. To accomplish this we use a discount factor which incorporates the discount rate selected. Weighting a series of benefits or costs, and summing these, yields a present value. Once we have calculated the present values of benefits and costs, we

normally take the difference between the two, the net present value as an indicator of the project's viability in economic terms. A second approach is to look at the opportunity cost of capital invested in a project, which refers to the profits which could have been obtained by investing the capital in the next best possible opportunity.

These foregone profits represent the cost of the capital employed in the project and the net benefits (i.e., benefits minus costs) of our project must at least be equal those foregone profits if it is to be considered viable" (Barbier et al, 1997; Markandya and Pearce, 1988). These deductions are the basis of the factor used by valuers in relating incomes receivable from a property to its present value (Y.P).

The most important thing is how to make accurate income and interest rates assessments and predictions. The return earned by an investor in property is not just compensation for giving up liquidity (money), for some time period, but is also compensation for taking all the risks associated with property ownership. The first component of this return can be conveniently estimated by equating it to the best rate of interest receivable by depositing the money in a bank account. The second component, the risk rate, is estimated by assessing the level of risks associated with property ownership as evidenced by the average dominant behavior of investors in that type of property. Management involvements and related complications enhance the risk rate. Anything over and above the banking rate can therefore be considered to be the risk rate.

Illogical behaviors however, do occur when the market players are seen to be consistently accepting rates of returns from their investments in real property which are even below those realizable through banking or some other less risky investments like

treasury bills and bonds, or demanding and getting returns higher than those in more risky businesses like transport. Such illogical behaviors are symptoms of market imperfections. The valuer must detect and ignore such artificial rates of return in order to estimate of the market value accurately.

Cost Approach: "The summation of all the costs of a new property and deduction of all elements of depreciation" (Okoth, 2003). The logic here is that no reasonable person can agree to pay more for a property than it would cost him to buy all its separate components and to assemble them himself, and also that such a person would also not agree to buy a used property as if it were new by disregarding loss of value due to usage, passage of time or any other cause.

In real life however, it appears that there are very many unreasonable people. The evidence of this is that many people have been seen selling or buying properties at unreasonable prices as evidenced by the massive data which forms the appendix of this study.

Dishonesty and greed or any aspect which tends to tilt the market conditions in favor of some players and against others can be listed as causes of poor decisions and loss making. In other words, the details of the players in the market need to be known. Such players may be financiers, developers, buyers, sellers, landlords or tenants or valuers or estate agents working on their behalf. Each group tries to create as much difference as possible between its own costs and benefits. Such differences can only be made at the expense of other players in the market. The dominant group wins and laughs all the way to the bank. This is the scenario depicts the workings of market imperfections.

The alternative to this lopsided market situation is a competitive market. "The standard of value most frequently invoked is the price at which fully informed, willing and numerous buyers and sellers exchange goods and services- the price in a competitive market" (Davies and Johnson, 1986).

The same writers went on as follows, "The notion of competitive markets argues that not only can individuals exchange their own time and resources to receive maximum personal benefits, but also that when all individuals selfishly pursue their own interests, the aggregate use of resources in society will be socially efficient in the sense of providing the greatest total benefit to society as a whole. But this does not always rhyme with equity in the distribution of benefits to society." This poor distribution of benefits is brought about by the fact that although the market may be as open and free as can be, market players are never on equal footings, some have head-starts; others are privileged with more or more readily available resources and ultimately, some members of the society may not be participants and can therefore not benefit at all. In other words, perfection is always relative.

The same authors recognize the role of parties in determining the value of a property as follows; "Value is a human perception- it is the worth of something to a particular individual, at a given place and moment in time. Utility, satisfaction and pleasure are other words that connote worth or value received. The measure of worth is determined by the time, money or goods an individual is willing to give up, to possess, obtain or use the goods or services in question. Valuation, the process of quantifying values must accordingly operate from the perspective of some individual (or group) of humans; in a specific problem situation, it is the decision maker who establishes the context or point

of view of the valuation." There are therefore as many values as the number of different points of view in respect of any property.

2.4 The Kenyan Situation in Levels of Market Imperfections

"Most urban centres in Kenya suffer from market imperfections and failures caused by distortions in land development and management practices including bad planning, slow provision of infrastructure, poor land information systems, cumbersome and slow transaction procedures, as well as under regulation of private land development, leading to unplanned or ribbon/ corridor development of land in the urban periphery. The distortion of the land and property market has led to speculation which has pushed the poor into the informal land markets as exemplified by the numerous slums, squatter settlements and illegal subdivisions" (Draft integrated issues and recommendations report of the national land policy, 2005).

Market imperfections and failures may be described as markets which don't serve their intended purposes of making available required land to the people who require it at reasonable prices and time. Such markets are usually in the control of a few people who tend to manipulate them. Indeed, the report continues as follows,

"Land in and around urban areas is owned by the government, private individuals or communally by communities. These vested interests gain more by keeping the land markets fragmented, without proper controls, and keeping the dealings in the land markets both secret and non transparent with the prime losers being the urban poor."

The question which arises is why the government is combined with other entities as a culprit contributing to the problem. The answer is because of its acts of commission and

omission; by inheriting and adopting foreign, biased property laws, failing to adapt them to suit the local conditions and even failing to implement them.

"This conventional approach to urban planning and development based on European, and mostly English traditions have turned out to be inappropriate and insufficient" (Olima, 2002). In fact, some of the practices like land allocation policies meant to favor immigrant settlers are not even acceptable in England. Inheriting them the way independent Kenya did can only be interpreted as the same ancient instinct of human beings to take advantage of situations at the expense of others for selfish gains.

There is therefore no need of even starting to pursue those who were allocated land illegally over the years without first disinheriting the legal system which was used to perpetrate the corruption. Such policies have the effect of tilting the play ground in real property transactions by favoring the beneficiaries of cheap plots.

"Most third world cities consist of small enclaves of western-style houses for a tiny elite, surrounded by vast and growing illegal settlements. In many cities a major growth industry is the provision of security- fences, dogs, and armed guards- for the small enclaves of the elite" (McAuslan, 1984). The situation in Nairobi is even worse than this because what is observed now is the small elite occupying the larger part of the city and relegating the vast majority to small enclaves of unsanitary illegal settlements.

"Under market conditions, economic activities in urban areas are so segregated to the extent that distribution of space is skewed by differences in purchasing power. The result is that some categories of urban space users are almost completely excluded. For instance, the low- income group is normally pushed towards undesirable, deteriorated or

distant locations and as such tend to suffer from absolute shortage of housing supply" (Mosley, 1987). This is a more accurate description of Nairobi.

"Property markets are imperfect and are characterized by tendencies towards speculation, inflation and waste. How does this come about? We should remember that under conditions of capitalist production, commodities are produced by agents who are different from those who consume them and are exchanged in the market" (Burgess, 1978). Kenya is a good example of that system of production. Profit maximization is too overwhelming a desire, that super profits are seen as reasonable business outcomes. "Public housing largely benefits the middle and upper income groups, with an emphasis on prestige on developments in Nairobi. The higher the income of the occupier, the more subsidy in public housing. Tenant- purchasers move out of their subsidized public housing and sublet it to five or six families at a room each. They become absentee landlords of public housing estates and pay subsidized rents to the City Council while making large profits from renting their houses" (McAuslan quoting Amis and Stren, 1984).

2.5 Market Imperfections and Failures Defined

A measure or at least an indicator of the level of market imperfections and failures is a desirable tool for alerting policy makers on the level of benefits being foregone through those conditions. Such a measure is none other than the one which measures monopoly power, that is, the ability to acquire sustained super- profits in transactions (Lipsey, 1970). The same expert defined super-normal profits as follows, "Normal profits are what must be earned to induce a firm to remain in an industry and they are the same thing as returns to capital and risk taking. Super-normal profits are anything in excess of normal

profits." The condition should be dealt with in the same way modern societies deal with monopolies in all other sectors of the economy. Market imperfections are therefore monopolistic tendencies.

Britton et al, (1980) stated that it may be possible to approach a valuation by adopting more than one method so as to check one against the other. Such checking of one method against another is equivalent to an investment appraisal in which both value for money and money for value must be balanced. If both calculations are right and yet the figures are different, then the difference must be indicative of market realities which increase benefits to some types of players at the expanse of others. The frictions which cause imbalances are none other than market imperfections. A suitable measure of market imperfections and failures may therefore be indicated by discrepancies between valuations by different methods provided that the methods are competently applied.

"Profits in some activity are the signal that resources can be moved into that activity. Losses are the signal that they can be profitably moved elsewhere. Profits and losses thus play a crucial signaling role in the workings of a free market system" (Lipsey, 1970). Imperfect markets respond to such signals sluggishly and may even fail to respond in extreme cases. Such extreme cases of market imperfections which don't respond to the signals of reason as indicated by losses or profits may therefore be termed market failures. They perpetuate super-normal profit making for some types of parties and loss making to others.

In a perfectly performing market, values by the different concepts should be so significantly close to each other that reasonableness can be read in any investment decision. Speculation would be hard because every purchaser would have to pay a

reasonable price and hence would feel pain to acquire property merely for hoarding purposes. The following account from the economic theory of price reinforces the foregoing view.

"The opportunity cost of using any factor is what is currently foregone by using it. With factors obtained from outside the firm, this cost is measured by the price paid for their services. With factors already owned by the firm, this is usually by the amount for which the factors could be leased or sold" (Lipsey, 1970). Faced by the same conditions, the account goes on to assert that prices in monopolistic markets tend to be higher than in competitive ones. Productions are more restricted the more imperfect the market. Normal profits are an acceptable part of costs.

"A competitive market is a region in which buyers and sellers are in such a free intercourse that the prices of the same goods tend to equality easily and quickly. In a perfect market, one individual must accept the market price, to the fixing of which he individually contributes to an insignificant extent. If he tries to make his price higher than the market price, he will sell nothing. If he sets it at the market price he can sell more than he can produce. By creating a separate demand for his product, on the other hand, he is enabled to charge a price higher than the market price without losing the whole demand for it. Within certain narrow limits, he can act as a monopolist of his goods" (Robinson, 1960).

That separate demand and narrow monopolistic tendency is achieved by creating differences between a product and other similar ones which compete with it in the market. It may come in the form of branding, innovation or advertising. All these create differences of perceptions and preferences. They increase costs and prices. Real property

is naturally differentiated. Human activities cause further differentiations. Competitive markets are rare.

While both absolute market perfection and imperfection (monopoly) are like atoms which don't exist freely in nature, it is clear from the above account that the deeper a market falls into imperfection the wider the discrepancies between costs, prices and rents because the restrictive nature of imperfection makes it inefficient and costly while its control of outputs, prices and rents allows it to charge as exorbitantly as it may deem necessary. Prices, costs and rents are different faces of the same pyramid, because they are the considerations or values given in exchange of acquiring the services of any property or factor of production.

According to Lipsey (1970), theoretically, an unfettered monopolist operating in a market with some specific elasticity characteristics will sell less and less at higher and higher prices until he sells absolutely nothing at an infinitely high price. In other words, an unfettered monopolist increases his profits by limiting supply and raising prices and in a way tries to eliminate opportunity costs. He tries to eat his cake and have it. This appears to be no longer merely theoretical because the eventual pushing of the poor in Nairobi into slums represents a very high price which they have to pay to the people who monopolize money and are apparently headed towards monopolizing real property in the city. The price is so high that it has to be paid in installments which never come to an end as follows:

Selling their properties in the low class areas at throw away prices to meet poverty generated needs like hospital bills, school fees, and capital for small businesses e. t c.

Paying exorbitant rents after becoming landless.

Failing to continue paying exorbitant rents and being relegated to substandard dwellings where they pay too much for too little and apparently for ever.

Becoming servants at slave wages sometimes on the same land which was once theirs.

The frequently prepared and alarming reports about the discrepancies between the poor and the rich are references in support of this scenario. For example, "Kenyans are among the most unequal people in the world: 10% of the people control 42% of the country's wealth. For every shilling earned by the poor, the rich get 56 shillings. The gap between the rich and poor is growing fast" (S.I.D, 2004).

According to Lipsey (1970), "The proposition that perfect competition leads to optimum allocation of resources requires among other things the following:

- There should be no divergence between private and social costs anywhere in the economy.
- There should be perfect competition in all sectors to ensure that the correct results obtain throughout.
- 3. There should be no external economies or diseconomies of scale.
- 4. There should be perfect information obtainable to all at no cost.
- 5. There should be perfect foresight about the future.
- There should be no learning by doing so that costs do not vary with the number of times a process is repeated.
- 7. The process of innovation and growth should be strictly autonomous.
- 8. The conditions necessary to produce this optimum should exist simultaneously everywhere in the economy.

put each the other way round. While perfection of any market is merely a conceptual ideal, real property markets are known for their special characteristics which tend to alienate them from that ideal more significantly than other sectors of any economy. Illiquidity, heterogeneity, disinformation, lopsided advantages in favour of some players against others are the order of the day.

The phenomenon of market imperfections is recognized as the main reason why real property related professions exist: "There are three main reasons:-

- Imperfection in property markets.
- · Heterogeneity of property.
- Legal factors" (Britton et al 1980).

But both heterogeneity of property and diversity of its legal characteristics are aspects of market imperfections, because one of the factors by which the phenomenon is defined is product uniqueness, which makes comparison hard, and diminishes information, thereby necessitating scrutiny of each unit. Property related professions have their primary objective as safeguarding the interests of the various parties against the entire range of complications incidental in dealings with real property. These complications are none other than market imperfections.

2.6 Recent Studies Relevant to Market Imperfections Many studies have been devoted to costs, rents and values. They are attempts by the researchers to predict or interpret the workings of imperfect market environments. If the markets were perfect, such undertakings would not be needed. For example, Kiragu (1993) tabulated rental values and the various characteristics associated with the properties behind them in

Nairobi city centre. Another Study has evidence of people disregarding valuations and allowing unreasonable sale prices to be realized (Gitari, 2001). Even valuers are in evidence coming out with figures far apart (Gitari, 2001, Kiptoo, 1999, Kimutai, 2001). The reasons for these unreasonable figures have been blamed by the above researchers on poor application of valuation methods, poor information, and the effect of statutory provisions on statutory valuations. But as illustrated in one study, the markets themselves are sometimes so full of diverse information that any analytical means purported to derive the market value as an average of the observations in the market can at best only yield a contrived figure (Karori, 1989).

A good example of costs oriented studies is one by Axcell et al (2001) which came out with total costs of office space occupancy in key centres within the UK with a view to enabling effective sourcing. Looked at from the side of the sellers of such spaces, the costs are rents or market values depending on the mode of demise. That paper discovered that the outgoings recognized and taken into consideration by most investors in the U.K are merely 50% of the total costs which should be considered. If the property market in such a developed country can be so steeply uninformed (imperfect), third world property market conditions are likely to be near total mysteries. To further complicate the matter, different people are able to reap different levels of returns from similar properties because of different qualities of management practices. A property considered unprofitable by one person may therefore be a great asset to another.

In a recently concluded study, it was found out that Kenya needs a real estate performance index like those in other key areas of the economy (Okumu, 2006). Such

an index is an affront against market imperfections by better information. The outcome will be patterns of changes in values costs and rents with time.

All these studies view properties as bundles of physical, legal and institutional characteristics and that presenting such characteristics to the market place can yield reasonable perceptions in the minds of the market actors. Information about these characteristics is therefore gathered analyzed and spread out as effectively as possible. But that information is often differently perceived by different players. There is therefore a need to bring the different types of players in the market into the equation. This study is designed to address the gap left out by studies like the ones outlined above by bringing the different types of actors into the picture.

A Global View on Property Markets Control Measures

"The market mechanism has long been the means for allocating land, but reliance on this is changing because concern has developed over public- private distribution of unearned increases in land values. Attitudes are changing towards a better balance of the distribution of the benefits resulting from development and urbanization particularly since land values are correlated with public investments. Hence there is a growing recognition that the public should recover land value increases or at least a fair fraction thereof" (U.N.O, 1975). The report listed the following as instruments of implementing urban land policies;

Public acquisitions to create land reserve banks.

Infrastructural development.

Housing development by government.

Creation of new cities as overflow devices.

Tax penalties for constructions counter to public policies.

Taxing unused land and non-conforming land uses.

"A land policy is a statement of the vision and mission on how best land will be put to use In order to develop a land policy, knowledge and ideology are needed. Knowledge is information about the existing and relevant conditions and trends in future. Ideology is a function of values against which information received can be treated" (Syagga, 2005).

"A good policy should encourage a smooth functioning land market that permits maximum productivity of land as a resource" (Syagga, 2005). The patterns envisaged in this study are knowledge which can help policy makers in selecting the right measures. In conclusion, because it is impossible to have the sort of level play ground in which exposure of land markets to the market mechanisms can yield both prosperity and equity, and in any case, some players already have advantageous head - starts in terms of money monopolies, locations enjoying public investments and any other unearned benefits, it is reasonable to subject property markets to some control measures. Where and how much to intervene with such measure should be guided by how badly off a market is as may be indicated by super profits or enormous losses that may be incurred in transactions. These can be indicated by the discrepancies in values by different concepts as established in this study.

2.7 The Winners and the Losers

According to Wills & Daniel (1989), "The value of real estate as that of any other investment comes from its future cash flow, or more specifically, the present value of the cash flows as anticipated during the investment holding period. The cash flow a real

estate will generate is determined by the structures developed on a unique piece of land and the demand for this type of real estate use. If the demand does not reach the developer's expectation, then immobility, lack of diversification and illiquidity of the investment become painfully evident. Unlike other commodities, real estate cannot be moved to new markets, substantially reshaped to improve market appeal, or discontinued in favor of a potentially more profitable product line."

In other words, the costs that go into development and maintenance of real estate must be counterbalanced by the payments recoverable from the real estate market in spite of the severe complexities surrounding the magnitudes of both such costs and recoverable payments. The three common methods of valuation are attempts at estimating those costs and recoverable payments. Losers are therefore parties who recover less payments than their costs, or less property than its costs. Winners are those who are able to recover more payments than their costs, or more property than its costs.

The same authors went on as follows, "The real estate industry has severe operating cycles with periods of over-building followed by periods of depressions and underbuilding. A knowledgeable developer needs to be aware of these cycles and make investment decisions accordingly." Referring to the same cycles Krex Promoters (2006) lamented that some people have invested or divested when they shouldn't have. Ability to respond to investment opportunities at the right time is not merely an information issue; it involves ability to raise funds by savings or credit arrangements. These favors are enjoyed less and less as we move down the ladder of social-economic statuses.

Even in depressed markets, it is the rich owners who can secure better sales by using money on innovative professional marketing strategies (Aluoch, 1993). Elite selling

economists, cultural ideas from historians and any other ideas from any discipline which can be used to influence the decision making process of any player in the market. The potential customer is investigated as follows: "Status in terms of his level of achievement, current employment, present property ownership, and knowledge already accumulated through other agents or own effort. He is further investigated to find out his urgency, financial ability property requirements and motives" (Kariuki, 2005). In other words his vulnerability is ascertained, and although the official purpose of the marketing strategy is to meet the customers' needs as efficiently as possible, the reality is that any vulnerability is efficiently taken advantage of because profit maximization is always the goal.

The operating cycles in real property industry mean that the market is always in a state of disequilibrium. When there is depression, the following statement is applicable: "In a poor and falling market, it is sometimes said that there are a few willing sellers, that most transactions in the market are as a result of forced sales and that prices paid in such markets are not truly representative of open market value" (LS. K. 2000). Conversely, "In a rich and rising market, it is sometimes said that there are a few willing buyers, that the prices in most transactions are as a result of forced sales which are not truly representative of open market value." There are therefore two types of forced sales one downwards and the other one upwards in terms of prices. Because the one upwards is forced on the buyer, it may be appropriately termed, forced buying. We therefore have periods of buyer's or seller's markets. We never experience the open

market value. One must therefore be a winner or a loser. These are creatures of market imperfections. They benefit those better equipped than others as seen earlier.

Some investors try to avoid selling properties cheaply and instead seek credit facilities using the land as collateral. They encounter the same monopolists they were avoiding and what transpires has been precisely captured as follows:

"Unfortunately, lenders have not identified with the problems facing customers. Instead of offering discounts on interest rates, and more lenient repayment terms, in order to recover their money, they levy additional payment as punishment for a mortgagor's incapacity to pay, equating incapacity with unwillingness. They appear to be in a position of power and often face little or no competition as borrowers have experienced when their properties are auctioned" (Waiganjo, 2003). That power is none other than monopoly power, by which market imperfections are measured.

"Banks established to provide credit for land and housing for the poor often benefit the middle and higher income groups, poor people sometimes contribute more to such banks than they get back in loans" (Mc Auslan, 1985).

Even valuations for mortgage purposes are apparently skewed in favour of the richcreditors in a way in which money is viewed to be more valuable than the property or as though it does not matter if the poor-borrower loses out when his property is sold:

In carrying out a mortgage valuation, it should be explained that the valuer will apply the normal valuation principles, but must also consider the mortgagee (the lender) should the mortgagor default. If this occurs, and the property has to be sold, the sale price needs to be sufficient to cover the debt with perhaps a margin for any arrears. The property is valued at the date of inspection but bearing in mind the future- will the value

be maintained and easily realizable? Any possibility of increase in value is not reflected in the valuation, but a possible diminution in value cannot be ignored" (Buttler, 1995). This means that the borrower cannot borrow money worth his property and any possibility of its rise in value while nobody cares that the value of the money he borrows is likely to fall through inflation, increased interest rates and other banking charges. By virtue of having the money-being rich, the lender shifts all the risks involved in the contract to the borrower and as if that is not enough, he devalues the property owned by the borrower. Such properties end up with the same monopolists as evidenced by the long and many lists of properties for sale by public auction in Nairobi with terms favorable to people who can keep money nearby.

2.8 Conceptual Framework

particular type of property and the extent of the demand for it." For the purpose of elaboration, these motives can be split up ranked according to levels of necessity as presented in table 1.

Table 1 Motives and Rankings

| Motive | Rank |
|---|------|
| Subsistence businesses to earn food and clothing | 1 |
| Shelter for owner | 2 |
| Security against misfortunes like diseases, costly court cases unemployment etc | 3 |
| Commercial businesses conducted by owner | 4 |
| Rental income from tenants | 5 |
| Reserving property for use by future generations | 6 |
| Saving money, equivalent to banking but earning returns through property appreciation | 7 |
| Acquisition and maintenance of high social status.(Pride of ownership) | 8 |

Source: Own construct 2006

Motive No. 6 is satisfaction gained by bequeathing property on one's descendants. This aspect has cultural and sentimental dimensions which can effectively remove any property from the market however attractive available bargains might be. Such traditional values are, however, being challenged by matters of life and death like the ones brought about by abject poverty.

These motives are ranked according to their levels of necessity in supporting the wellbeing of any investor. Pursuing any of these motives is made possible by two necessary conditions namely; being aware that the opportunity to pursue the motive exists and having the capacity (capital) to pursue it. It is these two conditions which promote motives needs and wants into effective demands and supplies. The ranking is

in line with Maslow's theory of human needs. Any investor is likely to pursue the motives which will satisfy his immediate and most pressing needs first, before paying any attention to the less necessary, future, and apparently imaginary needs. Going by the rankings above, the low class is likely to pursue the motives up to the third ranking because this is where the basic necessities of life are confined. Anybody who can afford anything above the basic necessities cannot be considered to be poor.

The poor are therefore likely to sell their painstakingly developed or subsidized properties to take their children to school, pay hospital bills or to meet any other basic need which can only be foregone if there is absolutely nothing disposable.

The middle class will pursue the motives up to the fifth ranking because anything above that is likely to be seen as a time wasting luxury.

The high class is motivated to pursue all the eight motives by the security of its savings in banks and income generating assets. In fact, subsistence and shelter needs are at this stage exaggerated by the lavishing of buildings with costly finishes, spacious rooms and compounds.

Before committing his money into any investment, any reasonable investor is likely to carry out an appraisal as follows:

A developer will carry out a contractor's test which means adding up all the costs needed for the development to see if available resources are adequate.

Then he will carry out an investment appraisal by assessing the property market in terms of what it can fetch him if sold off or rented out. If any proposed project does not make economic or even financial sense, it is rejected by not even being started. But for an investor whose motive is to use the property as a necessary input in his life or

livelihood, that appraisal is not necessary. He does not have the chance to exercise reasonability. Instead, the decision he has to make is not optional, and he is forced to put every resource at his disposal to pursue his motive. The appraisal is nothing short of carrying out valuations of the same property using the three common approaches namely; Market or Comparison, Investment and Cost Replacement. If both the market sale or investment values are higher than the costs approach one, the property is a viable investment. Selling or renting out the property depends on which value between the investment one and the sale one leaves the investor with more profits.

Those profits depend on "Demand, utility, scarcity and transferability of the property" (Eldred, 1987). All these aspects influence buyer preferences and capacities to meet the number and nature of motives which bring any prospective customer to the market. In other words, while trying to pursue some motives in respect of property, any investor is limited by his competitors (demand), the qualities and quantities of available properties (utility and scarcity) and all complications which are incidental to acquiring the property (transferability). Some motives may therefore not be effectively pursued. Worse still, some people fail to pursue any motives and have to do without property. Applying all this logic to the three class zones being studied, it is reasonable to arrive at the following conclusions:

In the high class zones, the target market demands satisfaction equivalent to the widest range of ownership motives. This cannot be met by renting property but by buying. The rental market is therefore small. The high class market also demands high quality properties. To meet this demand, high costs are incurred in constructions. The high costs cannot be recouped from the small rental market but can be recouped from the

sales one. Many estate agents in Nairobi testify that getting an ambassador to rent an ambassadorial residence is like winning a lottery jackpot. Such residences are therefore uneconomical as rental investments.

In the middle class zones, the target market demands properties which meet approximately five motives. The middle class is limited in resources and its development strategy is likely to be one or a few rental properties per investor rather than many developments for sale. Luxurious features are not of the essence. Above all, affordability is an issue. Constructions are therefore done with savings in mind, giving rise to features like economic plot and building sizes and modest finishes. This economization of development is consciously made by developers who need to earn profits, and such profits can only be accrued if development costs are below recoverable payments from market sales or rental values. Income levels here can enable those who can access mortgages to buy properties. But mortgages are not accessible to the larger majority. That majority becomes a reliable market for rental properties thereby making capitalized rental values higher than sale values.

In the low class zones developments are undertaken as basic necessities. Appraisals are not of the essence. Inputs can come from donors, community supports, inheritance, and government subsidies. Constructions can be done informally and completion time can be as extensive as necessary. All these mean high construction costs made high by the costly process rather than inputs.

The rental market is large but low and unreliable incomes keep the rental values low. In fact, government sponsored schemes like Shauri Moyo and Kibera have rents payable as disputed issues. Rents in such areas cannot recoup the costs of any decent property.

Sub-standard structures may be the only viable investments. The sales market is usually dormant because owners recognize owning property as a great fortune and since most owners have only single properties, trading in properties is rare. Sales seen there are therefore likely to be motivated by the needs of owners to meet other basic necessities like hospital bills, school fees, food and clothing during unemployment periods. This view is supported by the documented evidence of many property owners who quote such needy circumstances when applying for consents to sell their properties before meeting their contractual obligation of fully developing them as stipulated in letters of allotment. The same observation is also made apparent by the marketing strategy being adopted in low class areas of Nairobi which as seen in the problem statement section of this study is tending to use competitive pricing to attract prospective buyers.

Buyers in these markets are usually not easily forthcoming because the low class fails to save enough to buy. Buyers from other classes are invited. Speculation is their main motive. They offer as low prices as possible taking full advantage of the urgency of the need to sell. This places sale values below even the rental ones.

The following observation from the event of the launching of the Kenyan Real Estate Index reinforces the above views. The Kenya Real Estate Index (Krex), Promoters are a "consortium of real estate consultants, and firms, financiers and property owners" (Ayieko, 2006). This is a cross section of prominent investors and their representatives. Their interest in better information on real property may be driven by experiences of misadventures or the feeling that their investments can yield better returns if better information is made available. Not surprisingly absent from the composition of that consortium are investors who may not be very prominent in the business but are greatly

affected by the performance of land markets because their motives in dealing with real property are few and at the lower half of the eight motives listed earlier in this section.

Indeed, Krex Promoters stated their highly- perched view as follows, "Despite its dominance as an investment, real estate in Kenya, unlike financial securities, stocks and shares, has lagged behind in having a reliable tool to measure performance. This has made comparing it with other investment options with which it competes for investment funds difficult." It can therefore be concluded that the initiative is only relevant to the high class investors.

The foregoing discussion creates a scenario in need of interventions by policy makers. These can be implemented by uplifting the losers or by checking the excesses of the winners. If this is not done, then nature takes its course in a predictable way as follows:

As soon as a party from a higher class buys property in a lower class, the value of that particular property immediately changes to reflect the new owner's perceptions. That he cannot get an immediate buyer at his new price is irrelevant because his decision to retain it instead of accepting the highest offer available is equivalent to himself buying it at his own prescribed price. Usually, such a person ends up selling the property to a person of his own or higher standing in society. Lower class members are therefore progressively phased out and pushed to less desirable habitations and eventually to the slums. When it comes to transactions, the values realized are likely to have the results presented in table 2. They depend more on the types of parties than the types of properties. After all, what is not perceived cannot be pursued, and property is nothing more than what the parties perceive

Table 2 Likely transactions, parties and values

| Parties. | Likely values. |
|---|---------------------------------------|
| Rich seller and rich buyer. | Highest values possible based on the |
| | whole range of ownership motives. |
| Middle class seller, rich or middle class | Medium range values based on the 5 |
| or low class buyer. | motives the middle class is likely to |
| | be in a position of pursuing. Low |
| | class buyers are unlikely to |
| | participate in this category. |
| Low class seller, high or middle class | Low values based on the 3 motives |
| buyer. | the low class is likely to be in a |
| | position to pursue. |
| High class seller, middle or low class | High values based on the entire |
| buyer. | range of perceptions enjoyed by the |
| | high class. Such transactions are |
| | possible only through splitting up of |
| | properties into small pieces, long |
| | mortgages to the middle class and |
| | subsidies to the poor. |
| Low class seller, low class buyer. | Low values based on the 3 |
| | perceptions likely to motivate the |
| | poor. Such can only happen through |
| | market controls against other classes |
| | plus subsidies. |

Source: Own Construct 2006

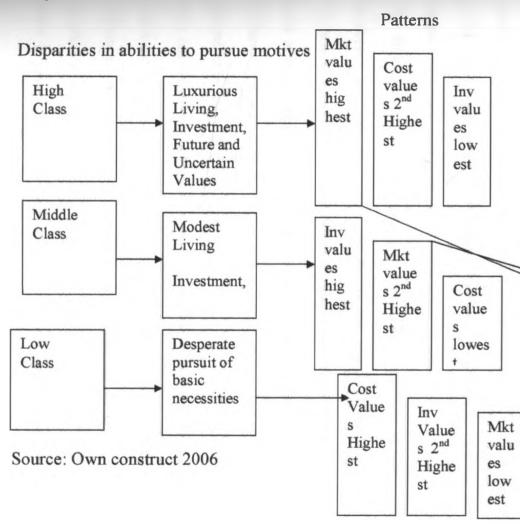
The propositions in table 2 are based on the reasoning that in any transaction, it is the figure pursued by the party with an upper hand which is realized. This is because any buyer or seller can only get what he can effectively pursue given his limiting or

enabling circumstances. It is these limiting or enabling circumstances which determine both the number and nature of motives each party is capable of pursuing.

They therefore represent the reality faced by each party trying to participate in the market. Disparities in the levels of abilities to pursue motives are therefore another name for market imperfections. In other words, if a market is made of people facing homogeneous circumstances, their impressions of any property in that market would be identical. Nobody would therefore seek to realize more value from any property than anybody else. Nobody would buy or sell any property at a price different from that anybody else would buy or sell it. Such a market would be a perfect one. But the reality, the phenomenon of market imperfections is the exact opposite of such a market.

The conclusions coming out of the foregoing discussion are depicted in the form of the conceptual model at Figure 1. Because the conceptual model is based on recognizing the reality faced by each type of investor and deducing the likely resultant behavior, it belongs to the positive economics school of thought. That school of thought examines phenomena on the basis of what actually happens as opposed to what should happen (Lipsey, 1970).

Figure 1 Conceptual Model



Long Run

Eventually, all real property ends up with the high class. Lower classes become perennial tenants or mortgagors

Interactions

Lower class parties get raw deals to the advantage of higher class parties

Derived from The Positive Economics School of Thought

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1Introduction

In this chapter, the procedures employed in achieving the objectives of this study are discussed through a detailed research design. The ways and means used to carry out the study so as to produce credible and reliable results are presented and discussed.

3.2(1) Research Design

This starts with identification of necessary data with which to operationalize the variables in the study. The variables are categorized into two namely; different types of parties and different types of properties. These two categories of variables define any market

The different types of players who are affected by transactions in real property are developers, landlords and tenants and buyers and sellers. Developers view property values in terms of costs of development. Landlords and tenants view property values in terms of rental values. Buyers and sellers view property values in terms of sale values. Differences between these types of values in respect of the same property are therefore recognized as losses or gains to each party depending on his area of participation. The same differences are indicators of the phenomenon of market imperfections which as seen in the background and literature review sections of this study works by creating such differences. They are also indicators of poor decision making in transactions if remarkably wide and directionally biased. In other words, if any category of market actors is observed to incur huge losses during transactions on too many occasions

compared to others, vulnerability to making poor decisions is construed to affect that category of actors. People of different means in this study are viewed according to the different class zones in the city. These are high, middle and low class areas. Properties are classified according to their situations and users and the observable different levels of heterogeneity.

Primary qualitative data from current and past observations and the researcher's many years experience in the field of valuation are pivotal in the emergence of the curiosity which gives impetus to this study. They are used to provide practical examples which demonstrate views advanced in this study before and after the quantitative tests.

3.2(2) Study Areas and Population

Nairobi is the capital city of Kenya. It covers an area of approximately 696 square kilometers. Its population was estimated at 2,143,254 in the last population census dated August 1999 (C.B.S 2006). For planning purposes, it has been divided into 20 zones. One of these zones namely zone 20, comprises of all public properties. These are not routinely the subjects of many transactions and valuations. The zones don't necessarily correspond with the social-economic classes already seen in this study. Instead, one zone may have the socially segregated sectors within itself. For example, zone 8 has the middle class estates of Buruburu and Kimathi as well as the low class ones of Makadara and Bahati.

Zone 15 is uniquely distinguishable from the others because it is almost entirely an area that was never appropriated by the white settlers. In fact, it was part of Kiambu district native reserves. It retains predominantly rural village characteristics.

The statistics below are important for the purposes of this study. They are derived from the sampling frame of this study which is all valuations carried out using the three common methods by the valuation office of the Ministry of Lands between April, 2003 and April, 2006. They were compiled by making physical counts of the valuation reports which are filed in several box files. The physical counting was necessary because reports which don't have the required data are also filed in the same files.

Table3 Population Statistics

| Zone | No. of valuation reports in 3 years |
|-----------|-------------------------------------|
| 1 | 306 |
| 2 | 425 |
| 3&4 | 680 |
| 5&6 | 213 |
| 7 | 15 |
| 8 | 208 |
| 9 | 124 |
| 10&11 | 510 |
| 12 | 292 |
| 13&14 | 288 |
| 15 | 213 |
| 16,17&18B | 594 |
| 18A& 19 | 103 |
| Total | 3,971 |

Source; Valuation Records Ministry of Land, 2006

3.2(3) Sampling Techniques and Sample Sizes

The valuation office of the Ministry of Lands has many valuation reports with some dating as far back as the colonial era. Nowadays, all transfer transactions presented for registration are subjected to valuations for stamp duty purposes. For all developed properties, the three main methods of valuation are routinely employed.

These reports are a suitable sampling frame because they are about all the properties which come into the market. The population statistics presented in Table 3 are derived from it. Very old reports may not be very meaningful in addressing modern phenomena because the registered areas were few and in segregated areas.

Each valuation report is assigned a reference number by which it can be uniquely identified. The reports are then recorded in cards serially arranged according to plot numbers. Because plot numbers are in most cases indicative of the estates, most of these cards are arranged according to the estates. It was therefore possible to carry out a multistaged, stratified, random sampling exercise as follows:

- Each planning zone was examined and a total of 107 main estates identified.
 Shopping, industrial, and farming areas were treated as estates if big enough or as parts of the residential estates in which they are situated.
- 2. Each estate was classified as high, middle or low class.
- 3. All identified high middle or low class estates in the whole city were separately listed together based on the classification done in (2). This resulted in 3 lists (high, middle and low class estates) representing the whole city.
- 4. The numbers of estates in each list at (3) were as follows: high class estates: 29; middle class estates; 37; and low class estates; 41. These figures were arrived at after

merging Estates near each other and having remarkably similar characteristics. For example, Ngumo, Golf-course, Magiwa, and High-view Estates (block32), were merged. This is because although the general rule that governs sample sizes is that the larger the sample the better, homogeneity of units of observation means that a few observations can be adequately representative of the population. In fact, in cases of identical units, only one unit needs to be observed (Mugenda, 2003). The study targeted not less than 10% of the estates to be randomly selected from each class. That target was exceeded as follows: Out of the 29 identified high class estates, 5 estates were randomly selected. These are Kilimani, Kileleshwa, Westlands Thompson and Parklands. Out of the 41 low class estates, 8 estates were randomly selected. These are Mathare, Huruma, Riruta, Kangemi, Uthiru, Waithaka, Ruthimitu and Mutuini. Out of the 37 middle class estates, 6 estates were randomly selected. These are Old Racecourse, Pangani, Eastleigh, Ngara, Ushirika and Juja Road. These are ample sample sizes because each is above 10% of the total number of identified estates and percentages as low as 5% in finite populations like the one in this study are considered big (Mugenda 2003, Lucey, 1996). 10% was picked as a doubtlessly high enough target given the much lower admissible levels for example the 30 observations usually recommended in cases of infinite populations.

5. In respect of each estate selected at (4.), a not less than 10% sample was randomly selected from a list of all valuations carried out on properties situated in that estate in each year starting April, 2003 to April 2006. For example, Thompson Estate was selected as one of those representing high class estates, and not less than 10% of the

valuations done in that estate in that period were randomly selected using their reference numbers. This was considered to be an ample sample size for the purpose of this study for the same considerations used in determining the minimum number of estates as explained earlier.

3.2 (4) Data Collection Instruments

Primary Sources

A data collection schedule with nine columns is designed in order to gather the necessary and desirable information. The importance of each column in the schedule is as follows:

- 1. The first column is for the plot number. This is the identification by which the details collected in respect of each property can be ascertained. By corresponding serially with properties in the same estates, it is useful in the sampling exercise, particularly in the identification and classification of the estates. For example all plot numbers which start with 330/... are known to be in respect of the high class area called Thompson Estate.
- 2. The second column is the reference number. This is the number by which any valuation can be uniquely identified and details ascertained. It plays an essential role in the random sampling exercise. By it, any property can be picked before its identity is known, and by it, that identity can then be established.
- 3. The third column is the situation. This detail expressly separates the different estates by names thereby enabling correct classification of each property according to the social-economic status of its neighborhood.
- 4. The fourth column is the description of each property according to the socialeconomic status of its situation. This detail enables the grouping together of

estates with similar classifications. That grouping together is essential in the analysis stage because the analysis is primarily interested in measuring the differences between behaviors of parties of different classes.

- 5. The fifth sixth and seventh columns are values of the same property arrived at using the three common methods of valuation. These are the different points of view of the same property by the main players in the market. Comparing these points of view is a major task in this study.
- 6. The eighth column is the date on which the transaction in respect of each valuation took place. This detail apart from enhancing accountability and hence credibility can be used to track down changes in patterns of values with time.
 Such can be the subject matter of further investigations in future studies.
- 7. The ninth column is the value declared by the parties. This is an interesting detail because it may be indicative of the extent to which the valuation opinion by any method is likely to be independently concurred with by the market forces. That is an area suitable for further enquiry.

The instrument is pre-tested and improved to the present format by applying earlier versions randomly on records similar to those involved in the final data collection. The instrument together with the entire data set it is used to collect forms the Appendix of this study.

Qualitative data from primary sources are featured in the literature review section of this study. The instrument and methods used in the gathering are the same ones employed in respect of secondary sources as described in the next subsection.

Secondary Sources Such sources are previous studies and textbooks on concepts and phenomena relevant to this study. The instrument used to collect data from such sources is a list of relevant topics or themes. The method used is reading all available literature on each topic in the list and making notes on the key observations. This amounts to drawing deeply from well established and accepted theories which are relevant to the themes and concepts in this study. That list together with the secondary qualitative data it was used to collect forms the literature review section of this study.

3.2(5) Data Collection Procedures

Permission was obtained from the custodians of the required data.

Latest maps showing the estates and other areas of the city were studied so that as many areas of the city as possible were included in the sampling process.

If a randomly selected estate failed to yield a reasonable number of documented valuations, such an estate was replaced by randomly selecting another one from those not selected. But in the case of low class estates, it was discovered that the numbers of valuation reports were so few that reasonable levels could only be achieved by extending the targeted period as well as the targeted number of estates. This way, almost all valuations done in Huruma and Mathare estates were selected the exceptions being vacant plots, missing and defaced ones. Similarly, a good part of all valuations done in the villages of the Dagoretti region were selected. Some valuations done in the sampling period were in respect of older transactions. Several of such valuations were netted by the sampling process.

Major difficulties arose when the method of randomly picking reports using their reference numbers as recorded in the cards became very laborious owing to the large

numbers of other types of reports like lease extensions, alienations e.t.c, most of which have nothing to offer in terms of the data required and were filed together with those which are relevant. The box files containing selected reports were sometimes not easy to locate because they were being referred to by different officers in their routine work. Patience was necessary and data had to be collected on first available first collected basis and not one estate at a time as would be conveniently desirable.

In the high class estates the problem of vacant plot reports being very many in most estates confined the data collection exercise to the busiest estates most of which are in zones 3& 4. The middle class estates reports were found to be remarkably similar owing to considerable homogeneity of properties in most estates. That homogeneity was taken advantage of in testing its effect on the level of market imperfections. This is because theoretically, by making information about property easier to get, homogeneity makes property markets less imperfect leading to better decision making. Imperfections which persist even when properties are remarkably homogeneous like the typical maisonettes or terraced houses which characterize most modern middle class estates in Nairobi are largely attributable to lack of level play ground (heterogeneity of parties). At the end of the data collection exercise which took two months to complete, 398 valuation reports selected from a target population of approximately 3,971 were captured in an Access data base.

3.2 (6) Data Analysis and Presentation

The primary quantitative data are separated and classified into categories according to the different types of parties and properties sampled out so as to enable effective comparison. Chi Square test is carried out in respect of each category for the purpose of investigating the dominant directions taken by the differences between values of the same properties realizable by different types of parties.

The data are then summarized by computing the mean of each classified category.

Z test is carried out in respect of each classified category with a view to investigating the sizes of the differences between values realizable by different types of parties in respect of the same properties.

The summarized data used in carrying out the two tests as well as the tests results are tabulated.

Pie and Bar charts are constructed from the tabulated data for the purpose of achieving vivid presentation.

A computer and calculator are used to handle the computations necessary in this study.

Chapter 4 of this study is devoted to the actual analysis and presentation.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1Introduction In this chapter, the first objective of this study namely; finding out the types of parties likely to make poor decisions in transactions is achieved by carrying out Chi Square tests on the data collected as detailed in chapter three. The second objective namely; estimating the extent of benefits or losses which result from poor decision making in real property transactions in Nairobi is achieved by carrying out Z tests on the same data. These tests establish the directions and magnitude of differences between values realizable by different types of parties in transactions. The results are presented in tables, bar and pie charts.

In other words, if the hypothesis that imperfect markets cause poor decision making patterns in transactions which affect parties according to their types is true,

some types of parties are expected to be observed making losses on more transactional occasions than would ordinarily be expected. To find out if this is true, Chi- Square tests are carried out.

The magnitude of these differences has to be ascertained as a consistently substantial figure which can be called poor decisions by the losing parties. This is tested by carrying out Z tests in respect of these differences. The differences vary according to the levels of imperfections so that where there are relatively homogeneous properties or parties, the differences are less significant. This variability is tested by comparing the Z test results of properties of different levels of heterogeneity. In this respect, middle class properties in

many Nairobi Estates are evidently remarkably less heterogeneous than the high class and low class ones

Table 4 Hypothesized Patterns

| High class zones. | 1).High market values compared to | 2).Replacement costs values lower | 3).Investment values lower than |
|---------------------|---------------------------------------|-----------------------------------|----------------------------------|
| | other types of values. | than market values. | the other two types of values. |
| Middle class zones. | 4).High investment values compared to | , | 6).Replacement costs values less |
| | - | values. | than both market |
| | values. | | and investment values. |
| Low class zones. | 7).High replacement | 8).Investment | 9).Market values |
| | cost values | values less than | less than both |
| | compared to other | replacement cost | investment and |
| | types of values. | values. | replacement cost |
| | | | values. |

Source: Own construct 2006

Table 4 above is a restatement of the hypothesis of this study in the form of three patterns related to three social-economically classified zones of Nairobi, and propositions of likely decision making trends by the various types of parties. The different type of parties are developers, buyers and sellers landlords and tenants, high-class, middle-class and low-class. Table 4 shows various positions at which these players are likely to operate so that there are decision making trends like the ones envisaged in the conceptual framework. A rearrangement of the decision making patterns means changes in who makes a profit and who makes a loss. The arrangements in Table 4 have the following meanings about the consequences of transactions:

 Developers and sellers of real property in the high class zones make enormous profits on too many transactional occasions at the expense of buyers.

- Developers and sellers of real property make enormous profits on too many transactional occasions in the middle class zones at the expense of both buyers and tenants.
- Developers and sellers of real property make enormous losses on too many transactional occasions in the low class zones to the advantage of buyers and tenants.

The Z and Chi Square tests are therefore applied to find out the extent to which the collected data is in agreement with the patterns at Table 4. The data is separated and classified according to the description of each property as high middle or low class and also according to its user. This is achieved by running select queries in the Access data base.

4.2 Beneficiaries and Losers in Real Property Transactions in The City of Nairobi These are identified through the data analyzed and presented in this section thereby achieving the first objective of this study.

Counts of valuations which comply with the patterns and those which don't are made manually. The results of the counting and statistical tests of significances are tabulated. The details contained in the tables are inclusive of all possibilities because it is only by considering all possible arrangements (patterns), that any number of observations of a hypothesized pattern can be adjudged to be more prevalent than would ordinarily be expected. This is because a type of party can only be construed to be predisposed to making poor decisions if it is observed to be making poor decisions on too many occasions compared to other types of parties. The tables therefore have two angles (ways)

of comparison; one is between the hypothesized pattern and other possible patterns including those hypothesized in respect of other class zones, while the other one is between the number of positive and negative observations. Positive observations are those which support the hypothesis of the study while negative ones are those which don't or are supportive of other possibilities.

Table 5 Hypothesis Testing on Levels of Prevalence of Patterns in all

| Class Zones | Middle C | lass Areas | High C | High Class Areas Low Class Areas | | | |
|--|----------|------------|----------|----------------------------------|----------|----------|--------|
| Frequencies | Observed | Expected | Observed | Expected | Observed | Expected | Totals |
| Positive observations in respect of hypothesized patterns | 24 | 55 | 111 | 94.5 | 55 | 40.6 | 190 |
| Negative observations in respect of hypothesized patterns | 91 | 60 | 87 | 103.3 | 30 | 44.4 | 208 |
| Positive observations in respect of all other possible patterns | 91 | 60 | 87 | 103.3 | 30 | 44.4 | 208 |
| Negative observations in respect of all other possible patterns | 24 | 55 | 111 | 94.5 | 55 | 40.6 | 190 |
| Totals | 230 | 230 | 396 | 396 | 170 | 170 | 796 |

Areas of Nairobi Aggregated

Source: Field Survey, 2006.

The above contingency table compares the hypothesized observed decision making trends with those which would be expected if parties from the different class zones of Nairobi make the same numbers of different decisions in transactions so that each party makes an equal number of good and bad decisions as any other. The findings are that hypothesized trends are more in high and low class zones but less in middle class ones. This means that the social economic status of a party or the situation of a property in a class zone is related to decision making in transactions. It is only equality or near equality which would denote absence of that relationship.

Each zone is then treated separately to get a closer examination. The results are as detailed in the forthcoming sub sections.

Table 6 Hypothesis Testing on Levels of Prevalence of Patterns in

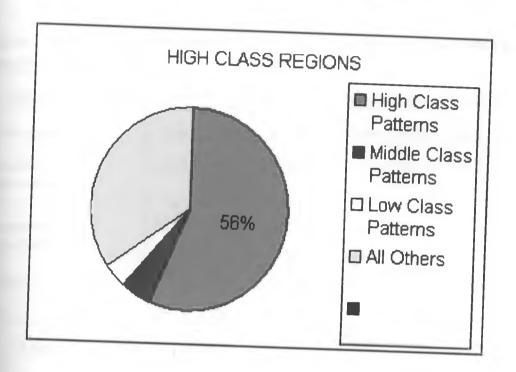
High-Class Areas of Nairobi

| Patterns | High | Class | Middle | e Class | Low class Any Other | | Other/s | /s | |
|----------------------------------|------|-------|--------|---------|---------------------|-------|---------|-------|--------|
| Frequen cies | Obs. | Exp. | Obs | Ехр | Obs | Ехр | Obs | Exp | Totals |
| Positive observations | 111 | 49.5 | 10 | 49.5 | 7 | 49.5 | 70 | 49.5 | 198 |
| Negativ e observat ions | 87 | 148.5 | 188 | 148.5 | 191 | 148.5 | 128 | 148.5 | 594 |
| Totals | 198 | 198 | 198 | 198 | 198 | 198 | 198 | 198 | 792 |
| % | 56 | 25 | 5 | 25 | 3.7 | 25 | 35 | 25 | 100 |

Source: Field Survey, 2006.

The contingency table for the high class areas (Table 6) shows that, 56 % of the sampled transactions comply with the pattern hypothesized to be the dominant one in that category. Low percentages are achieved by the patterns expected to be dominant in the middle and low class areas. All other possible arrangements (patterns) command a presence of 35%. It can therefore be concluded that the hypothesized pattern in that area is prevalent. In other words, out of 198 transactions, parties in 111 transactions are likely to make decisions like the ones proposed in the hypothesis. These are buying or selling properties at prices high above their development costs, renting out and reaping values far below the sale values or development costs. In other words, buyers and landlords are losers while sellers and tenants are winners in most real property transactions in the high class areas of Nairobi. These percentages are depicted in the pie chart below

Figure 2 Decision making trends in the high class zones



Source; Field Survey, 2006

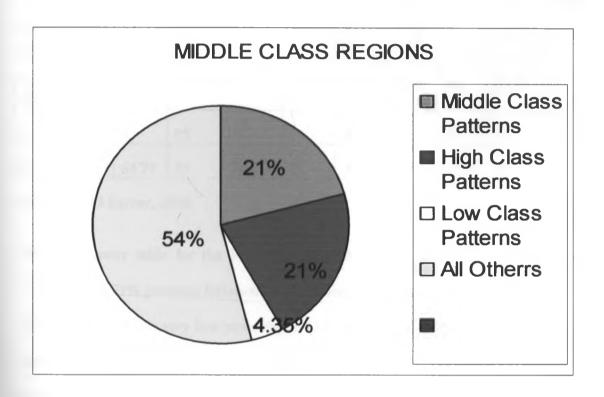
Table 7 Hypothesis Testing on Levels of Prevalence of Patterns in Middle Class Areas of Nairobi

| Patterns | Middle | e Class | High Class | | h Class Low Class | | Any | S | |
|--------------------------|--------|---------|------------|-------|-------------------|-------|-----|-------|--------|
| Frequencies | Obs | Exp | Obs | Exp | Obs | Ехр | Obs | Ехр | Totals |
| Positive observations | 24 | 28.75 | 24 | 28.75 | 5 | 28.75 | 62 | 28.75 | 115 |
| Negative observations | 91 | 86.25 | 91 | 86.25 | 110 | 86.25 | 53 | 86.25 | 345 |
| Totals | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 460 |
| % | 21 | 25 | 21 | 25 | 4.35 | 25 | 54 | 25 | 100 |

Source: Field Survey, 2006.

The contingency table for the middle class areas (Table 7) shows that the hypothesized pattern commands a presence of merely 21% of the sampled transactions, equal to the pattern expected to be prevalent in the high class areas. The pattern expected to be prevalent in the low class areas scores a paltry 4.35% presence. All other possible arrangements (patterns) command 54%. A closer examination is therefore is needed to establish which among the other possible patterns is dominant. In other words, out of 115 observations, only 24 cases display decision making trends like those hypothesized namely buying or selling properties at prices below their capitalized rental values but above their development costs. The percentages are depicted in the pie chart below.

Figure 3 Decision making trends in the middle class zones



Source; Field Survey, 2006

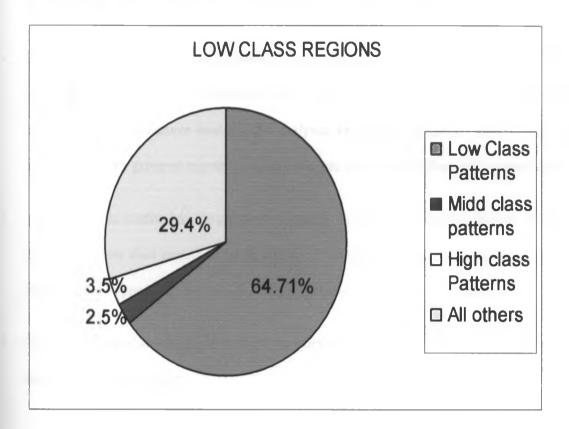
Table 8 Hypothesis Testing on Prevalence of Patterns in Low-Class Areas of Nairobi

| Patterns | Low Class | | Middle Class | | High Class | | Any Other/s | | |
|--------------------------|-----------|-------|--------------|-------|------------|-------|-------------|-------|--------|
| Frequencies | Obs | Exp | Obs | Exp | Obs | Ехр | Obs | Ехр | Totals |
| Positive Observations | 55 | 21.25 | 2 | 21.25 | 3 | 21.25 | 25 | 21.25 | 85 |
| Negative Observations | 30 | 63.75 | 83 | 63.75 | 82 | 63.75 | 60 | 63.75 | 255 |
| Totals | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 340 |
| % | 64.71 | 25 | 2.41 | 25 | 3.53 | 25 | 29.41 | 25 | 100 |

Source: Field Survey, 2006.

The contingency table for the low class areas shows that the pattern hypothesized commands 64.71% presence followed by any other patterns at 29.41%. High and middle class patterns achieve very low percentages. Out of 85 observations, 55 cases displayed decision making trends like the ones proposed in the hypothesis. The trends are buying or selling properties at prices below their costs of development as well as their income generating capacities. In other words, developers and sellers are losers while buyers are winners in most real property transactions in low class areas of Nairobi. These percentages are depicted in the pie chart below.

Figure 4 Decision making trends in the low class zones



Source; Field Survey, 2006

Chi- Square test is carried out in respect of each contingency table (Tables 6, 7, 8&9). The null hypothesis in respect of each test is that there is no difference between the level of prevalence of the proposed decision making pattern and what would ordinarily be expected. This test enumerates the exact numbers of transactions in which the parties hypothesized to be losers or winners are actually observed to be what they are thought to be and compares them with what would ordinarily be expected if every type of market player equally realizes profits or losses like any other type.

To ensure that the test doesn't merely indicate differences between the different areas in levels of prevalence or absence of the hypothesized patterns without necessarily telling us how prevalent the patterns are, the following measures are taken:

- Other possible patterns are incorporated in the tests so that the hypothesized patterns are not seen to be racing against themselves or claiming territorial monopoly which they don't have. This measure enables the analyses to isolate the shares held by all other possible patterns grouped together and to calculate the expected frequencies correctly.
- Every value is credited to the pattern it supports and any that denotes absence (observed frequencies less than expected ones) siphoned out thereby eliminating the possibility of values not in support of a pattern distorting the results by way of exaggeration.
- Percentages are also computed in each category as a further measure of the prevalence of each pattern in each zone.

Table 9 Chi- Square Test Results-(Levels of significance of poor decision making patterns)

| Test All areas of Nairobi Aggregated | Results Hypothesized Patterns: 30.6 All other pattern/s: 67. | Critical levels 5% Level of significance: 12.592 1% Level of significance:16.812 The degrees of freedom are 6. |
|---------------------------------------|--|---|
| High class areas of Nairobi. | Hypothesized pattern: 101.8 Any other pattern/s: 11.3 | 5% Level of significance: 7.815 1% Level of significance: 11.345 The degrees of freedom are 3. |
| Middle class areas of Nairobi | Hypothesized Pattern:0 (The pattern is not significantly prevalent) Any other pattern/s:51.26 | |
| Low class areas of Nairobi | Hypothesized pattern: 71.467 Any other pattern/s: 0.8 | 5% Level of significance: 7.815 1% Level of significance: 11.345 The degrees of freedom are 3. |

Source Field Survey, 2006.

The null hypotheses are rejected in respect of all the areas except the middle class ones. The patterns hypothesized are significantly prevalent in the high and low class areas. The middle class areas are under some other pattern/s which return a high Chi- square value of 51.26. Both hypothesized patterns and all other possible ones grouped together are significantly prevalent in the all areas of Nairobi aggregated category.

4.3 The Extent of Benefits or Losses in Real Property Transactions in

the City of Nairobi These are measured and displayed through the data analyzed and presented in this section thereby achieving the second objective of this study.

As seen earlier, the data is separated by running select queries in the Access data-base and classified according to class zone and user of each property. This results in six categories, thereby enabling the analysis to investigate the effects of different types of properties on the levels of losses or profits. Averages of the six categories are then computed by running totals queries.

Table 10 Average values

| Description | Average values by Market Approach | Average values by Investment Approach | Average values by Costs Approach | Average values Declared by parties |
|---|---|---------------------------------------|----------------------------------|------------------------------------|
| High class residential areas | 11,997,747 | 8,608,146 | 9,919,010 | 12,018,886 |
| Middle class residential areas | 5,670,263. | 5,412,452. | 5,409,042 | 5,570,202. |
| Middle class B.C.R properties | 11,485,000 | 12,902,300 | 11,626,800 | 11,465000 |
| Low class residential properties | 766,576 | 966,681 | 1,170,788 | 830,152 |
| Low class B.C.R properties | 1,675,000 | 2,186,666 | 2,581,666. | 1,705,000 |
| Low class residential/agricultural properties | 1,697,717 | 2,184,326 | 2,803,630 | 1,617935 |

Source: Field Survey, 2006.

The data tabulated above shows average values of the same properties valued using the three common methods. Null hypothesis is formulated that there are no significant differences between values by different methods, which as seen earlier are values realizable by different types of investors in real property imperfect markets. Z tests are carried out. The results are as detailed in Table 11.

Table 11 Z Test Results (Tests of the significance of the differences between values realizable by different types of investors in respect of the same properties)

| Categories | Market and investment approaches | Investment and replacement costs approaches | Market and replacement costs approaches | Averages |
|---|----------------------------------|---|---|----------|
| All sampled types and areas aggregated | 3.3239 | 3.9388 | 0.6149 | 2.626 |
| High class residential areas | 4.2064 | 1.63 | 2.297 | 2.804 |
| Middle class B.C.R properties | 3.851 | 3.459 | 0.4 | 2.57 |
| Middle class residential properties | 3.851 | .0274 | 3.6844 | 2.456 |
| Low class BCR properties | 2.2241 | 2.024 | 4.23 | 2.826 |
| Low class residential properties | 2.2 | 2.031 | 4.231 | 2.82 |
| Low class residential cum agricultural properties | 2.17 | 2.146 | 4.242 | 2.837 |

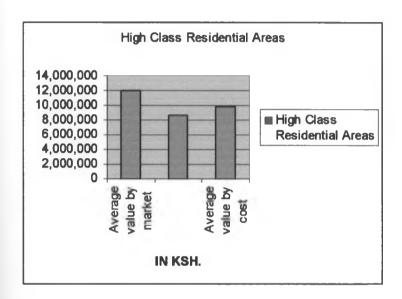
Source: Field Survey, 2006.

The critical Z score is set at 1.96 (5%) level of significance. Out of the 21 transactional points tested, only 4 are found to be within acceptable limits. Out of the 4, 1 lies at the periphery. All the averaged discrepancies are found to be outside the acceptable limits. The null hypothesis is thus rejected and the alternative one adopted; The 3 methods on the average generally yield figures which are too wide apart. This was expected because the concepts mirror the markets on which they are applied and most real property markets are this imperfect.

It means that enormous profits or losses are made in real property transactions in Nairobi. The relatively smaller differences in the middle class zones mean that the levels of market imperfections there are lower than in other areas. This is because the properties in those areas are relatively homogeneous-terraced maisonettes, flats, roughly equally sized plots. Parties in those areas are neither as desperate to sell like those in the low class areas nor as eager to buy like those in the high class areas. Nevertheless, the average differences are still significant because homogeneity of properties is not enough to eliminate market imperfections. The parties also need to be homogeneous, and since there are interactions between the middle and other classes in transactions, this cannot be achieved. Again no class is homogeneous within itself.

The levels of profitability or loss making are given a closer examination and clearer presentation as detailed below.

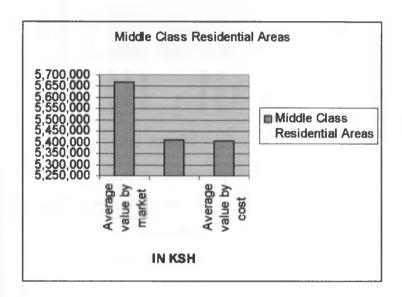
Figure 5 Values discrepancies in the high class zones of Nairobi



Source; Field Survey, 2006

The table of average values (Table 10) shows that in the high class zones, developers are earning a profit averaging over 2,000,000 shillings per property sold immediately after development. Letting out leads to a loss of over 1,300,000 shillings per property if the developer decides not to sell it in its economic life. Buying a property and letting it out makes the investor lose almost 3,400,000 shillings per unit if the investor decides to let it out for its economic life. The only viable investment approach in this category is therefore developing and selling out immediately. These disparities in values realizable by different types of parties in respect of the same properties in the high class areas of Nairobi are depicted in the bar graph above.

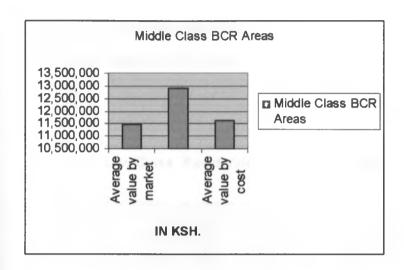
Figure 6 Values discrepancies in the middle class residential zones of Nairobi



Source; Field Survey, 2006

In the middle class residential areas, developing and selling off immediately earns the developer an average of over 260,000 shillings per unit. Buying and letting out leads to a loss of over 257,000 shillings per unit on the average. Constructing and letting out earns the developer a profit averaging over 3,400 shillings per unit. This is very near to making normal profits. It is within the acceptable limits of the Z test. (There are only 0.0274 standard deviations between the mean of investment values and that of replacement costs values). Most of these are viable investment approaches. The only losers here are buyers because they are unable to recover their investments by letting out the properties. This situation is depicted in the bar graph above.

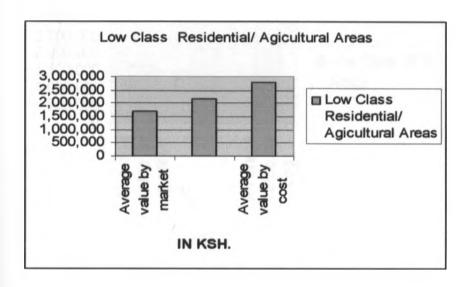
Figure 7 Values discrepancies in the middle class BCR zones of Nairobi



Source; Field Survey, 2006.

In the middle class BCR properties category, developing and selling off immediately leads to loss of over 140,000 shillings per unit. Constructing and letting out leads to an average profit of over 1,275,000 shillings per unit. Buying and letting out leads to an average profit of over 1,400,000 shillings per unit. Buying or constructing and letting out are therefore both viable investment approaches in this category. The losers in this category are therefore tenants who by paying too much in rents enable both developers and buyers to make handsome profits. This situation is depicted in the bar graph above.

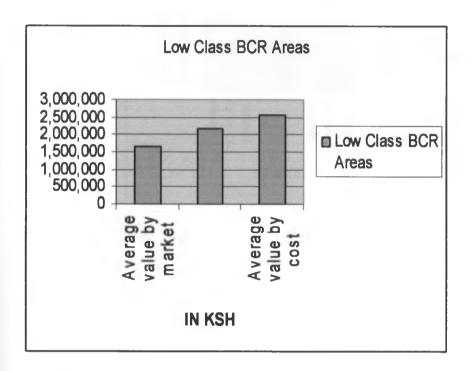
Figure 8 Values discrepancies in the low class agricultural cum residential zones of Nairobi



Source; Field survey, 2006

In the low class residential cum agricultural properties, developing and selling out leads to a loss of over 1,100,000 shilling per unit. Developing and letting out leads to a loss of over 619,000 shillings per unit. Buying and letting out leads to profit of over 486,000 shillings per unit. The only investment approach which makes sense in this category is therefore buying and letting out. This scenario is depicted in the bar graph above.

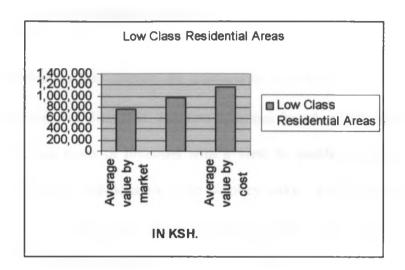
Figure 9 Values discrepancies in the low class BCR zones of Nairobi



Source; Field Survey, 2006

In the low class BCR category, developing and selling off leads to an average loss of over 906,000 shillings per unit. Developing and letting out leads to an average loss of over 395,000 shillings per unit. Buying and letting out leads to an average profit of over 511,000 shillings per unit. The only logical investment approach in this category is therefore buying and letting out. This situation is depicted in the bar graph above.

Figure 10 Values discrepancies in the low class residential properties in Nairobi.



Source; Field Survey, 2006

In the low class residential category, developing and selling off leads to a loss of over 400,000 shillings per unit. Developing and letting out leads to a loss of over 204,000 shillings per unit. Buying and letting out leads to a profit of over 200,000 shillings per unit. The only viable option here is thus buying and letting out. The low class is unlikely to save enough to buy. This situation is depicted in the bar graph above.

The middle bars in all the above bar charts are in respect of income values

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

- 5.1 Introduction In this chapter, the conclusions according to the findings of this study are presented and discussed. Recommendations based on the findings are then made to the various types of investors with a view to enabling them to avoid poor decisions. Other recommendations are made to policy makers and valuation professionals on how property values can be better distributed among the different types of investors by creation of smooth running markets. A concluding summary is provided. Areas suitable for further research are identified.
- **5.2 Conclusions** As envisaged in the conceptual framework, buyers and landlords of properties in the high class regions of Nairobi have come out as types of parties who are vulnerable to poor decision making. Buyers are seen to be paying prices high above the costs of development while landlords are seen accepting rents which cannot justify either the buying price or the development costs.

This situation is caused by the very nature of the high class investors because as seen in the conceptual framework, they pursue a wide range of satisfactions from real property. That wide range cannot be achieved through renting but through ownership. This creates a high demand in the sales market and a depressed one in the rental market. Another factor is that because of the comfort of being plentifully endowed with disposable incomes, they are not likely to take much interest in tedious processes like construction. They leave it to entrepreneurs in the property development industry who appear to take

full advantage of the situation by charging as exorbitantly as possible. Besides that, pride of ownership is not necessarily reflected in either the costs of development or income generating capacities. Instead, even names of estates are enough to make a difference in prices. For example, in Nairobi, names like Muthaiga, Runda and Karen are likely to attract people who want to live among their peers in high social status. This view is in line with the theory of the leisure class, Veblen, (1899).

Going down the ladder, the pattern, (not identified at the hypothesis stage but came out of the research results) as the one dominant in the middle class residential areas is that market approach values are higher than those from the other two approaches which are approximately evenly matched. The likely interpretation here is that mass developers are the dominant actors. The considerably large scale developments observable are not the work of middle class developers even if situated in middle class areas. Property sales in this category are typical of transactions between rich sellers and middle class buyers and as envisaged in the conceptual framework, such transactions are only possible with long mortgages and subdivisions into small pieces. The dominant pattern is therefore leaning towards that expected in the high class zones by placing the market values at the top. The hypothesized pattern in the middle class residential zones appears to have been overtaken by events. The high class seems to have discovered the investments opportunities there which can enable them to either build and sell or build and let, opportunities they cannot get in the high class zones except by lowering of standards.

The B.C.R. properties in the middle class category came out with a pattern which has high investment values compared to the other two types of values which are roughly evenly matched. Although not exactly coinciding with the hypothesized pattern, it is leaning towards it by placing the capitalized rental values at the top, meaning as predicted, that tenancy is the dominant property acquisition mode. Indeed, sales of such properties are very rare signifying the current owners' comfortable satisfaction.

The closeness of the average figures coming out of the investment and replacement costs approaches in residential properties and sale values and costs values in BCR ones can be attributed to two factors: Firstly, most properties have considerable levels of homogeneity especially when they are flats, maisonettes or terraced houses in the same estates or shops and rooms. This interpretation is supported by the following view: "The degree of imperfection does however, differ in different parts of the market. First-Class shop investments, for example are fairly homogeneous and this fact will decrease the imperfection of competition in the market for them" (Britton et al, 1980). Secondly, in residential properties, the dominant actors here are rich routine developers, who prefer to build and sell through long mortgages than to let out. This means that the majority reasoned in the conceptual framework become tenants to fellow middle class mortgagors, who give them fair bargains (homogeneity of parties). Apart from this, rental units in Nairobi are further created by the middle class by illegal extensions and partitions, in efforts to meet their mortgage obligations.

At the bottom of the ladder, the hypothesized pattern is seen to materialize. It exposes the dangerous tendency of the free market system of eliminating not poverty, but the poor. The market approach value is below the others with the costs approach being at the top. This means that whichever decision an investor makes, he ends up making losses in transactions unless his way of property acquisition is buying a ready made property. This option is rarely possible to the low class. As seen in the literature review, the low class in

most cases acquires property through painstaking developments which can take long periods, subsidies inheritance and community supports. Property in this category is mostly a necessary input in the lives or livelihoods of the low class. Their selling of property is usually a last resort, urgent and necessary, in their circumstances. According to the findings of this study, the magnitude of losses in such transactions is great. The contribution of these losses to the precipitation of abject poverty is therefore immense. All the negative consequences of abject poverty are suffered by the entire society: Squalor, insecurity, civil strife, diseases, political instability are examples.

Although the three common methods of valuation are designed to estimate the market value of any property, the findings of this study inform the valuation profession that:

- All good comparables irrespective of their number are no proof of market value.
- Accurately available current and projected rental values are no proof of market value.
- Accurately calculated costs of buying land and constructing on it minus all the sunken costs are no proof of market value.

These three can at best be described as events which have been observed and which have likelihoods of being or having been replicated on nearby dates.

If the three can however, be observed to have coincided on one figure, then that figure is likely to be nearer to the conceptual ideal, (market value) than when each is on its own. In fact their coinciding on one figure would have the following meaning on the quality of the parties in a transaction: That each party namely developer, buyer, seller, tenant,

landlord, rich, middle-class or poor acted on the same level of knowledge, prudence and absence of compulsion. Such is a very rare coincidence. But valuers have the problem of shortage of information and some of them have gone to the extent of asserting that some methods are not applicable in some areas because for example a rural home may not have any rent to talk about. "Where there is no likelihood of any rent being generated like a 'lavish rural home' in rural Kenya, the investment value in terms of economics is negligible" (I.S.K, 2000). The correct approach is to imagine that the owner of such a home does not have it and every time he visits the rural area, he has to travel to the nearest town and put up in a hotel. The rental value of the home can therefore be calculated in terms of savings in travelling and hiring of the hotel accommodation. Considering that such a person may not be travelling alone, the savings may not be negligible. The same principle of transferring benefits so that they are converted into amounts which may not be directly seen to be incurred or accrued is applicable in many other situations. Again, if building such a home in such a place is considered to be a very imprudent decision, it is beneficial for a client to be informed of that negligible investment value he has generated through that imprudent decision so that he can make a better decision in future. Giving the three types of values therefore, amounts to ethical disclosure of vital information to clients.

The patterns observed in this study inform policy makers that in Nairobi's high and middle class areas, enormous profits are being made by developers and that property buyers in those regions are either so or eager to buy, or so ill- informed, that they continue playing faithful clients to the developers. About the low class areas, the patterns

inform policy makers that properties are being sold out cheaply thereby furthering the phenomenon of abject poverty

5.3 Recommendations

Investors can only react to the findings of this study by choosing the best investment approaches because their interests are to avoid losses and to maximize benefits. The creation of smoothly functioning markets by generally reducing the gaps between values to different types of parties can only be impartially addressed by policy makers. The following recommendations are therefore differently crafted to either give investors better investment approaches or policy makers better interventional approaches.

1. Investors should understand property development process

Buyers in high and middle class areas should be more interested in the property development process with a view to ascertaining the actual costs of development thereby reducing the wide gap between those costs and sale values. This is a purely information aspect. What seems to be taken advantage of by developers is the buyers' apparent obliviousness of loss making arising from possibly the comfort of being plentifully endowed or being too eager to buy. Better understanding can be achieved through consulting professionals in the real property industry.

2. Investors should make rational decisions

Guided by the findings of this study, investors should make rational decisions like the ones listed below.

Selling off instead of renting out for an investor in high or middle class residential areas who may be moving from his residences on retirement. This is because this study shows that sale values are high above the capitalized rental ones.

Tenancy is a more cost effective mode of acquiring residential accommodation than buying in the high and middle class areas. This is because the findings of this study show that buying prices are high above the capitalized rents payable. This may be adopted if pride of ownership, future and uncertain values are ignored

Renting out is a better decision than selling off for an investor who develops a BCR property in the middle class areas. For those who can afford, ownership is a more cost effective mode of acquiring business accommodation than renting because the findings of this study show that a tenant ends up paying more than a buyer or developer.

3. Giving all the three types of values in valuation reports

Valuers should always give the three types of values separately so that valuation reports are clothed with the extra benefit of investment appraisal because the findings of this study show that the three methods yield figures wide apart. When clients notice that extra ingredient, demand for valuation services is likely to rise.

4. Institution of appropriate taxation policies

Targeting the developers in the high and middle class areas for more taxation because the high profits they are making are super-normal. Such taxes may be passed down to the consumers of such properties but this will serve to alert such consumers that they need to

use better approaches in their property acquisitions. Landlords in the high and middle class residential zones should have the taxes on rental incomes waived because they don't seem to be making any profits according to the findings of this study.

Tax incentives should be given to developers of properties in low class areas because according to the findings of this study, no profits can be reaped from such developments.

Speculation should be discouraged by introducing capital gains tax because according to the findings of this study, more super profits are made by selling than by running property as an income generating investment.

5. Participatory interventional measures by policy making authorities

Based on the findings of this study which identify the losing parties as well as the areas in which they are concentrated, the government and other policy making authorities can make a difference by participating in the real property markets as follows:

- Buying properties on sale in low class areas instead of allowing them to be taken
 cheaply as is currently happening. Such properties can create a lands bank which
 can cater for public utilities or stabilize property prices by moderating abrupt
 changes in values by reselling the bought properties at opportune moments.
- Encouraging risk management strategies by way of subsidies to poor people
 making it unnecessary for them to address misfortunes and shortfalls by having to
 lose properties cheaply as they are currently doing according to the findings of
 this study. Such are hospital and education insurance covers.

- Encouraging infrastructural development in low class areas to boost values and create employment thereby making the low class less desperate because according to the findings of this study, needy circumstances are responsible for poor decision making in low class areas.
- 5.4 Concluding Summary Poor decisions and losses in property transactions are more of systematic than unique risks. They befall parties according to their types based on vulnerability to market imperfections. Different types of parties realize different values in respect of the same properties because they have different levels of ability to decide what, when and whether to sell or buy and at what price. Property markets are therefore made imperfect more by heterogeneity of parties than that of properties.

Abilities to make good decisions depend on the circumstances which create the motives which bring properties and parties to markets. These range from basic necessities and investments to luxuries and uncertain future benefits. The circumstances come in the form of different levels of urgency to acquire or dispose. Desperate circumstances can, and often transfer the entire monopoly power from the property owner to the buyer so that it is the money rather than the property that is monopolized. The difference between the values realized by the two parties in a sale realized under such circumstances is a loss to one party and a super- profit to the other. This study has identified trends of such transactional outcomes in respect of properties in the city of Nairobi.

Likely decision making trends by different types of parties have been encapsulated by this study into testable propositions which can be used by policy makers in gauging the extent of market imperfections in any market and by investors in identifying the best different concepts in different class zones. Unfortunately, the class zones have been mixed up by higher classes buying out lower ones and relegating them towards the slums, but that process is not yet complete according to the findings of this study. When the process is complete, only one pattern will remain-that of the high class zones. This is because interactions between people of different means in transactions in which the values at stake are as high as those of real property are always dangerous to those of lower means. This idea is supported by the experts preparing a new land policy for Kenya.

No wonder therefore, the soundly theoretically derived pattern for the middle class residential zones has already been replaced by one leaning towards the high class zones. If the current trend is allowed to continue, the long run effect is grim and predictable: We will end up back in the dark ages of great noble men and serfs, born winners and born losers.

5.5 Areas of further research

- 1. This study has proposed that the patterns found in Nairobi are likely to be found in any other area where class patterns are similar to those of Nairobi. This proposition can be tested by carrying out similar studies in respect of such areas.
- 2. This study is limited in the duration of transaction observations. That duration can be extended with a view to observing the changes in the decision- making behaviors. Such long term observations can reveal the cycles of real property investment outcomes. In other words, differences in levels of profitability or loss making by the different types of

actors over time can be tracked down. This type of research may be the most cost effective way of developing a real property performance index like the one envisaged by Krex Promoters because the data needed is already cheaply available.

3. The three patterns investigated in this study are typical behaviors of three distinctive classes of investors. But the three classes are in reality not distinctive groups but wide spectrums of various levels endowment or lack of it. The different estates may therefore be more or less typical of high middle or low class behaviors. For example, Runda and Karen Estates may be more typical of high class behavior than Kilimani and Mountain View While Dandora may be more typical of low class behavior than Huruma. A more extensive research aimed at ranking all the estates of Nairobi with a view to revealing the areas needier than others can be undertaken along the lines established by this study.

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| D | Plot No | Ref Na | Situation | Description | Market Value |
|----|---------------|--------|------------|--------------------------|---------------|
| 1 | 330/591 | 7560 | Thompson | High Class Residential | 10,950,000.00 |
| 2 | 209/1702/5/BF | 7626 | Kilimani | High Class Residential | 40,000,000.00 |
| 3 | 330/316 | 7665 | Thompson | High Class Residential | 22,000,000.00 |
| 4 | 36/11/1 | 5067 | Eastleigh | Middle Class BCR | 18,000,000.00 |
| 5 | Dag/ Rir/586 | 2350 | Riruta | Residential/Agricultural | 2,400,000.00 |
| 6 | 2/429/FB7 | 8011 | Kilimani | High Class Residential | 3,300,000.00 |
| 7 | 209/8905 | 8018 | Parklands | High Class Residential | 13,000,000.00 |
| 8 | 36/11/9 | 5065 | Eastleigh | Middle Class BCR | 8,000,000.00 |
| 9 | 36/111/401 | 5062 | Eastleigh | Middle Class Residential | 20,000,000.00 |
| 10 | 1870/X/87 | 7994 | Westlands | High Class Residential | 16,750,000.00 |
| 11 | Dag/Rut/757 | 2334 | Ruthimitu | Residential/Agricultural | 2,000,000.00 |
| 12 | 1/988,9,10 | 7986 | Kilimani | High Class Residential | 18,000,000.00 |
| 13 | 36/1/79 | 5059 | Eastleigh | Middle Class Residential | 7,300,000.00 |
| 14 | Deg/Wka/T129 | 2348 | Waithaka | Low Class Residential | 2,320,000.00 |
| 15 | 2/656//F | 7946 | Kilimani | High Class Residential | 6,000,000.00 |
| 16 | 209/163/16 | 5066 | Ngara | Middle Class Residential | 13,000,000.00 |
| 17 | 209/399/15 | 8004 | Westlands | High Class Residential | 14,000,000.00 |
| 18 | 36/V111/339 | 5055 | Eastleigh | Middle Class Residential | 8,500,000.00 |
| 19 | 209/76/11 | 7991 | Westlands | High Class Residential | 20,000,000.00 |
| 20 | 1870/111/280 | 7950 | Westlands | High Class Residential | 6,700,000.00 |
| 21 | 209/3271/47 | 5051 | Pangani | Middle Class Residential | 5,000,000.00 |
| 22 | 2/636/M | 8084 | Kilimani | High Class Residential | 7,000,000.00 |
| 23 | 209/3409/F | 8050 | Parklands | High Class Residential | 4,500,000.00 |
| 24 | 209/129/F | 7882 | Kileleshwa | High Class Residential | 8,750,000.00 |
| 25 | 205/133 | 7928 | Kileleshwa | High Class Residential | 12,000,000.00 |
| 26 | 36/11/26 | 5047 | Eastleigh | Middle Class Residential | 8,000,000.00 |
| 27 | 330/256 | 7917 | Thompson | High Class Residential | 4,500,000.00 |
| 28 | Dag/Wka/T55 | 2321 | Waithaka | Residential/Agricultural | 2,400,000.00 |
| 29 | 209/12968/F | 7920 | Kileleshwa | High Class Residential | 6,000,000.00 |
| 30 | 1870/IV/175 | 7818 | Westlands | High Class Residential | 13,680,000,00 |

| Investment Value | Cost Value | Declared Value | Date |
|------------------|---------------|----------------|-----------|
| 8,100,000.00 | 8,200,000.00 | 10,950,000.00 | 05-Apr-06 |
| 27,000,000.00 | 26,000,000.00 | 32,000,000.00 | 04-Jun-06 |
| 12,500,000.00 | 14,500,000.00 | 30,000,000.00 | 25-Apr-06 |
| 20,000,000.00 | 15,000,000.00 | 20,000,000.00 | 24-Apr-06 |
| 2,700,000.00 | 4,850,000.00 | 3,400,000.00 | 18-Apr-06 |
| 1,570,000.00 | 2,700,000.00 | 3,300,000.00 | 11-Apr-06 |
| 9,072,000.00 | 10,392,000.00 | 13,000,000.00 | 01-Apr-06 |
| 10,600,000.00 | 7,000,000.00 | 18,000,000.00 | 31-Mar-06 |
| 22,500,000.00 | 20,500,000.00 | 18,062,500.00 | 20-Mar-06 |
| 16,750,000.00 | 11,200,000.00 | 16,750,000.00 | 13-Mar-06 |
| 2,000,000.00 | 2,254,000.00 | 2,000,000.00 | 10-Mar-06 |
| 18,420,000.00 | 22,984,000.00 | 18,000,000.00 | 06-Mar-06 |
| 5,000,000.00 | 5,200,000.00 | 5,500,000.00 | 01-Mar-06 |
| 2,525,000.00 | 2,560,000.00 | 1,600,000.00 | 02-Mar-06 |
| 3,000,000.00 | 5,400,000.00 | 6,000,000.00 | 28-Feb-06 |
| 15,000,000.00 | 12,000,000.00 | 15,000,000.00 | 24-Feb-06 |
| 9,500,000.00 | 6,800,000.00 | 24,000,000.00 | 17-Feb-06 |
| 6,075,000.00 | 8,326,000.00 | 8,500,000.00 | 08-Feb-06 |
| 18,000,000.00 | 16,000,000.00 | 30,000,000.00 | 08-Feb-06 |
| 5,700,000.00 | 6,000,000.00 | 6,700,000.00 | 07-Feb-06 |
| 3,596,000.00 | 5,100,000.00 | 5,000,000.00 | 06-Feb-06 |
| 5,200,000.00 | 6,500,000.00 | 7,000,000.00 | 01-Feb-06 |
| 4,150,000.00 | 4,500,000.00 | 4,500,000.00 | 31-Jan-06 |
| 8,130,000.00 | 5,980,000.00 | 8,750,000.00 | 31-Jan-06 |
| 6,000,000.00 | 12,000,000.00 | 12,000,000.00 | 26-Jan-06 |
| 10,000,000.00 | 7,600,000.00 | 17,100,000.00 | 25-Jan-06 |
| 4,000,000.00 | 3,000,000.00 | 4,500,000.00 | 12-Jan-06 |
| 4,946,000.00 | 6,400,000.00 | 243,000.00 | 11-Jan-06 |
| 3,350,000.00 | 5,350,000.00 | 6,000,000.00 | 31-Dec-05 |
| 7,000,000.00 | 14,000,000.00 | 13,680,000.00 | 21-Dec-05 |

APPENDIX

| | 31 | Dag/Rir/S23 | 2325 | Riruta | Residential/Agricultural | 3,500,000.00 |
|---|----|--------------|------|----------------|--------------------------|---------------|
| | 32 | 1870/11/204 | 7807 | Westlands | High Class Residential | 15,000,000.00 |
| | 33 | 209/8085 | 5054 | Old Racecourse | Middle Class Residential | 3,224,000.00 |
| 1 | 34 | 209/1634 | 5046 | Eastleigh | Middle Class Residential | 5,500,000.00 |
| I | 35 | Deg/Rir/S247 | 2297 | Riruta | Residential/Agricultural | 3,000,000.00 |
| 1 | 36 | Deg/Rir/S462 | 2306 | Riruta | Residential/Agricultural | 2,200,000.00 |
| I | 37 | Riruta/1689 | 2286 | Riruta | Residential/Agricultural | 1,800,000.00 |
| 1 | 38 | 209/1218/3 | 7860 | Paridands | High Class Residential | 20,000,000.00 |
| | 39 | 330/507 | 7898 | Thompson | High Class Residential | 25,000,000.00 |
| I | 40 | 1870/8/182 | 7813 | Weslands | High Class Residential | 10,000,000.00 |
| I | 41 | Block104/171 | 5020 | Juja Rd Estate | Middle Class Residential | 3,000,000.00 |
| Ι | 42 | Deg/Mti/T359 | 2016 | Mutuini | Residential/Agricultural | 250,000.00 |
| 1 | 43 | 330/261 | 7339 | Thompson | High Class Residential | 25,000,000.00 |
| I | 44 | 209/7954/181 | 153 | Huruma | Low Class BCR | 900,000.00 |
| I | 45 | 2/443 | 7764 | Kilimani | High Class Residential | 7,200,000.00 |
| ı | 46 | 209/5559/F8 | 5037 | Old Racecourse | Middle Class Residential | 2,200,000.00 |
| 1 | 47 | 209/7963/11 | 151 | Huruma | Low Class Residential | 900,000.00 |
| 1 | 48 | 36/V11/650 | 4912 | Eastleigh | Middle Class Residential | 4,800,000.00 |
| 1 | 49 | 209/3143 | 7746 | Kileleshwa | High Class Residential | 8,112,000.00 |
| 1 | 50 | 1870/IV/116 | 7680 | Westlands | High Class Residential | 9,000,000.00 |
| 1 | 51 | 36/1/886 | 5002 | Eastlegh | Middle Class BCR | 4,000,000.00 |
| 1 | 52 | 209/8075 | 5060 | Old Racecource | Middle Class Residential | 3,200,000.00 |
| I | 53 | Deg/Kmi/S4 | 2310 | Kangemi | Residential/Agricultural | 2,200,000.00 |
| 1 | 54 | 209/2489 | 5043 | Pangani | Middle Class Residential | 4,000,000.00 |
| 1 | 55 | 209/8050 | 5008 | Old Racecourse | Middle Class Residential | 3,200,000.00 |
| 1 | 56 | Deg/Rir/S467 | 2285 | Riruta | Residential/Agricultural | 700,000.00 |
| 1 | 57 | 1870/111/321 | 7660 | Westlands | High Class Residential | 14,000,000.00 |
| I | 58 | 209/995/M3 | 7906 | Parklands | High Class Residential | 8,000,000.00 |
| | 59 | 330/310 | 7333 | Thompson | High Class Residential | 20,000,000.00 |
| | 60 | 209/15310 | 5069 | Pangani | Middle Class Residential | 5,000,000.00 |
| ľ | 61 | Dag/Wka/T35 | 2294 | Waithaka | Low Class Residential | 2,500,000.00 |

| 3,650,000.00 | 3,700,000.00 | 4,000,000.00 | 30-Nov-05 |
|---------------|---------------|---------------|-----------|
| 2,500,000.00 | 3,700,000.00 | 1,800,000.00 | 28-Nov-05 |
| 3,375,000.00 | 4,500,000.00 | 5,000,000.00 | 25-Nov-05 |
| 14,420,000.00 | 10,985,000.00 | 20,000,000.00 | 22-Nov-05 |
| 1,500,000.00 | 20,000,000.00 | 25,000,000.00 | 17-Nov-05 |
| 4,500,000.00 | 10,000,000.00 | 10,000,000.00 | 16-Nov-05 |
| 2,600,000.00 | 2,550,000.00 | 3,400,000.00 | 15-Nov-05 |
| 315,000.00 | 540,000.00 | 480,000.00 | 10-Nov-05 |
| 19,000,000.00 | 27,000,000.00 | 35,000,000.00 | 10-Nov-05 |
| 900,000.00 | 1,600,000.00 | 700,000.00 | 08-Nov-05 |
| 7,575,000.00 | 8,800,000.00 | 7,200,000.00 | 05-Nov-05 |
| 2,400,000.00 | 2,200,000.00 | 1,500,000.00 | 30-Oct-05 |
| 1,164,000.00 | 1,565,000.00 | 800,000.00 | 28-Oct-05 |
| 4,500,000.00 | 5,100,000.00 | 3,500,000.00 | 26-Oct-05 |
| 7,800,000.00 | 8,600,000.00 | 8,112,000.00 | 10-Oct-05 |
| 8,500,000.00 | 9,000,000.00 | 9,000,000.00 | 06-Oct-05 |
| 4,000,000.00 | 4,000,000.00 | 1,000,000.00 | 04-Oct-05 |
| 3,250,000.00 | 3,000,000.00 | 3,200,000.00 | 30-Sep-05 |
| 2,700,000.00 | 3,500,000.00 | 3,250,000.00 | 28-Sep-05 |
| 5,000,000.00 | 5,000,000.00 | 1,000,000.00 | 28-Sep-05 |
| 2,600,000.00 | 3,000,000.00 | 3,300,000.00 | 23-Sep-05 |
| 800,000.00 | 720,000.00 | 700,000.00 | 14-Sep-05 |
| 1,386,000.00 | 13,880,000.00 | 5,500,000.00 | 12-Sep-05 |
| 3,600,000.00 | 3,200,000.00 | 8,000,000.00 | 12-Sep-05 |
| 8,000,000.00 | 14,000,000.00 | 22,000,000.00 | 10-Sep-05 |
| 5,300,000.00 | 6,000,000.00 | 5,000,000.00 | 08-Sep-05 |
| 2,536,000.00 | 2,550,000.00 | 2,000,000.00 | 08-Sep-05 |

4,000,000.00

9,500,000.00

3,250,000.00

6.000.000.00

3,650,000,00

5,250,000.00

13,500,000.00

3,000,000.00

6,000,000.00

3 700 000 00

1,400,000.00

31,500,000.00

2,500,000.00

9,500,000.00

4 000 000 00

15-Dec-05

15-Dec-05

08-Dec-05

05-Dec-05

30-Nov-05

APPENDIX

| 6 | 32 | 36/V11/568 | 5001 | Eastleigh | Middle Class Residential | 4,800,000.00 |
|---|------------|--------------|------|----------------|--------------------------|---------------|
| 6 | 33 | 209/1705 | 7634 | Kilimani | High Class Residential | 11,500,000.00 |
| 6 | 34 | 209/12782 | 7613 | Kileleshwa | High Class Residential | 5,600,000.00 |
| 6 | 35 | 4851/25/F | 7934 | Kileleshwa | High Class Residential | 7,500,000.00 |
| 6 | 36 | 1870/V1/91/F | 7604 | Westlands | High Class Residential | 6,500,000.00 |
| 6 | 37 | 330/746 | 7801 | Thompson | High Class Residential | 4,500,000.00 |
| е | 8 | 209/118/58 | 4997 | Ngara | Middle Class Residential | 9,000,000.00 |
| 6 | 39 | Deg/Rir/S338 | 2270 | Riruta | Residential/Agricultural | 2,200,000.00 |
| 7 | 0 | 1870/11/104 | 7569 | Westlands | High Class Residential | 25,000,000.00 |
| 7 | 1 | 330/723 | 7568 | Thompson | High Class Residential | 12,500,000.00 |
| 7 | 2 | 104/519/4 | 5038 | Juja Rd Estate | Middle Class Residential | 2,300,000.00 |
| 7 | 7 3 | 209/11388/86 | 130 | Huruma | Low Class BCR | 400,000.00 |
| 7 | 4 | 36/11/69 | 4989 | Eastleigh | Middle Class Residential | 14,500,000.00 |
| 7 | ' 5 | Block104/516 | 5003 | Juja Rd Estate | Middle Class BCR | 11,500,000.00 |
| 7 | 6 | 1870/X/4 | 7656 | Westlands | High Class Residential | 6,500,000.00 |
| 7 | 7 | Block104/184 | 4984 | Juja Rd Estate | Middle Class Residential | 4,200,000.00 |
| 7 | 78 | 209/104/F86 | 7609 | Parklands | High Class Residential | 2,500,000.00 |
| 7 | 79 | 36/1/125 | 4980 | Eastleigh | Middle Class Residential | 6,900,000.00 |
| 8 | 30 | 209/14193 | 7639 | Parklands | High Class Residential | 13,000,000.00 |
| 8 | 31 | 209/1821 | 7585 | Paridands | High Class Residential | 25,000,000.00 |
| 8 | 32 | 4857/12 | 7645 | Kileleshwa | High Class Residential | 8,000,000.00 |
| 8 | 3 | 36/V11/606 | 7573 | Eastlegh | Middle Class Residential | 00,000,000,8 |
| 8 | 34 | 209/90/9/M5 | 7636 | Parklands | High Class Residential | 6,700,000.00 |
| 8 | 15 | 330/496 | 7526 | Thompson | High Class Residential | 16,500,000.00 |
| 8 | 36 | 209/8593/8/M | 7683 | Westlands | High Class Residential | 6,200,000.00 |
| 8 | 37 | 2/473/F | 7541 | Kilimani | High Class Residential | 6,000,000.00 |
| 8 | 8 | 1870/6/244/M | 7597 | Westlands | High Class Residential | 6,000,000.00 |
| 8 | 19 | 209/4300/115 | 4990 | Pangani | Middle Class Residential | 5,000,000.00 |
| 9 | 0 | Block104/15 | 5039 | Juja Rd Estate | Middle Class Residential | 3,000,000.00 |
| 9 | 1 | 2/860 | 7519 | Kilimani | High Class Residential | 11,000,000.00 |
| 9 | 2 | 60025 | 6004 | Westlands | High Class Residential | 00.000,000,8 |

| 5,700,000.00 | 7,000,000.00 | 11,500,000.00 | 05-Sep-05 |
|---------------|---------------|---------------|-----------|
| 6,500,000.00 | 7,100,000.00 | 11,500,000.00 | 26-Aug-05 |
| 4,536,000.00 | 3,405,000.00 | 5,600,000.00 | 26-Aug-05 |
| 6,480,000.00 | 4,170,000.00 | 7,880,000 00 | 24-Aug-05 |
| 6,500,000.00 | 4,000,000.00 | 6,500,000.00 | 22-Aug-05 |
| 4,000,000.00 | 4,500,000.00 | 1,500,000.00 | 10-Aug-05 |
| 10,700,000.00 | 11,700,000.00 | 11,000,000.00 | 10-Aug-05 |
| 2,600,000.00 | 2,800,000.00 | 2,500,000.00 | 09-Aug-05 |
| 20,000,000.00 | 28,000,000.00 | 45,000,000.00 | 08-Aug-05 |
| 10,800,000.00 | 10,800,000.00 | 12,500,000.00 | 07-Aug-05 |
| 2,400,000.00 | 2,000,000.00 | 1,800,000.00 | 06-Aug-05 |
| 550,000.00 | 750,000.00 | 350,000.00 | 06-Aug-05 |
| 18,576,000.00 | 10,200,000.00 | 21,500,000.00 | 04-Aug-05 |
| 10,600,000.00 | 14,000,000.00 | 12,000,000.00 | 01-Aug-05 |
| 6,500,000.00 | 3,400,000.00 | 6,500,000.00 | 29-Jul-05 |
| 2,600,000.00 | 3,000,000.00 | 4,500,000.00 | 28-Jul-05 |
| 2,376,000.00 | 1,600,000.00 | 2,300,000.00 | 26-Jul-05 |
| 8,775,000.00 | 6,100,000.00 | 10,000,000.00 | 26-Jul-05 |
| 7,200,000.00 | 10,000,000.00 | 13,000,000.00 | 26-Jul-05 |
| 13,900,000.00 | 12,300,000.00 | 25,000,000.00 | 25-Jul-05 |
| 8,300,000.00 | 6,000,000.00 | 8,000,000.00 | 21-Jul-05 |
| 10,530,000.00 | 8,512,000.00 | 8,000,000.00 | 20-Jul-05 |
| 4,752,000.00 | 5,225,000.00 | 6,700,000.00 | 09-Jul-05 |
| 10,000,000.00 | 11,500,000.00 | 16,500,000.00 | 15-Jul-05 |
| 5,800,000.00 | 3,700,000.00 | 6,000,000.00 | 14-Jul-05 |
| 9,165,000.00 | 10,650,000.00 | 6,000,000.00 | 06-Jul-05 |
| 6,500,000.00 | 4,800,000.00 | 5,000,000.00 | 05-Jul-05 |
| 3,640,000.00 | 5,000,000.00 | 3,000,000.00 | 15-Jul-05 |
| 2,600,000.00 | 3,000,000.00 | 2,900,000.00 | 29-Jun-05 |
| 9,072,000.00 | 7,960,000.00 | 11,000,000.00 | 28-Jun-05 |
| 7,500,000.00 | 8,500,000.00 | 5,000,000.00 | 20-Jun-05 |
| | | | |

APPENDIX

| 93 | 209/11358/318 | 134 | New Mathere | Low Class Residential | 1,100,000.00 | |
|-----|---------------|------|----------------|--------------------------|---------------|---|
| 94 | 1/249/F | 7532 | Kilimani | High Class Residential | 5,000,000.00 | |
| 95 | 209/3271/51 | 4970 | Pangani | Middle Class Residential | 3,800,000.00 | |
| 96 | 330/1256/M | 7593 | Thompson | High Class Residential | 7,500,000.00 | |
| 97 | 1870/V/143 | 7869 | Westlands | High Class Residential | 6,000,000.00 | |
| 98 | 1/578 | 7765 | Kilimani | High Class Residential | 9,000,000.00 | |
| 99 | 39/7/624&625 | 4982 | Eastleigh | Middle Class Residential | 3,500,000.00 | |
| 100 | 1870//iv/137 | 7465 | Westlands | High Class Residential | 3,400,000.00 | |
| 101 | 330/669 | 7778 | Thompson | High Class Residential | 20,000,000.00 | |
| 102 | 209/92/17/F4 | 7649 | Parklands | High Class Residential | 3,000,000.00 | |
| 103 | Deg/Rut/362 | 2245 | Ruthimiti | Residential/Agricultural | 800,000.00 | |
| 104 | 209/958/8/BF | 7622 | Kilimani | High Class Residential | 25,000,000.00 | |
| 105 | 36/111/1089 | 4962 | Eastleigh | Middle Class Residential | 3,300,000.00 | |
| 106 | 209/65/41/F | 7513 | Parlands | High Class Residential | 4,500,000.00 | |
| 107 | 2/199 | 7480 | Kilimani | High Class Residential | 24,500,000.00 | |
| 108 | 1126,27&29 | 2509 | Thompson | High Class Residential | 7,500,000.00 | |
| 109 | 209/49/1 | 7871 | Kilimani | High Class Residential | 6,000,000.00 | |
| 110 | 1870/x/30/M9 | 7458 | Westlands | High Class Residential | 7,500,000.00 | |
| 111 | 1870/V/24 | 7640 | Westlands | High Class Residential | 6,000,000.00 | |
| 112 | 1870/111/70 | 7289 | Westlands | High Class Residential | 27,000,000.00 | |
| 113 | 209/11092/3 | 7471 | Parklands | High Class Residential | 2,800,000.00 | |
| 114 | Block104/68 | 4956 | Juja Rd Estate | Middle Class Residential | 2,500,000.00 | |
| 115 | Deg/WKA/65 | 2232 | Waithaka | Residential/Agricultural | 2,000,000.00 | |
| 116 | 209/354/18 | 7479 | Kilimani | High Class Residential | 5,200,000.00 | |
| 117 | Deg/Rir/4334 | 2324 | Riruta | Residential/Agricultural | 1,500,000.00 | |
| 118 | 209/118/81 | 4971 | Ngara | Middle Class Residential | 6,000,000.00 | |
| 119 | 209/18/2 | 7374 | Paridands | High Class Residential | 25,000,000.00 | |
| 120 | 205/62/F1 | 7378 | Kileleshwa | High Class Residential | 5,500,000.00 | |
| 121 | 1870/b/20 | 7397 | Westlands | High Class Residential | 6,800,000.00 | |
| 122 | 209/9754 | 147 | Huruma | Low Class BCR | 5,000,000.00 | |
| 123 | 1870/v/180 | 7392 | Westlands | High Class Residential | 6,300,000.00 | |
| 123 | 1870/v/180 | 7392 | Westlands | High Class Residential | 6,300,000.0 | 0 |

| 1,250,000.00 | 1,050,000.00 | 00.000.00 | 18-Jun-05 |
|---------------|---------------|---------------|-----------|
| 4,500,000.00 | 4,700,000.00 | 5,000,000.00 | 15-Jun-05 |
| 2,800,000.00 | 4,700,000.00 | 5,200,000.00 | 14-Jun-05 |
| 6,750,000.00 | 7,600,000.00 | 6,000,000.00 | 13-Jun-05 |
| 3,500,000.00 | 4,000,000.00 | 6,000,000.00 | 12-Jun-05 |
| 5,400,000.00 | 6,295,000.00 | 9,000,000.00 | 08-Jun-05 |
| 5,000,000.00 | 4,000,000.00 | 3,600,000.00 | 07-Jun-05 |
| 3,200,000.00 | 2,250,000.00 | 3,400,000.00 | 07-Jun-05 |
| 14,000,000.00 | 19,000,000.00 | 20,000,000.00 | 05-Jun-05 |
| 3,800,000.00 | 3,500,000.00 | 1,312,000.00 | 30-May-05 |
| 964,000.00 | 1,000,000.00 | 200,000.00 | 27-May-05 |
| 20,000,000.00 | 23,000,000.00 | 35,000,000.00 | 25-May-05 |
| 2,160,000.00 | 2,934,000.00 | 3,300,000.00 | 20-May-05 |
| 4,158,000.00 | 5,350,000.00 | 3,500,000.00 | 15-May-05 |
| 12,500,000.00 | 18,000,000.00 | 34,500,000.00 | 15-May-05 |
| 8,100,000.00 | 6,580,000.00 | 7,500,000.00 | 10-May-05 |
| 2,000,000.00 | 5,900,000.00 | 6,000,000.00 | 08-May-05 |
| 5,940,000.00 | 5,392,000.00 | 7,500,000.00 | 05-May-05 |
| 7,800,000.00 | 5,800,000.00 | 4,000,000.00 | 05-May-05 |
| 13,000,000.00 | 16,000,000.00 | 27,000,000.00 | 04-May-05 |
| 2,600,000.00 | 1,800,000.00 | 2,800,000.00 | 29-Apr-05 |
| 2,100,000.00 | 1,900,000.00 | 2,800,000.00 | 29-Apr-05 |
| 3,000,000.00 | 4,500,000.00 | 3,500,000.00 | 21-Apr-05 |
| 4,700,000.00 | 2,800,000.00 | 5,200,000.00 | 18-Apr-05 |
| 1,700,000.00 | 2,500,000.00 | 1,850,000.00 | 18-Apr-05 |
| 5,700,000.00 | 7,100,000.00 | 4,000,000.00 | 18-Apr-05 |
| 10,000,000.00 | 11,000,000.00 | 25,000,000.00 | 16-Apr-05 |
| 4,320,000.00 | 5,630,000.00 | 5,500,000.00 | 09-Apr-05 |
| 6,000,000.00 | 6,500,000.00 | 1,500,000.00 | 08-Apr-05 |
| 7,900,000.00 | 8,500,000.00 | 5,000,000.00 | 05-Apr-05 |
| 5,200,000.00 | 5,700,000.00 | 6,300,000.00 | 05-Apr-05 |

| 124 209/8161/10M | 7360 | Kileleshwa | High Class Residential | 40,000,000.00 |
|-------------------|------|-------------|--------------------------|---------------|
| 125 36/vii/699 | 4953 | Eastleigh | Middle Class Residential | 1,500,000.00 |
| 126 209/3277/2 | 7356 | Kileleshwa | High Class Residential | 11,000,000.00 |
| 127 Block 104/382 | 4950 | Ushirika | Middle Class Residential | 3,500,000.00 |
| 128 Dag/kmi/T255 | 2203 | Kangemi | Residential/Agricultural | 1,000,000.00 |
| 129 36/11/40 | 4937 | Eastleigh | Middle Class Residential | 11,000,000.00 |
| 130 1870/x/79 | 7772 | Westlands | High Class Residential | 7,000,000.00 |
| 131 11929/42 | 2255 | Riruta | Low Class Residential | 1,500,000.00 |
| 132 209/2955 | 4932 | Eastleigh | Middle Class Residential | 2,200,000.00 |
| 133 209/8552/387 | 146 | New Mathare | Low Class BCR | 700,000.00 |
| 134 1/187/F | 7538 | Kilimani | High Class Residential | 5,000,000.00 |
| 135 330/1281/M | 7459 | Thompson | High Class Residential | 8,750,000.00 |
| 136 9/M | 7576 | Thompson | High Class Residential | 9,000,000.00 |
| 137 209/1573 | 7400 | Kilimani | High Class Residential | 25,000,000.00 |
| 138 1870/ii/45 | 7402 | Westlands | High Class Residential | 21,000,000.00 |
| 139 209/3014/1/M | 7365 | Kilimani | High Class Residential | 5,400,000.00 |
| 140 1870/v/2002 | 7961 | Westlands | High Class Residential | 12,000,000.00 |
| 141 Deg/Rir/2238 | 2269 | Riruta | Residential/Agricultural | 2,000,000.00 |
| 142 209/407/3 | 7714 | Kilimani | High Class Residential | 7,500,000.00 |
| 143 Deg/Kmi/T59 | 2215 | Kangemi | Residential/Agricultural | 5,000,000.00 |
| 144 Dag/Wka/T212 | 3222 | Waithaka | Residential/Agricultural | 5,000,000.00 |
| 145 209/2531/4 | 4920 | Ngare | Middle Class Residential | 10,000,000.00 |
| 146 209/15413 | 4988 | Eastleigh | Middle Class Residential | 4,200,000.00 |
| 147 209/4344/3 | 7830 | Parklands | High Class Residential | 22,000,000.00 |
| 148 209/11/897 | 7840 | Kileleshwa | High Class Residential | 8,400,000.00 |
| 149 209/49 | 7777 | Kileleshwa | High Class Residential | 22,000,000.00 |
| 150 1870/238/111 | 7747 | Westlands | High Class Residential | 6,000,000.00 |
| 151 209/76/1 | 7716 | Westlands | High Class Residential | 21,500,000.00 |
| 152 36/1/113 | 4908 | Eastleigh | Middle Class Residential | 2,200,000.00 |
| 153 209/2389/105 | 4807 | Pangani | Middle Class Residential | 4,500,000.00 |
| 154 104/519/fe1 | 5048 | Ushirika | Middle Class Residential | 2,300,000.00 |

| 43,000,000.00 | 32,000,000.00 | 8,000,000.00 | 01-Apr-05 |
|---------------|---------------|---------------|-----------|
| 1,800,000.00 | 1,500,000.00 | 1,800,000.00 | 25-Mar-05 |
| 6,500,000.00 | 7,500,000.00 | 11,000,000.00 | 23-Mar-05 |
| 2,800,000.00 | 2,350,000.00 | 3,800,000.00 | 21-Mar-05 |
| 944,000.00 | 977,000.00 | 1,000,000.00 | 18-Mar-05 |
| 12,960,000.00 | 10,700,000.00 | 22,500,000.00 | 14-Mar-05 |
| 5,400,000.00 | 6,500,000.00 | 7,000,000.00 | 11-Mar-05 |
| 1,796,000.00 | 2,800,000.00 | 1,100,000.00 | 10-Mar-05 |
| 1,830,000.00 | 1,873,000.00 | 2,200,000.00 | 01-Mar-05 |
| 720,000.00 | 870,000.00 | 700,000.00 | 01-Mar-05 |
| 5,200,000.00 | 4,200,000.00 | 5,000,000.00 | 28-Feb-05 |
| 6,266,000.00 | 6,750,000.00 | 8,750,000.00 | 28-Feb-05 |
| 8,100,000.00 | 7,800,000.00 | 9,000,000.00 | 28-Feb-05 |
| 20,000,000.00 | 20,800,000.00 | 35,000,000.00 | 25-Feb-05 |
| 15,276,000.00 | 18,000,000.00 | 28,000,000.00 | 22-Feb-05 |
| 5,300,000.00 | 6,000,000.00 | 5,400,000.00 | 15-Feb-05 |
| 10,100,000.00 | 11,500,000.00 | 12,000,000.00 | 13-Feb-05 |
| 3,300,000.00 | 3,800,000.00 | 3,300,000.00 | 10-Feb-05 |
| 6,000,000.00 | 9,000,000.00 | 6,400,000.00 | 08-Feb-05 |
| 4,800,000.00 | 5,400,000.00 | | 03-Feb-05 |
| 5,700,000.00 | 9,720,000.00 | | 30-Jan-05 |
| 9,500,000.00 | 7,000,000.00 | 10,000,000.00 | 20-Jan-05 |
| 4,500,000.00 | 4,400,000.00 | 4,400,000.00 | 18-Jan-05 |
| 8,000,000.00 | 12,700,000.00 | 22,000,000.00 | 12-Jan-05 |
| 6,500,000.00 | 7,500,000.00 | 8,400,000.00 | 12-Jan-05 |
| 6,000,000.00 | 9,000,000.00 | 32,080,000.00 | 12-Jan-05 |
| 5,346,000.00 | 6,162,000.00 | 6,000,000.00 | 11-Jen-05 |
| 10,368,000.00 | 12,664,000.00 | 31,500,000.00 | 10-Jen-05 |
| 4,100,000.00 | 3,900,000.00 | 3,000,000.00 | 31-Dec-04 |
| 3,000,000.00 | 4,000,000.00 | 4,500,000.00 | 31-Dec-04 |
| 2,400,000.00 | 2,000,000.00 | 2,500,000.00 | 13-Dec-04 |

| 155 330/354 | 7910 | Thompson | High Class Residential | 10,400,000.00 |
|-------------------|------|----------------|--------------------------|---------------|
| 156 209/13825 | 4910 | Ngara | Middle Class BCR | 1,200,000.00 |
| 157 Block 104/383 | 4903 | Ushirika | Middle Class Residential | 4,200,000.00 |
| 158 209/2389/168 | 4898 | Pangani | Middle Class Residential | 6,000,000.00 |
| 159 Block 104/322 | 4894 | Ushirika | Middle Class Residential | 5,000,000.00 |
| 160 209/3671/1 | 4892 | Pangani | Middle Class Residential | 10,000,000.00 |
| 161 209/2389/76 | 4882 | Pangani | Middle Class Residential | 4,000,000.00 |
| 162 330/40/1/M | 7911 | Thompson | High Class Residential | 6,700,000.00 |
| 163 1/922 | 7971 | Kilimani | High Class Residential | 12,000,000.00 |
| 164 209/7323/1/m | 7394 | Kileleshwa | High Class Residential | 7,500,000.00 |
| 165 Deg/Kmi/450 | 2147 | Kangemi | Residential/Agricultural | 2,000,000.00 |
| 166 Dag/Kmi/T249 | 2153 | Kangemi | Low Class Residential | 2,120,000.00 |
| 167 Deg/Rir/s163 | 2168 | Riruta | Low Class Residential | 1,800,000.00 |
| 168 209/9754/133 | 132 | Huruma | Low Class Residential | 1,000,000.00 |
| 169 209/8349 | 4899 | Old Racecourse | Middle Class Residential | 3,000,000.00 |
| 170 Deg/Kmi/s36 | 2149 | Kangemi | Residential/Agricultural | 1,050,000.00 |
| 171 209/1661/1 | 4919 | Pangani | Middle Class Residential | 11,626,000.00 |
| 172 Block 104/360 | 4893 | Ushirika | Middle Class Residential | 4,200,000.00 |
| 173 209/8117 | 4925 | Old Racecourse | Middle Class Residential | 3,200,000.00 |
| 174 Block 104/383 | 4866 | Juja Rd Estate | Middle Class Residential | 3,500,000.00 |
| 175 209/11358 | 4865 | New Mathare | Low Class Residential | 4,000,000.00 |
| 176 36/ii/99 | 4871 | Eastleigh | Middle Class Residential | 6,000,000.00 |
| 177 36/vii/498 | 4852 | Eastleigh | Middle Class BCR | 16,000,000.00 |
| 178 209/1418/39 | 4845 | Ngara | Middle Class Residential | 6,000,000.00 |
| 179 209/1733 | 4854 | Ngara | Middle Class BCR | 38,000,000.00 |
| 180 36/111/1453 | 4874 | Eastleigh | Middle Class BCR | 18,000,000.00 |
| 181 209/1611/3 | 4876 | Ngara | Middle Class BCR | 25,000,000.00 |
| 182 36/vii/509 | 4846 | Eastleigh | Middle Class Residential | 9,600,000.00 |
| 183 209/8459 | 4840 | Old Racecourse | Middle Class Residential | 3,000,000.00 |
| 184 1870/ii/168/m | 6965 | Westlands | High Class Residential | 7,300,000.00 |
| 185 36/ii/76 | 4839 | Eastleigh | Middle Class Residential | 6,300,000.00 |

| 10,800,000.00 | 12,100,000.00 | 10,400,000.00 | 31-Dec-04 |
|---------------|---------------|---------------|-----------|
| 800,000.00 | 1,200,000.00 | 1,200,000.00 | 21-Dec-04 |
| 3,240,000.00 | 3,500,000.00 | 3,550,000.00 | 15-Dec-04 |
| 6,550,000.00 | 6,500,000.00 | 5,500,000.00 | 09-Dec-04 |
| 3,240,000.00 | 5,000,000.00 | 5,000,000.00 | 09-Dec-04 |
| 11,000,000.00 | 11,000,000.00 | 10,000,000.00 | 02-Dec-04 |
| 2,300,000.00 | 4,200,000.00 | 4,000,000.00 | 01-Dec-04 |
| 6,100,000.00 | 6,500,000.00 | 6,700,000.00 | 26-Nov-04 |
| 12,500,000.00 | 13,000,000.00 | 12,000,000.00 | 22-Nov-04 |
| 6,500,000.00 | 4,800,000.00 | 7,500,000.00 | 05-Nov-04 |
| 4,900,000.00 | 4,000,000.00 | | 26-Oct-04 |
| 4,700,000.00 | 4,800,000.00 | 4,000,000.00 | 25-Oct-04 |
| 1,800,000.00 | 2,800,000.00 | - | 25-Oct-04 |
| 1,200,000.00 | 1,900,000.00 | 1,100,000.00 | 10-Oct-04 |
| 3,000,000.00 | 2,600,000.00 | 3,000,000.00 | 29-Sep-04 |
| 1,700,000.00 | 900,000.00 | 700,000.00 | 28-Sep-04 |
| 10,700,000.00 | 14,000,000.00 | 12,000,000.00 | 28-Sep-04 |
| 3,240,000.00 | 3,500,000.00 | 5,800,000.00 | 22-Sep-04 |
| 2,000,000.00 | 2,300,000.00 | 2,700,000.00 | 22-Sep-04 |
| 3,240,000.00 | 3,100,000.00 | 3,500,000.00 | 15-Sep-04 |
| 6,254,000.00 | 6,600,000.00 | 3,640,000.00 | 14-Sep-04 |
| 5,400,000.00 | 5,000,000.00 | 6,200,000.00 | 09-Sep-04 |
| 27,000,000.00 | 15,000,000.00 | 29,000,000.00 | 08-Sep-04 |
| 4,000,000.00 | 6,400,000.00 | 6,000,000.00 | 25-Aug-04 |
| 37,700,000.00 | 40,000,000.00 | 38,000,000.00 | 21-Aug-04 |
| 26,700,000.00 | 25,446,000.00 | 18,000,000.00 | 20-Aug-04 |
| 14,235,000.00 | 21,144,000.00 | 25,000,000.00 | 20-Aug-04 |
| 9,504,000.00 | 11,284,000.00 | 4,800,000.00 | 11-Aug-04 |
| 2,300,000.00 | 2,100,000.00 | 3,000,000.00 | 09-Aug-04 |
| 6,000,000.00 | 6,000,000.00 | 7,300,000.00 | 04-Aug-04 |
| 3,400,000.00 | 3,380,000.00 | 6,300,000.00 | 04-Aug-04 |
| | | | |

| 186 | 36/1/51 | 4848 | Eastleigh | Middle Class BCR | 5,300,000.00 |
|-----|---------------|------|----------------|--------------------------|---------------|
| 187 | Deg/Wks/1375 | 2108 | Waithaka | Residential/Agricultural | 750,000.00 |
| 188 | 1870/0/329 | 6970 | Parklands | High Class Residential | 10,000,000.00 |
| 189 | 209/8521 | 4856 | Old Racecourse | Middle Class Residential | 3,200,000.00 |
| 190 | 209/8433 | 4847 | Old Racecourse | Middle Class Residential | 3,500,000.00 |
| 191 | 104/15,25&106 | 4838 | Juja Rd Estate | Middle Class Residential | 2,800,000.00 |
| 192 | 209/2003 | 4842 | Pangani | Middle Class Residential | 5,000,000.00 |
| 193 | 1870/1/407 | 6929 | Westlands | High Class Residential | 6,500,000.00 |
| 194 | Deg/Kmi/120 | 2114 | Kangemi | Residential/Agricultural | 1,800,000.00 |
| 195 | Deg/rir/4848 | 2216 | Waithaka | Residential/Agricultural | 1,000,000.00 |
| 196 | 209/9791 | 4851 | Pangani | Middle Class BCR | 10,000,000.00 |
| 197 | 209/118/51 | 4831 | Pangani | Middle Class Residential | 3,600,000.00 |
| 198 | 36/vii/328 | 4844 | Eastleigh | Middle Class Residential | 9,200,000.00 |
| 199 | 209/347/17 | 6916 | Kileleshwa | High Class Residential | 6,250,000.00 |
| 200 | 38/vil/302 | 4862 | Eastleigh | Middle Class Residential | 7,500,000.00 |
| 201 | Deg/ut/1010 | 2103 | Uthiru | Residential/Agricultural | 1,500,000.00 |
| 202 | Deg/Kmi/391 | 2109 | Kangemi | Low Class Residential | 1,000,000.00 |
| 203 | 36/iii/1108 | 4837 | Eastleigh | Middle Class Residential | 3,200,000.00 |
| 204 | 209/392/8 | 6886 | Kilimani | High Class Residential | 17,000,000.00 |
| 205 | 1870/W/108 | 6943 | Westlands | High Class Residential | 18,800,000.00 |
| 206 | 209/380/7 | 6876 | Kilimani | High Class Residential | 14,200,000.00 |
| 207 | 209/197/1/116 | 4859 | Pangani | Middle Class Residential | 4,200,000.00 |
| 208 | 209/2251/5/F | 6928 | Parklands | High Class Residential | 4,000,000.00 |
| 209 | 209/2994 | 6865 | Kileleshwa | High Class Residential | 8,500,000.00 |
| 210 | 330/364 | 6964 | Thompson | High Class Residential | 12,100,000.00 |
| 211 | 209/8907/F | 6932 | Parklands | High Class Residential | 4,500,000.00 |
| 212 | 2/656 | 6863 | Kilimani | High Class Residential | 4,920,000.00 |
| 213 | 35/357/9 | 7654 | Paridands | High Class Residential | 6,500,000.00 |
| 214 | 209/7963/199 | 139 | Huruma | Low Class Residential | 700,000.00 |
| 215 | 1870/√/175 | 6884 | Westlands | High Class Residential | 17,000,000.00 |
| 216 | 36/407/xvii | 4815 | Eastleigh | Middle Class Residential | 8,000,000.00 |

| 6,900,000.00 | 4,900,000.00 | 7,000,000.00 | 03-Aug-04 |
|---------------|---------------|---------------|-----------|
| 540,000.00 | 950,000.00 | 200,000.00 | 30-Jul-04 |
| 6,415,000.00 | 8,000,000.00 | 10,000,000.00 | 27-Jul-04 |
| 2,600,000.00 | 2,500,000.00 | 3,200,000.00 | 27-Jul-04 |
| 2,300,000.00 | 2,000,000.00 | 3,500,000.00 | 26-Jul-04 |
| 2,600,000.00 | 2,787,000.00 | 2,800,000.00 | 22-Jul-04 |
| 3,000,000.00 | 5,250,000.00 | 5,000,000.00 | 21-Jul-04 |
| 5,400,000.00 | 6,300,000.00 | 5,500,000.00 | 21-Jul-04 |
| 2,100,000.00 | 3,800,000.00 | 3,000,000.00 | 20-Jul-04 |
| 1,295,000.00 | 1,300,000.00 | 1,300,000.00 | 20-Jul-04 |
| 10,000,000.00 | 10,000,000.00 | 5,000,000.00 | 16-Jul-04 |
| 2,500,000.00 | 3,700,000.00 | 4,000,000.00 | 15-Jul-04 |
| 8,533,000.00 | 9,260,000.00 | 9,000,000.00 | 12-Jul-04 |
| 4,600,000.00 | 6,500,000.00 | 3,850,000.00 | 09-Jul-04 |
| 8,554,000.00 | 8,100,000.00 | 7,500,000.00 | 05-Jul-04 |
| 1,550,000.00 | 2,250,000.00 | 1,650,000.00 | 01-Jul-04 |
| 1,150,000.00 | 1,550,000.00 | 1,700,000.00 | 28-Jun-04 |
| 3,375,000.00 | 3,200,000.00 | 3,200,000.00 | 25-Jun-04 |
| 17,316,000.00 | 17,580,000.00 | 17,000,000.00 | 25-Jun-04 |
| 15,672,000.00 | 17,324,000.00 | 28,800,000.00 | 23-Jun-04 |
| 11,000,000.00 | 13,900,000.00 | 14,200,000.00 | 20-Jun-04 |
| 4,200,000.00 | 2,800,000.00 | 4,200,000.00 | 18-Jun-04 |
| 3,700,000.00 | 3,850,000.00 | 4,000,000.00 | 18-Jun-04 |
| 5,700,000.00 | 10,000,000.00 | -7,600,000.00 | 17-Jun-04 |
| 9,450,000.00 | 10,900,000.00 | 12,100,000.00 | 14-Jun-04 |
| 4,400,000.00 | 4,000,000.00 | 4,250,000.00 | 08-Jun-04 |
| 4,536,000.00 | 2,580,000.00 | 4,920,000.00 | 08-Jun-04 |
| 5,000,000.00 | 4,300,000.00 | 6,500,000.00 | 06-Jun-04 |
| 670,000.00 | 800,000.00 | 1,200,000.00 | 04-Jun-04 |
| 9,500,000.00 | 10,800,000.00 | 17,000,000.00 | 03-Jun-04 |
| 9,720,000.00 | 8,600,000.00 | 8,000,000.00 | 31-May-04 |

| 217 Block104/519 | 4800 | Ushirika | Middle Class Residential | 250,000.00 |
|-------------------|------|------------|--------------------------|---------------|
| 218 209/2489/39 | 4818 | Ngara | Middle Class Residential | 10,000,000.00 |
| 219 209/9791/1 | 4858 | Pangani | Middle Class BCR | 3,500,000.00 |
| 220 36/11/131 | 4804 | Eastleigh | Middle Class Residential | 3,850,000.00 |
| 221 209/13033 | 6851 | Kilimani | High Class Residential | 4,500,000.00 |
| 222 209/118/38 | 4835 | Pangani | Middle Class Residential | 4,000,000.00 |
| 223 1/1148 | 6913 | Killmani | High Class Residential | 3,250,000.00 |
| 224 Block 104/402 | 4822 | Ushirika | Middle Class Residential | 3,350,000.00 |
| 225 Deg/Rir/s207 | 2081 | Riruta | Residential/Agricultural | 2,000,000.00 |
| 226 1/855/m | 6824 | Kilimani | High Class Residential | 5,000,000.00 |
| 227 1870/1/91 | 6820 | Westlands | High Class Residential | 10,000,000.00 |
| 228 209/363/4 | 7873 | Kilimani | High Class Residential | 17,000,000.00 |
| 229 209/118/62 | 4817 | Ngara | Middle Class Residential | 16,000,000.00 |
| 230 209/118/45/f | 6809 | Parklands | High Class Residential | 25,000,000.00 |
| 231 36/ii/223 | 4803 | Eastleigh | Middle Class Residential | 5,000,000.00 |
| 232 209/3529/7/f | 6852 | Parklands | High Class Residential | 10,000,000.00 |
| 233 2/115/ms | 6967 | Kilimani | High Class Residential | 29,000,000.00 |
| 234 205/2681/5/m | 6969 | Kilimani | High Class Residential | 5,000,000.00 |
| 235 330/455 | 6838 | Thompson | High Class Residential | 18,000,000.00 |
| 236 36/V116 | 4790 | Eastleigh | Middle Class BCR | 12,000,000.00 |
| 237 209/7307 | 6817 | Kileleshwa | High Class Residential | 7,000,000.00 |
| 238 209/11542/6 | 6927 | Kileleshwa | High Class Residential | 11,500,000.00 |
| 239 2/655/1 | 6825 | Kilimani | High Class Residential | 4,100,000.00 |
| 240 1870/10/120 | 7510 | Westlands | High Class Residential | 10,000,000.00 |
| 241 7158/198 | 6870 | Westlands | High Class Residential | 11,750,000.00 |
| 242 209/3271/82 | 4785 | Pangani | Middle Class Residential | 9,000,000.00 |
| 243 209/4300 | 4812 | Pangani | Middle Class Residential | 5,500,000.00 |
| 244 209/10717/6m | 6836 | Westlands | High Class Residential | 13,540,000.00 |
| 245 1870/v/239 | 6822 | Wetlands | High Class Residential | 49,200,000.00 |
| 246 209/1256 | 6735 | Kileleshwa | High Class Residential | 40,000,000.00 |
| 247 Dag/ Rir/T177 | 2070 | Riruta | Residential/Agricultural | 7,000,000.00 |

| 2,100,000.00 | 1,900,000.00 | 2,500,000.00 | 27-May-04 |
|---------------|---------------|---------------|-----------|
| 10,000,000.00 | 6,000,000.00 | 7,500,000.00 | 26-May-04 |
| 3,600,000.00 | 3,000,000.00 | 3,500,000.00 | 25-May-04 |
| 1,800,000.00 | 3,200,000.00 | 3,850,000.00 | 25-May-04 |
| 5,300,000.00 | 3,000,000.00 | 4,000,000.00 | 24-May-04 |
| 3,000,000.00 | 4,100,000.00 | 4,000,000.00 | 24-May-04 |
| 3,250,000.00 | 2,300,000.00 | 3,250,000.00 | 23-May-04 |
| 2,350,000.00 | 2,400,000.00 | 3,350,000.00 | 21-May-04 |
| 2,200,000.00 | 3,500,000.00 | 1,450,000.00 | 14-May-04 |
| 3,500,000.00 | 4,400,000.00 | 5,000,000.00 | 13-May-04 |
| 8,500,000.00 | 7,100,000.00 | 10,000,000.00 | 12-May-04 |
| 9,500,000.00 | 11,000,000.00 | 17,000,000.00 | 11-May-04 |
| 10,700,000.00 | 11,700,000.00 | 4,000,000.00 | 11-May-04 |
| 14,540,000.00 | 20,000,000.00 | 35,000,000.00 | 07-May-04 |
| 5,200,000.00 | 5,300,000.00 | 5,000,000.00 | 07-May-04 |
| 6,804,000.00 | 9,430,000.00 | 8,000,000.00 | 07-May-04 |
| 17,500,000.00 | 19,700,000.00 | 39,000,000.00 | 04-May-04 |
| 4,800,000.00 | 4,400,000.00 | 5,000,000.00 | 04-May-04 |
| 11,000,000.00 | 14,500,000.00 | 28,000,000.00 | 04-May-04 |
| 13,608,000.00 | 12,564,000.00 | 7,400,000.00 | 03-May-04 |
| 6,000,000.00 | 8,000,000.00 | 7,000,000.00 | 02-May-04 |
| 7,800,000.00 | 4,780,000.00 | 11,500,000.00 | 27-Apr-04 |
| 3,880,000.00 | 2,519,000.00 | 4,100,000.00 | 27-Apr-04 |
| 5,000,000.00 | 5,500,000.00 | 10,000,000.00 | 26-Apr-04 |
| 7,000,000.00 | 9,500,000.00 | 11,750,000.00 | 21-Apr-04 |
| 7,695,000.00 | 8,528,000.00 | 9,000,000.00 | 19-Apr-04 |
| 4,750,000.00 | 5,200,000.00 | 5,500,000.00 | 15-Apr-04 |
| 7,200,000.00 | 9,000,000.00 | 13,537,500.00 | 14-Apr-04 |
| 43,000,000.00 | 33,600,000.00 | 59,200,000.00 | 12-Apr-04 |
| 24,000,000.00 | 35,000,000.00 | 50,000,000.00 | 08-Apr-04 |
| 9,000,000.00 | 9,680,000,00 | 6,800,000.00 | 08-Apr-04 |

| 248 Block104/18 | 31 4791 | Juja Rd Estate | Middle Class Residential | 3,075,000.00 |
|-----------------|---------|----------------|--------------------------|---------------|
| 249 209/1006/9/ | 6868 | Westlands | High Class Residential | 54,000,000.00 |
| 250 1870/ii/549 | /f 6821 | Westlands | High Class Residential | 6,500,000.00 |
| 251 209/15288 | 6840 | Kileleshwa | High Class Residential | 6,500,000.00 |
| 252 Block104/51 | 9 4807 | Ushirika | Middle Class Residential | 1,600,000.00 |
| 253 1870/vi/92 | 6783 | Westlands | High Class Residential | 12,000,000.00 |
| 254 Block104/51 | 9 4769 | Ushirika | Middle Class Residential | 2,400,000.00 |
| 255 209/3150 | 6773 | Kileleshwa | High Class Residential | 10,800,000.00 |
| 256 1/1216 | 7381 | Kilimani | High Class Residential | 13,500,000.00 |
| 257 36/lii/1147 | 4779 | Easlegh | Middle Class Residential | 2,500,000.00 |
| 258 330/682 | 6780 | Thompson | High Class Residential | 14,125,000.00 |
| 259 36/i/281 | 4797 | Eastlegh | Middle Class Residential | 13,000,000.00 |
| 260 209/2389/12 | 22 4784 | Pangani | Middle Class Residential | 8,000,000.00 |
| 261 1/1160f | 6757 | Kilimani | High Class Residential | 2,500,000.00 |
| 262 2/316 | 6752 | Kilimani | High Class Residential | 9,000,000.00 |
| 263 Block104/51 | 9 4802 | Ushirika | Middle Class Residential | 2,250,000.00 |
| 264 209/8552/1 | 11 133 | New Mathare | Low Class Residential | 650,000.00 |
| 265 209/14990 | 6799 | Kileleshwa | High Class Residential | 6,740,000.00 |
| 266 1870/1/349 | 6746 | Westlands | High Class Residential | 11,500,000.00 |
| 267 209/70/7 | 6747 | Westlands | High Class Residential | 20,000,000.00 |
| 268 990/8 | 0090 | Westlands | High Class Residential | 35,000,000.00 |
| 269 209/1992/4 | 6793 | Parklands | High Class Residential | 800,000.00 |
| 270 1870/73 | 6776 | Westlands | High Class Residential | 11,000,000.00 |
| 271 209/1783 | 4796 | Ngara | Middle Class Residential | 7,500,000.00 |
| 272 209/354/18/ | 14 6794 | Kilimani | High Class Residential | 4,400,000.00 |
| 273 36/iii/1266 | 4853 | Eastleigh | Middle Class Residential | 3,400,000.00 |
| 274 4580/17 | 6882 | Kileleshwa | High Class Residential | 18,000,000.00 |
| 275 36/il/267 | 4954 | Eastleigh | Middle Class Residential | 7,300,000.00 |
| 276 Deg/Wka/51 | 1 2026 | Waithaka | Residential/Agricultural | 1,200,000.00 |
| 277 330/1053 | 6844 | Thompson | High Class Residential | 12,000,000.00 |
| 278 1/1167 | 6869 | Kilimani | High Class Residential | 9,400,000.00 |

| 2,600,000.00 | 2,800,000.00 | 3,075,000.00 | 07-Apr-04 |
|---------------|---------------|---------------|-----------|
| 42,000,000.00 | 52,000,000.00 | 55,000,000.00 | 06-Apr-04 |
| 5,800,000.00 | 5,000,000.00 | 6,500,000.00 | 05-Apr-04 |
| 6,480,000.00 | 6,827,000.00 | 6,500,000.00 | 02-Apr-05 |
| 1,800,000.00 | 1,600,000.00 | 1,600,000.00 | 01-Apr-04 |
| 7,290,000.00 | 8,780,000.00 | 12,000,000.00 | 01-Apr-04 |
| 1,600,000.00 | 1,600,000.00 | 2,400,000.00 | 22-Mer-04 |
| 6,600,000.00 | 9,500,000.00 | 10,800,000.00 | 22-Mar-04 |
| 10,800,000.00 | 12,200,000.00 | 13,500,000.00 | 28-Feb-04 |
| 2,600,000.00 | 2,460,000.00 | 2,000,000.00 | 27-Feb-04 |
| 8,000,000.00 | 9,422,000.00 | 8,500,000.00 | 24-Feb-04 |
| 14,000,000.00 | 12,000,000.00 | 13,000,000.00 | 25-Feb-04 |
| 7,200,000.00 | 9,700,000.00 | 7,200,000.00 | 20-Feb-04 |
| 2,400,000.00 | 2,000,000.00 | 2,300,000.00 | 18-Feb-04 |
| 6,700,000.00 | 9,000,000.00 | 9,000,000.00 | 17-Feb-04 |
| 2,100,000.00 | 1,850,000.00 | 2,250,000.00 | 16-Feb-04 |
| 900,000.00 | 800,000.00 | 1,250,000.00 | 12-Feb-04 |
| 3,300,000.00 | 5,750,000.00 | 6,740,000.00 | 10-Feb-04 |
| 5,400,000.00 | 8,000,000.00 | 11,500,000.00 | 08-Feb-04 |
| 8,000,000.00 | 13,500,000.00 | 20,000,000.00 | 06-Feb-04 |
| 9,072,000.00 | 22,500,000.00 | 25,000,000.00 | 03-Feb-04 |
| 700,000.00 | 700,000.00 | 800,000.00 | 31-Jan-04 |
| 7,300,000.00 | 11,000,000.00 | 11,000,000.00 | 26-Jan-04 |
| 5,600,000.00 | 8,500,000.00 | 7,500,000.00 | 26-Jan-04 |
| 4,100,000.00 | 2,200,000.00 | 4,400,000.00 | 20-Jan-06 |
| 4,650,000.00 | 4,000,000.00 | 4,200,000.00 | 12-Jan-04 |
| 9,700,000.00 | 16,800,000.00 | 17,000,000.00 | 31-Dec-03 |
| 5,000,000.00 | 4,000,000.00 | 7,300,000.00 | 30-Dec-03 |
| 1,400,000.00 | 1,550,000.00 | - | 24-Dec-03 |
| 9,500,000.00 | 10,700,000.00 | 12,000,000.00 | 23-Dec-03 |
| 6,100,000.00 | 8,000,000.00 | 9,400,000.00 | 20-Dec-03 |

| 279 36/vii/513 | 2781 | Eastleigh | Middle Class Residential | 9,600,000.00 |
|-------------------|------|----------------|--------------------------|---------------|
| 280 209/1418/33 | 2479 | Ngara | Middle Class Residential | 11,000,000.00 |
| 281 209/5559 | 4776 | Ngara | Middle Class Residential | 2,000,000.00 |
| 282 1/569 | 6270 | Kilimani | High Class Residential | 14,000,000.00 |
| 283 209/5646/m2 | 2783 | Ngara | Middle Class Residential | 4,000,000.00 |
| 284 Block104/236 | 2782 | Juja Rd Estate | Middle Class Residential | 2,850,000.00 |
| 285 36/W279 | 2787 | Eastleigh | Middle Class Residential | 11,000,000.00 |
| 286 36/W155 | 2784 | Eastleigh | Middle Class BCR | 6,500,000.00 |
| 287 209/3465 | 4783 | Ngara | Middle Class BCR | 7,200,000.00 |
| 288 Dag/Mti/840 | 2025 | Mutuini | Residential/Agricultural | 1,000,000.00 |
| 289 Deg/Rir/3617 | 2022 | Riruta | Residential/Agricultural | 3,450,000.00 |
| 290 Deg/ Rir/3511 | 2029 | Riruta | Residential/Agricultural | 700,000.00 |
| 291 36/iii/400 | 2469 | Eastleigh | Middle Class BCR | 26,000,000.00 |
| 292 209/12789/1/f | 6830 | Kilimani | High Class Residential | 4,800,000.00 |
| 293 209/2389/56 | 4805 | Pangani | Middle Class Residential | 4,500,000.00 |
| 294 Deg/Mti/1385 | 2011 | Mutuini | Residential/Agricultural | 700,000.00 |
| 295 Deg/Rir/137 | 2005 | Riruta | Residential/Agricultural | 1,200,000.00 |
| 296 209/13810 | 2792 | Pangani | Middle Class BCR | 5,000,000.00 |
| 297 1/301 | 6894 | Kilimani | High Class Residential | 28,000,000.00 |
| 298 205/53 | 6765 | Kileleshwa | High Class Residential | 10,000,000.00 |
| 299 Deg/Kmi/305 | 2014 | Kangemi | Residential/Agricultural | 1,500,000.00 |
| 300 209/8552/37 | 131 | New Mathare | Low Class Residential | 800,000.00 |
| 301 Deg/Rir/1783 | 2009 | Riruta | Residential/Agricultural | 1,800,000.00 |
| 302 36/W7 | 2473 | Eastleigh | Middle Class BCR | 4,500,000.00 |
| 303 209/5829 | 6162 | Kilimani | High Class Residential | 15,000,000.00 |
| 304 209/11373/157 | 4884 | New Mathare | Low Class Residential | 1,200,000.00 |
| 305 Deg/Rir/1091 | 1999 | Riruta | Residential/Agricultural | 1,500,000.00 |
| 306 Deg/Kmi/2413 | 2002 | Kangemi | Residential/Agricultural | 800,000.00 |
| 307 1870/vii/94 | 6226 | Westlands | High Class Residential | 9,000,000.00 |
| 308 330/304 | 6223 | Thompson | High Class Residential | 15,000,000.00 |
| 309 330/131 | 6221 | Thompson | High Class Residential | 17,500,000.00 |

| 11,000,000.00 | 9,000,000.00 | 8,000,000.00 | 18-Dec-03 |
|---------------|---------------|---------------|-----------|
| 7,000,000.00 | 10,500,000.00 | 10,800,000.00 | 17-Dec-07 |
| 1,800,000.00 | 1,565,000.00 | 1,500,000.00 | 15-Dec-03 |
| 9,450,000.00 | 13,750,000.00 | 00.000,000,8 | 11-Dec-03 |
| 3,250,000.00 | 4,600,000.00 | 4,000,000.00 | 09-Dec-03 |
| 2,750,000.00 | 2,500,000.00 | 2,850,000.00 | 02-Dec-03 |
| 14,500,000.00 | 9,000,000.00 | 5,865,000.00 | 01-Dec-03 |
| 7,800,000.00 | 6,400,000.00 | 2,000,000.00 | 01-Dec-03 |
| 5,052,000.00 | 6,962,000.00 | 7,200,000.00 | 01-Dec-03 |
| 2,100,000.00 | 3,650,000.00 | 2,200,000.00 | 25-Nov-03 |
| 1,620,000.00 | 1,800,000.00 | | 21-Nov-03 |
| 00,000.00 | 750,000.00 | 580,000.00 | 21-Nov-03 |
| 36,800,000.00 | 26,000,000.00 | 25,000,000.00 | 13-Nov-03 |
| 4,600,000.00 | 3,500,000.00 | 4,800,000.00 | 10-Nov-03 |
| 3,000,000.00 | 4,700,000.00 | 3,500,000.00 | 31-Oct-03 |
| 840,000.00 | 1,200,000.00 | 850,000.00 | 27-Oct-03 |
| 2,800,000.00 | 3,500,000.00 | 2,696,000.00 | 23-Oct-03 |
| 6,350,000.00 | 4,900,000.00 | 4,000,000.00 | 22-Oct-03 |
| 19,500,000.00 | 27,700,000.00 | 8,000,000.00 | 17-Oct-03 |
| 8,000,000.00 | 9,000,000.00 | 10,000,000.00 | 16-Oct-03 |
| 1,350,000.00 | 1,200,000.00 | 2,400,000.00 | 04-Oct-03 |
| 980,000.00 | 1,500,000.00 | 1,250,000.00 | 17-Sep-03 |
| 2,025,000.00 | 2,750,000.00 | 1,875,000.00 | 17-Sep-03 |
| 6,000,000.00 | 4,400,000.00 | 6,000,000.00 | 15-Sep-03 |
| 11,000,000.00 | 12,500,000.00 | 15,000,000.00 | 05-Sep-03 |
| 1,000,000.00 | 1,500,000.00 | 1,200,000.00 | 29-Jul-03 |
| 2,500,000.00 | 4,500,000.00 | | 28-Jul-03 |
| 824,000.00 | 790,000.00 | 150,000.00 | 28-Jul-03 |
| 8,000,000.00 | 9,000,000.00 | 7,000,000.00 | 17-Jul-03 |
| 6,000,000.00 | 11,250,000.00 | 11,250,000.00 | 17-Jul-03 |
| 14,800,000.00 | 17,000,000.00 | 17,500,000,00 | 14-Jul-03 |

| | _ | | | |
|-------------------|------|------------|------------------------|---------------|
| 310 4857/25/1 | 6257 | Kileleshwa | High Class Residential | 5,750,000.00 |
| 311 209/103/4/m7 | 6263 | Parklands | High Class Residential | 4,500,000.00 |
| 312 1/593,4m | 6193 | Killmani | High Class Residential | 18,000,000.00 |
| 313 209/12814 | 6195 | Killmani | High Class Residential | 4,500,000.00 |
| 314 1870/v/2389 | 6190 | Westlands | High Class Residential | 4,000,000.00 |
| 315 330/132 | 6222 | Thompson | High Class Residential | 17,500,000.00 |
| 316 330/623 | 6196 | Thompson | High Class Residential | 10,000,000.00 |
| 317 209/3440 | 6229 | Parklands | High Class Residential | 14,000,000.00 |
| 318 330/474 | 6197 | Thompson | High Class Residential | 12,000,000.00 |
| 319 1870//1301 | 6189 | Westlands | High Class Residential | 21,000,000.00 |
| 320 1870/iv/198 | 6262 | Westlands | High Class Residential | 5,900,000.00 |
| 321 209/366/6 | 6178 | Kilimani | High Class Residential | 10,000,000.00 |
| 322 1870/1/207 | 6216 | Westlands | High Class Residential | 7,500,000.00 |
| 323 26439/161 | 6202 | Thompson | High Class Residential | 4,800,000.00 |
| 324 209/6919 | 6212 | Kilimani | High Class Residential | 7,500,000.00 |
| 325 2/325 | 6204 | Kilimani | High Class Residential | 12,000,000.00 |
| 326 1870/W/47 | 6209 | Westlands | High Class Residential | 13,000,000.00 |
| 327 1870/W419 | 6218 | Westlands | High Class Residential | 8,000,000.00 |
| 328 209/13033/c8 | 6339 | Kilimani | High Class Residential | 4,500,000.00 |
| 329 36439/f | 6161 | Thompson | High Class Residential | 4,800,000.00 |
| 330 1870/il/220 | 6228 | Westlands | High Class Residential | 13,000,000.00 |
| 331 209/8364/1 | 6878 | Parklands | High Class Residential | 16,400,000.00 |
| 332 209/1701 | 6165 | Kilimani | High Class Residential | 20,000,000.00 |
| 333 1870//219 | 6203 | Westlands | High Class Residential | 15,250,000.00 |
| 334 209/14326/fb4 | 6149 | Kilimani | High Class Residential | 7,000,000.00 |
| 335 330/737/mb2 | 6144 | Thompson | High Class Residential | 4,500,000.00 |
| 336 1/1139,m | 6155 | Kilimani | High Class Residential | 5,000,000.00 |
| 337 209/7990 | 6158 | Thompson | High Class Residential | 10,000,000.00 |
| 338 209/5829 | 6126 | Kilimani | High Class Residential | 15,000,000.00 |
| 339 1870/1/358 | 6208 | Westlands | High Class Residential | 18,000,000.00 |
| 340 209/1992/3 | 6255 | Westlands | High Class Residential | 12,000,000.00 |

| 10-Jul-03 | 5,750,000.00 | 4,000,000.00 | 4,320,000.00 |
|-----------|---------------|---------------|---------------|
| 08-Jul-03 | 4,500,000.00 | 4,400,000.00 | 4,100,000.00 |
| 30-Jun-07 | 16,000,000.00 | 15,440,000.00 | 12,600,000.00 |
| 30-Jun-03 | 4,500,000.00 | 4,500,000.00 | 3,400,000.00 |
| 30-Jun-03 | 3,500,000.00 | 3,500,000.00 | 3,300,000.00 |
| 30-Jun-03 | 17,500,000.00 | 16,700,000.00 | 14,700,000.00 |
| 30-Jun-03 | 10,000,000.00 | 8,524,000.00 | 5,400,000.00 |
| 27-Jun-03 | 12,500,000.00 | 14,000,000.00 | 6,700,000.00 |
| 27-Jun-03 | 11,500,000.00 | 11,000,000.00 | 6,000,000.00 |
| 26-Jun-03 | 21,000,000.00 | 19,800,000.00 | 13,500,000.00 |
| 26-Jun-03 | 4,900,000.00 | 4,200,000.00 | 5,300,000.00 |
| 23-Jun-03 | 10,000,000.00 | 8,500,000.00 | 5,400,000.00 |
| 23-Jun-03 | 7,500,000.00 | 5,000,000.00 | 3,600,000.00 |
| 20-Jun-03 | 4,800,000.00 | 3,800,000.00 | 4,800,000.00 |
| 20-Jun-03 | 7,500,000.00 | 6,000,000.00 | 4,100,000.00 |
| 19-Jun-03 | 12,000,000.00 | 7,000,000.00 | 6,300,000.00 |
| 17-Jun-03 | 13,000,000.00 | 12,600,000.00 | 12,300,000.00 |
| 12-Jun-03 | 8,000,000.00 | 6,800,000.00 | 4,800,000.00 |
| 10-Jun-03 | 4,500,000.00 | 3,000,000.00 | 5,300,000.00 |
| 10-Jun-03 | 4,850,000.00 | 3,800,000.00 | 4,800,000.00 |
| 06-Jun-03 | 6,200,000.00 | 9,000,000.00 | 6,000,000.00 |
| 05-Jun-03 | 17,000,000.00 | 16,883,000.00 | 4,200,000.00 |
| 30-Mmy-03 | 20,000,000.00 | 24,000,000.00 | 23,000,000.00 |
| 30-Mmy-03 | 15,250,000.00 | 15,000,000.00 | 13,000,000.00 |
| 28-May-03 | 7,000,000.00 | 3,100,000.00 | 6,000,000.00 |
| 22-Mmy-03 | 4,500,000.00 | 4,200,000.00 | 4,000,000.00 |
| 22-May-03 | 5,000,000.00 | 4,500,000.00 | 3,800,000.00 |
| 09-May-03 | 10,000,000.00 | 11,800,000.00 | 7,000,000.00 |
| 07-May-03 | 15,000,000.00 | 12,500,000.00 | 11,000,000.00 |
| 05-May-03 | 8,000,000.00 | 18,000,000.00 | 15,225,000.00 |
| 28-Apr-03 | 4,000,000 00 | 10,000,000.00 | 7,000,000.00 |
| | | | |

| 341 | 26439 | 6235 | Thompson | High Class Residential | 5,850,000.00 |
|-----|---------------|------|------------|--------------------------|---------------|
| 342 | 209/9680/3 | 6171 | Kileleshwa | High Class Residential | 5,800,000.00 |
| 343 | 209/8593 | 6241 | Westlands | High Class Residential | 5,100,000.00 |
| 344 | 36/1/408 | 5071 | Eastleigh | Middle Class Residential | 4,500,000.00 |
| 345 | 209/2389 | 4774 | Pangani | Middle Class Residential | 3,500,000.00 |
| 346 | 209/942/1 | 6880 | Parklands | High Class Residential | 19,238,000.00 |
| 347 | 209/2753/3 | 4778 | Ngara | Middle Class Residential | 11,000,000.00 |
| 348 | 209/13551/1 | 2793 | Ngara | Middle Class BCR | 4,000,000.00 |
| 349 | 330/1019/m | 6243 | Thompson | High Class Residential | 7,000,000.00 |
| 350 | 36/ii/1225 | 4767 | Eastleigh | Middle Class BCR | 6,000,000.00 |
| 351 | 1870/ii/320f | 6760 | Westlands | High Class Residential | 4,600,000.00 |
| 352 | 1870//125 | 6911 | Westlands | High Class Residential | 22,000,000.00 |
| 353 | 1870/ii/337 | 6082 | Westlands | High Class Residential | 21,000,000.00 |
| 354 | 36/v970 | 4809 | Eastleigh | Middle Class Residential | 6,300,000.00 |
| 355 | 209/1483/m14 | 6106 | Parklands | High Class Residential | 6,000,000.00 |
| 356 | 1870/iii/193 | 6074 | Westlands | High Class Residential | 13,000,000.00 |
| 357 | Deg/Wka/T128 | 1975 | Waithaka | Residential/Agricultural | 700,000.00 |
| 358 | 209/380/7 | 5991 | Kilimani | High Class Residential | 16,500,000.00 |
| 359 | 1870/v/238 | 6234 | Westlands | High Class Residential | 3,900,000.00 |
| 360 | 36/vii/275 | 4916 | Eastleigh | Middle Class Residential | 9,000,000.00 |
| 361 | 209/2239/1 | 6134 | Westlands | High Class Residential | 5,500,000.00 |
| 362 | Deg/ Rir/s530 | 1921 | Riruta | Residential/Agricultural | 1,500,000.00 |
| 363 | Deg/Kre/340 | 1890 | Riruta | Low Class BCR | 3,000,000 00 |
| 364 | Deg/Rut/T79 | 1941 | Ruthimitu | Residential/Agricultural | 100,000.00 |
| 365 | Deg/ Rir/s250 | 1905 | Riruta | Residential/Agricultural | 1,500,000.00 |
| 366 | 209/9352/fs | 6941 | Kilimani | High Class Residential | 40,000,000.00 |
| 367 | 209/9754/38 | 81 | Huruma | Low Class Residential | 300,000.00 |
| 368 | Block104/423 | 4850 | Ushirika | Middle Class Residential | 1,500,000.00 |
| 369 | 330/356 | 6775 | Thompson | High Class Residential | 3,800,000.00 |
| 370 | 330/907/m | 7935 | Thompson | High Class Residential | 5,000,000.00 |
| 371 | 209/992/1 | 6749 | Parklands | High Class Residential | 12,000,000.00 |

| 08-Apr-03 | 5,850,000.00 | 4,200,000.00 | 5,800,000.00 |
|-----------|---------------|---------------|---------------|
| 24-Apr-03 | 5,800,000.00 | 3,832,000.00 | 3,500,000.00 |
| 17-Apr-03 | 5,100,000.00 | 3,200,000.00 | 5,100,000.00 |
| 16-Mar-03 | 2,000,000.00 | 4,500,000.00 | 4,300,000.00 |
| 11-Mar-03 | 3,500,000.00 | 4,200,000.00 | 2,650,000.00 |
| 06-Mar-03 | 29,250,000.00 | 17,300,000.00 | 12,000,000.00 |
| 15-Feb-03 | 11,000,000.00 | 11,000,000.00 | 10,000,000.00 |
| 12-Feb-03 | - | 4,300,000.00 | 3,500,000.00 |
| 07-Feb-03 | 7,000,000.00 | 4,400,000.00 | 4,500,000.00 |
| 27-Jan-03 | - | 6,300,000.00 | 7,000,000.00 |
| 21-Jan-03 | 5,600,000.00 | 3,850,000.00 | 4,300,000.00 |
| 27-Dec-02 | | 21,000,000.00 | 8,500,000.00 |
| 01-Oct-02 | 8,258,000.00 | 11,000,000.00 | 20,000,000.00 |
| 24-Sep-02 | 200,000.00 | 5,800,000.00 | 5,500,000.00 |
| 19-Sep-03 | 4,100,000.00 | 3,100,000.00 | 3,200,000.00 |
| 13-Sep-02 | 13,000,000.00 | 11,000,000.00 | 9,000,000.00 |
| 03-Sep-02 | - | 870,000.00 | 720,000.00 |
| 12-Jun-02 | - | 16,500,000.00 | 13,000,000.00 |
| 01-Apr-03 | 3,800,000.00 | 3,600,000.00 | 4,030,250.00 |
| 28-May-02 | 300,000.00 | 9,000,000 00 | 8,750,000.00 |
| 21-May-02 | 5,500,000.00 | 4,200,000.00 | 4,900,000.00 |
| 03-Sep-99 | - | 4,500,000.00 | 3,000,000.00 |
| 12-Feb-99 | 3,400,000.00 | 3,800,000.00 | 3,000,000.00 |
| 14-Dec-98 | | 400,000.00 | 160,000.00 |
| 12-Aug-98 | 210,000.00 | 3,400,000.00 | 2,980,000.00 |
| 12-Oct-95 | 50,000,000.00 | 35,000,000.00 | 42,000,000.00 |
| 25-Jan-95 | 650,000.00 | 835,000.00 | 450,000.00 |
| 21-Dec-94 | 1,215,700.00 | 1,350,000.00 | 1,800,000.00 |
| 05-Dec-94 | 3,000,000.00 | 4,000,000.00 | 5,300,000.00 |
| 07-Oct-94 | 5,000,000.00 | 4,700,000.00 | 1,500,000.00 |
| 12-Feb-94 | 10,000,000.00 | 13,500,000.00 | 7,800,000.00 |

| 372 | Dag/Wka/206 | 1394 | Waithaka | Residential/Agricultural | 150,000.00 |
|-----|--------------|------|-----------|--------------------------|--------------|
| 373 | Deg/Rir/s34 | 1391 | Riruta | Residential/Agricultural | 100,000.00 |
| 374 | Dag/Rir/2463 | 1369 | Riruta | Residential/Agricultural | 420,000.00 |
| 375 | 209/66/27 | 5995 | Westlands | High Class Residential | 9,000,000.00 |
| 376 | 209/7963/142 | 62 | Huruma | Low Class Residential | 250,000.00 |
| 377 | 209/9754 | 111 | Huruma | Low Class Residential | 300,000.00 |
| 378 | 209/7963/65 | 93 | Huruma | Low Class Residential | 300,000.00 |
| 379 | 209/7963/444 | 63 | Huruma | Low Class Residential | 270,000.00 |
| 380 | 209/7963/190 | 60 | Huruma | Low Class Residential | 200,000.00 |
| 381 | 209/7963/67 | 59 | Huruma | Low Class Residential | 350,000.00 |
| 382 | Deg/Rir/s12 | 1907 | Riruta | Residential/Agricultural | 325,000.00 |
| 383 | 209/7963/404 | 53 | Huruma | Low Class Residential | 200,000.00 |
| 384 | 209/7963/375 | 67 | Huruma | Low Class Residential | 200,000.00 |
| 385 | 209/7954 | 107 | Huruma | Low Class Residential | 200,000.00 |
| 386 | 1870/ii/255 | 6771 | Westlands | High Class Residential | 3,800,000.00 |
| 387 | 209/7963/403 | 54 | Huruma | Low Class Residential | 200,000.00 |
| 388 | 96 | 46 | Huruma | Low Class Residential | 7,000.00 |
| 389 | 209/7963/12 | 110 | Huruma | Low Class Residential | 200,000.00 |
| 390 | 209/7963/348 | 50 | Huruma | Low Class Residential | 100,000.00 |
| 391 | 209/7963/239 | 28 | Huruma | Low Class Residential | 140,000.00 |
| 392 | 7963/402 | 30 | Huruma | Low Class Residential | 140,000.00 |
| 393 | Deg/Rir/1301 | 1340 | Riruta | Residential/Agricultural | 400,000.00 |
| 394 | 209/7963/271 | 58 | Huruma | Low Class Residential | 150,000.00 |
| 395 | 209/7963/174 | 12 | Huruma | Low Class Residential | 100,000.00 |
| 396 | 209/7963/438 | 11 | Huruma | Low Class Residential | 100,000.00 |
| 397 | 209/8552/34 | 15 | Huruma | Low Class BCR | 50,000.00 |
| 398 | Deg/Rir/1338 | 2104 | Riruta | Residential/Agricultural | 2,000,000.00 |

Source: Valuation Office Ministry Of Lands, 2006

| 293,000.00 | 590,000.00 | • | 18-Aug-93 |
|--------------|---------------|--------------|-----------|
| 77,000.00 | 230,000.00 | 50,000.00 | 09-Feb-93 |
| 810,000.00 | 900,000.00 | - | 31-Dec-92 |
| 8,000,000.00 | 13,000,000.00 | 9,000,000.00 | 17-Sep-92 |
| 270,000.00 | 340,000.00 | 250,000.00 | 02-Apr-91 |
| 330,000.00 | 450,000.00 | 305,000.00 | 08-Mar-91 |
| 330,000.00 | 540,000.00 | 300,000.00 | 06-Mar-91 |
| 270,000.00 | 340,000.00 | 250,000.00 | 22-Feb-91 |
| 200,000.00 | 360,000.00 | 200,000.00 | 20-Feb-91 |
| 320,000.00 | 450,000.00 | 300,000.00 | 08-Feb-91 |
| 550,000.00 | 00.000.00 | 650,000.00 | 11-Dec-90 |
| 210,000.00 | 310,000.00 | 200,000.00 | 27-Jul-90 |
| 280,000.00 | 350,000.00 | 220,000.00 | 06-Jul-90 |
| 226,000.00 | 312,000.00 | 50,000.00 | 07-Mar-90 |
| 1,550,000.00 | 2,600,000.00 | 3,800,000.00 | 26-Feb-90 |
| 140,000.00 | 250,000.00 | 100,000.00 | 28-Aug-87 |
| 7,500.00 | 28,000.00 | - | 11-May-86 |
| 140,000.00 | 250,000.00 | 200,000.00 | 26-Mar-86 |
| 115,000.00 | 235,000.00 | 120,000 00 | 28-Aug-85 |
| 140,000.00 | 148,000.00 | 140,000.00 | 22-May-85 |
| 143,000.00 | 148,000.00 | 2,100,000.00 | 16-Apr-85 |
| 232,000.00 | 450,000.00 | 690,000.00 | 28-Apr-82 |
| 140,000.00 | 190,000.00 | 300,000.00 | 16-Mar-82 |
| 142,000.00 | 165,000.00 | 29,000.00 | 19-Aug-81 |
| 142,000.00 | 160,000.00 | 250,000.00 | 19-Aug-81 |
| 50,000.00 | 170,000.00 | 80,000.00 | 03-Aug-80 |
| 2,400,000.00 | 2,846,000.00 | 2,950,000.00 | 17-Mar-04 |
| | | | |