

# Waqf Cooperative Housing Model (WCHM) as an Innovative Solution for Affordable Housing

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**Abstract:** The issue of affordable housing around the world is worse as more than half of global population is considered poor. These low incomes earning people have been struggling for shelter for many decades. Despite several government initiatives, they are not able to possess their own homes because of many reasons. Consequently, they are compelled to live in slums. They spent most of their disposable income on rentals and thus unable to provide proper nutrition and education to their children. This gives rise to lawlessness, drug addiction and extremism in the society. It is estimated that two billion homes will be needed over the next eighty years to cater to the need of homeless people and because of increasing fiscal deficits and budgetary constraints, governments are unable to cope with this demand. To fill this gap between demand and supply of housing units, this study introduces an innovative model Waqf Cooperative Housing Model (WCHM) that aims to create a synergy between Waqf and development cooperative housing. Moreover, this paper also attempt to overcome the problem of lack of financing for cooperatives, and proposes three Waqf based sources of finance that are Cash Waqf, Waqf Sukuk and revenue generation from common area (Waqf area) of condominiums for the development of cooperative affordable housing.

**Keywords:** Affordable housing, cooperative housing, waqf, cash waqf, condominium common area, sukuk

**Paper type:** Conceptual paper

## 1. Introduction

Food, clothing and shelter are always recognized as basic social needs. A key aspect of the economically weaker section is that which cannot meet basic needs satisfactorily. Despite low income, the poor somehow manages to get food and clothing. However, the accessibility to shelter is difficult in most of the cases on their own. Therefore, they look towards public sector support for provision of shelter (Nafar, 2018). The low-income population is a large and considerable part of society in most developing and underdeveloped countries; and Pakistan is no exception. The fact that the economically weaker section of population is an important and deciding vote bank for political purposes and has turned Pro-Poor Housing a political slogan. Different programs like “Slum Free Cities”, “Mang Raha Hai Har Insan, Roti Kapra Or Makaan”, “Housing for All” and many more has been observed by us but the delivery in almost all the cases is NONE (Chen and Ravallion, 2013; a. Hasan, 2010; Nafar, 2018; “Pro-Poor Housing :,” 2010). The supply of low-cost, low-income housing around the world is very slender keeping in view the massive shortage.

If we consider the largest city of Pakistan as an example then about 75% of Karachi’s population live below poverty line and most of them belong to the unencountered demand for affordable new houses, estimated at 80,000 new houses per annum. Despite one of the largest cities of the world, only 26% of the population of Karachi occupies 62% of residential space which causes an overloaded, overcrowded condition. This results in a population density with 600 to 4000 inhabitants per hectare. It creates conditions such as more than 10 people living in a single room, newly wed couples without privacy, drugs consumption, gangs formation in children, sharing kitchen and bathroom that creates conflict and unhygienic conditions etc. (Nausheen and Anwar,2014; A.Hasan, 2015).

In addition, the economic principles of demand and supply came into effect as the demand for housing is high while supply for housing units is insufficient to fulfill the needs which resultantly led to price hike/high rentals in housing sectors. Thus, the only choice for poor tenants is to pay a higher rental at the cost of better education for children, hunger for their family, lack of leisure. Because of their higher expenses to fulfill the shelter need, they could not be able to save enough to have a house throughout their lives (Baqutaya, Ariffin, and Raji, 2016; Nafar, 2018; Teknologi, Melaka, Azmi, and Thurasamy, 2014). In addition, because of the following unhealthy conditions and environment of their neighborhood, their families are more susceptible to epidemics and involved in sexual and criminal activities (Koehler, 2015; Nadiyah, Ali, Halim, and Noor, 2016; Ravallion, Chen, and Sangraula, 2007).

Many solutions have been proposed so far to solve the problems of economic/affordable housing by utilizing spare or unutilized public land, obligation on private employers/firms to provide housing to their employees, building of stand alone units rapid rehousing, cooperative housing development etc (Biddle and Edwards-ford, 2014). Development of cooperative housing is one of the modern idea for provision of affordable housing in a manner that the members can pool their resources to help themselves without relying on the public sector. However, almost all cooperatives face difficulty in raising funds for development, and so far the traditional interest based channels for raising finance has failed to address this problem.

In this study, a solution for the problem of lack of affordable housing and its associated sub problem that is financing of any cooperatives based initiative has been proposed through an innovative model named “Waqf Cooperative Housing Model (WCHM)” in which cooperative development housing will be used to provide affordable housing to the poor and low income sector of the society. To cater the problem of lack of financing/funding for cooperative development; three sources of finance based on ‘Waqf’ which is so far an untapped, yet highly effective tool of Islamic finance has been identified. Firstly, there is a need to motivate the wealthy people or elite class living in large condominiums to Waqf the uncovered area (50 to 60 percent area as per local legislation) and building facilities such as medical centers, gymnasiums,

swimming pool and other facilities to generate income which will be used to build affordable cooperative housing for low income class. Secondly, cash donations by wealthy class in the form of cash waqf and finally, issuance of sukuk on the basis of waqf assets. All the above mentioned financing tools may be used in combination as they are not mutually exclusive. Thus, the objective of this study is ***“to introduce an innovative cooperative based housing model which may be financed through waqf based tools.”***

The rest of this paper is structured as follow. The following section discusses the relevant literature for understanding of affordable housing issue, waqf and WCHM by methodologies, discussion and conclusions, limitations and subsequent research directions related to the study of this proposed topic.

## 2. Literature Review

By the year 2050, the world population is expected to hit the level somewhere between 7.9-10.9 billion and by 2030, almost 60% of global population will be urban in which more than half will be living in poor habitats and slums and considered as urban poor (Ismail and Shaikh, 2016; Nafar, 2018). The urban population has the highest growth rates in developing countries, and an average of 5 million new urban residents will be absorbed to this group every month. In 1950, about 232 million people lived in urban areas which delineated 17% of total population. In 2005, Asia’s urban population increased up to 1.6 billion or about 40% of the total population of the region. It is also predicted that by 2025, almost half of the Asian’s total population will become urban, which resultantly become a major challenge for policy makers for urban housing (Authors, 2018; “Pro-Poor Housing :,” 2010; Zabri, Mohammed, and Mohammed, 2018).

### A. *Factors of lack of affordable housing*

There are many factors which contribute to rapid urbanization and the deficiency of urban housing, some of them are:

- *Urbanization and population growth*

Major metropolitan cities around the world has been experiencing a very high urbanization rate in addition to generic population growth. This cause the shortage in existing urban housing. For example, more than 16 million people in the city of Karachi (approximately 10% of total population of Pakistan) is growing at 2.5% due to generic population growth, while the population growth attributed to urbanization is around 5-6%. Thus, the overall growth rate of city population is more than 8% (Author and Anwar, 2014; A. Hasan, 2015). In Kabul with a population of more than 3 million, an increasing rate of about 15% of urbanization is primarily due to returning of refugees (“Pro-Poor Housing :,” 2010).

- *Depletion of existing housing stock*

While chasing shortage in housing, the urban planners rarely consider the depletion of existing stock as a further addition to the existing shortage of housing. Considering 1%, a very nominal rate of depletion, about 2.4 million units in India and 0.2 million housing units in Pakistan amounted for the depletion (where a house became depleted in 100 years) (“Pro-Poor Housing :,” 2010). In Pakistan with an annual addition of new stock estimated at 0.3 million units, which is equivalent to a net addition of 0.1 million units per year (Ahmed, 2008; A. Hasan, 2015). In Kabul, where more than 80% of the city’s population lives in slums, and almost two-third of the housing unit is destroyed or damaged, the high urbanization rate further aggravates the housing issue.

- *Changing cultural norms*

In most countries, the cultural values and norms are changing in terms of size of family and persons per household. The trend of independent living culture and a rise in nucleus families require more housing which further exacerbate the housing shortage problem (Baqutaya et al., 2016; Nafar, 2018).

- *Economic reasons*

Due to economic growth, industrialization and mechanization of agriculture, more job were created in cities, but it also led to an increase in unemployment in rural areas and push those unemployed poor people primarily to migrate to cities for jobs who naturally prefer to live near work place. Since the urban planners are unable to meet the adequate percentage of urbanization, the slums are growing rapidly because settlers are sputtered with the support of land mafias and these slums became their permanent homes (Biddle and Edwards-ford, 2014; Nadiyah et al., 2016; Nafar, 2018).

Due to above reasons such as the urban population explosion and the failure of urban planning, the cities are expanding only in size, without any development. Rising prices of urban land forces the poor people to penetrate the suburbs for survival having basic or no civic amenities.

Rapid population growth and urbanization with a rise in numbers of independent nucleus families affects the global demand and supply for housing units. As a result of the rise in housing prices and rents, the only option for such tenants is to pay excessive /high rent at the cost of other basic needs such as food, clothing, education and medical care. Consequently, the basic human need of shelter become an unaffordable dream for middle and lower-middle class citizens. According to above definition, the housing is considered unaffordable if someone is spending more than 30% of disposable income on housing rent (Braithwaite, Dasandi, and Hudson, 2014; Nafar, 2018).

### *B. Measuring affordable housing*

The measurement of housing affordability is highly subjective as it depends upon several factors. According to some researchers it results as a direct relationship of cost and income of the household (Baqutaya et al., 2016). The US department of housing and urban development (HUD) measures housing affordability by saying that the housing cost should not be more than 30% of income of a household (Alzamil; 2014). (Shuid, 2011) stated that if all expenses related to housing such as monthly rent, utilities, maintenance, taxes etc are less than 30 percent of household income then the housing is considered as affordable. Therefore, income of household and housing expenses are the two most important factors in determining the affordability. Centre county affordable housing coalition (2007) has proposed a formula to determine the affordability using household expense (SP) and household income (CM).

$$\text{Housing Affordability} = [\text{SP}/\text{CM}] \times 100 < 30\%$$

If the housing is not affordable that is if the spending of a household on housing is greater than 30 percent means that such household is compromising other needs which may include health, food, clothing, medical care, transportation, entertainment etc (HUD, 2014).

### *C. Proposed practical solutions of affordable housing*

Several solutions have been proposed for the rectification of the rotten problem of affordable housing which includes but not limited to:

- *Setting up dedicated trust fund for housing production*

Tax money that is raised through real estate as well as voluntary contributions by the developers is proposed to be invested in this fund and consequently the financing may be raised through this fund (Biddle and Edwards-ford, 2014).

- *Searching for unutilized public land*

Survey has been carried out to find unutilized public land for the building of affordable housing (Challenges, 2003). This search does not stop at only vacant areas, it also includes the utilization of vacant areas at schools, fire stations, libraries, churches etc. one interesting instance was the building of 64 affordable housing units at a fire station at Alexandria (Biddle and Edwards-ford, 2014).

- *Offering of housing by private employers*

It has been proposed since long that there is a need to put some responsibility on private employers to providing housing for their medium and low income earning employees (Biddle and Edwards-ford, 2014). Government should also help them by providing them tax incentives.

- *Building of single family units or stand alone units*

Stand alone units means housing units that have a single bedroom, kitchen, bathroom and a separate entrance. The building of stand alone or single family units may solve the problems associated with multiple families living in a single house which is commonly called “doubling up” arrangement (Biddle and Edwards-ford, 2014).

- *Rejecting the idea of rapid rehousing*

The idea to subsidize the rents for a limited time such as for six months or for a year does not solve the problem of affordable housing (Biddle and Edwards-ford, 2014). This approach is inherently short term in nature as it seems that the problem is resolved but in effect after the subsidy the poor are in the same position again.

- *Developing “brownfields” and “greenbelts” for housing units*

Brownfield is an area that has been used for commercial or industrial purposes but the future use of such area may produce hazardous environmental or health problems for the nearby population. The utilization of such areas for building affordable units may resolve the issue (Biddle and Edwards-ford, 2014). The idea to use green belts for the building of affordable housing is widely unacceptable as the idea is not environmental friendly and may face opposition from environmentalists (Qureshi, Breuste, and Lindley, 2010).

However, because of several inherent shortcomings in the above mentioned proposals such as short term nature, burden on government treasury, opposition by the environmentalists etc these proposals could not be able to resolve the problem of affordable housing till date. Moreover, these ideas heavily rely on either public finance or bank debt and do not provide any suitable and sustainable source of financing for any affordable housing initiative. Either they rely on public finance which is non feasible in nature keeping in view the rising fiscal deficits and other constraints of public exchequer or bank debt which is again non sustainable at both micro as well as macro level.

#### *D. Proposed financing solutions for affordable housing*

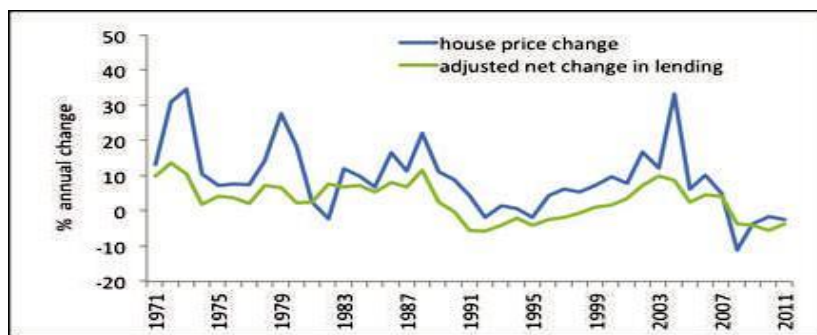
In the past, several financial solution have been proposed and practiced to build housing for poor but all failed due to their inherent weaknesses, which are as follows:

- *Debt based financing for affordable housing*

To provide shelter to middle and lower classes, one main option is financial institutions ( Banks) financing, however the poor and low income class is unable to meet the requirements. Moreover, any debt based arrangement does not cater to the affordability as the repayment terms are unfavorable for the impoverished people because markup is tied with the base lending rate (BLR), that is Karachi Inter Bank Offer Rate (KIBOR) in case of Pakistan which because of rising inflation tends to rise and results in inability to repay the loan by a poor /person with a low disposable income. (Hasan,2015; Mohammed, 2016; Jha, 2006).

It can be observed at a macro level that excessive lending to home financing by institutions such as commercial banks cause real state inflation (Jha,2006). According to neoclassical economist, this rise in property prices is because of the increase in demand due to population growth and decrease in supply of land. However, according to many researchers increment in property price is not because of population and unencountered supply rather it is waqf a direct consequence of a lax monetary policy (Aziz and Mohammad, 2016; Mohammad, 2016; Jha, 2006; Yusuf,2011). Inflation is a situation of a sustained increase in the cost of living so when an economy is unable to create corresponding goods and services with the corresponding excess of money supply it creates inflation.

Figure 1. Changes in house prices with lending patterns



Source: Positive money.org

The above-plotted figure belong to UK property market shows changes in house prices with a change in lending pattern from 1971 till 2011, which demonstrated that an increase in the lending by banks result in an increase in prices of houses (Jha 2006).

The incapability of low income class to fulfill requirements/paperwork, failure to repay the loan installments due to scarce disposable income and all the above positive relationship between bank lending and property inflation, or all the problems associated with debt base initiatives give way to other financing options like equity financing.

- *Equity based financing for affordable housing*

Scholars suggested the use of equity financing to overcome the insufficiency/shortcoming of debt base financing (Ashraf and Khwaja 2016; Clarke 2015; Mohammad 2016; Suzuki and Miah, 2016). Musharakah Mutanaqisah (MM) or the diminishing partnership is the most common equity based mechanism for home financing (Gundogdu, 2016; Mohammed, 2016; Laldin and Furqani, 2013). Under the MM arrangement, both financier (bank) and buyer forms a partnership and divided the housing unit in several units, initially at the ratio of 9:1 (90% owned by the bank and 10% by the buyer). The buyer acquires the unit subsequently through a decided payment structure and at the end of the contract period buyer owns 100% of the house

(Smolo and Hasan, 2011). Many scholars considered the MM financing mechanism as according to Maqasid-e-Sharia which is based on equity and justice because the unit price was fixed at the time of contract arrangement and it is more affordable for customers. There is an option for the partner/customer if he is unable to afford so he may conclude the partnership and to sell his already owned shares back to bank or the third party or to conclude the partnership.(Baqutaya, Ariffin, and Raji, 2016; Mohammed, 2016; Jha 2006; Laldin and Furqani, 2013; Smolo and Hassan 2011).

However, the practice is very different as the investors are reluctant to enter into a partnership with low-income customers and follow procedure of debt based lenders and associate the unit prices with the same KIBOR and BLR benchmarks. But the diminishing partnership arrangement indirectly becomes a malignant form of debt base financing with all the drawbacks, including the horizon that widens the gap of achieving affordable housing for distressed social class.(Baqutaya et al., 2016; institution of Mohammed,2016; Laldin and Furqani, 2013; Smolo and Hasan, 2011).

- *Government owned home financing : a non-sustainable alternative*

It is a fact that every government reluctant to attain to provide shelter to its whole population, and strive for solving the housing issue several governments has taken initiatives in past but no one can be able to provide shelter to cent percent of its population. Among different vigor by government, the option to build home for public servants is adopted mostly (Aini, Aziz, and Hanif, 2015; Baqutaya et al., 2016; Hofstra and Vermeulen, 2016; Mohammed, 2016). Financing on Low interest rate is another option that many governments pursue including Pakistan, with a current rate of 4% by government agencies (Haider and Badami, 2010; Hasan,2015; Qureshi et al., 2010).

It can easily be observed that due to the reasons such as rigid procedures, irksome documentations, corruption etc, the government schemes was fail to fill the gap of demand for shelter with a high rate. Furthermore , only 8% - 10% of the total population are public servant. (Braithwaite, Dasandi, and Hudson,2014; Nadiah,Ali, Halim, and Noor, 2016).

In order to fill up the fiscal deficits, Governments need to minimize their expenditures. The available resources are not sufficient as per requirements or overcome the shortfall of government funding to pursue such initiatives. Now the global trend is to shift towards the private sector, in order to minimize dependency of government owned institutions. (Nadiah et al.,2016). Countries such as Australia, France, Argentina, Korea etc are the examples which follows such trend, and sale their total / partial public sector financing institutions to private sector.( Mohammed, 2016).

Many Scholars and practitioners developed consensus after considering the drawbacks and shortcoming of debt based financing and constraints to government, that this issue of affordable housing finance may only be solved by the financial organizations where the members help themselves (Ebrahim, 2009; Ibrahim et al., 2012; Mohammed, 2016).

- *Cooperatives as an affordable home financing provider*

In cooperative mode of financing, a group of people formed an association, worked together and raise financing using their own means and mutual savings to acquire a house for their members. To acquire the house through cooperative funding the member has to pay the principal plus additional amount for the welfare of cooperative members. Thus, under this arrangement, the members provided with a lending facility with no interest payment (Ibrahim et al., 2012).

- *Lack of complementary funds for cooperatives: A potential role of waqf model*

Almost all cooperative arrangements faces shortage of funds due to their dependency on capital shares, deposits by members etc. which most of the time is not enough for home financing for its members

(Muhammed, 2016). If they go for commercial bank financing, they must have to face extra burden and decent return at the paying off time which is often unaffordable for the cooperatives these loans. By using bank's financing, cooperative has to compromise its foundations/groundings that aims to provide affordable housing to its member (Ibrahim et al., 2012; Institutions and Mohammed, 2016).

#### *E. Definitions of important terms related to waqf cooperative housing model (WCHM)*

It is necessary to explain important terms related to WCHM for a better understanding of the whole process of WCHM. The terms such as Waqf, Cash Waqf and Waqf Sukuk are explained as follows:

- *Waqf*

It is not a hyperbole claim that the *Waqf* has provided the foundation for much of what is considered “Islamic civilization”. By definition, *waqf* is an inalienable trust (U. Ahmed, 2015; Bello, 2010). In *waqf* arrangement the founder (waqif) becomes the principal of a revenue-producing property inalienable in perpetuity while assigning the usufruct (munfa'a) of this property to particular persons or organization/foundation in a way that is considered as pious and charitable (Mohsin, 2013). Islam as religion which have a complete code of life provides potent financing solution to the every problems in the form of *Waqf*. Unfortunately, the concept of *Waqf* is now considered suitable only for the building of mosques and graveyards because after the Ottoman collapse the concept of waqf was gradually disappeared. However, during Ottoman empire all the socio-economic financing such as education health community welfare was carried out through *Waqf* so much so that **“a person was born in waqf house, slept in waqf cradle, eat and drunk from waqf properties, taught in waqf school, read waqf books, received his salary from waqf administration and upon death buried in waqf cemetery under waqf coffin”** (Bello, 2010; p. 6).

However, the comprehensive literature still fails to address the gap of linkage between cooperative through Waqf financing and affordable housing (Mohammed, 2016). A potential collaboration could be Waqf financed economical/affordable housing that include income/revenue generation from unused or unutilized condominium common area than could be used to build housing for the poor and low-income.

- *Cash waqf*

Cash waqf is a process of lending cash to those who are entitled and does not have enough resources to cater to their basic needs without any interest. According to Hanafi school of thought, “Cash waqf is the process of dedicating cash as *waqf* and investment of same so that the profits are used for the *waqf's* stipulated charitable deeds” (Ahmad, 2015; p.65). Murat Cizakca (2013) defined cash waqf as establishing a charitable endowment through cash.

- *Waqf sukuk*

Waqf Sukuk works as traditional Sukuk however the only difference is that the asset that is used for issuance of Sukuk is waqf asset (Ismal, 2015). Awqaf New Zealand recently issued Waqf Sukuk certificates and the modus operandi of these Awqaf Sukuks is as follows (Cizakca, 2016):

- 1- The asset that is used for Sukuk issuance is a farm that is a waqf asset.
- 2- These Sukuk certificates are offered to global investors.
- 3- These certificates are ‘not for profit’ and the profit, if any generated, will be given to charity.
- 4- The government of New Zealand guarantee the redemption and payment of these certificates.



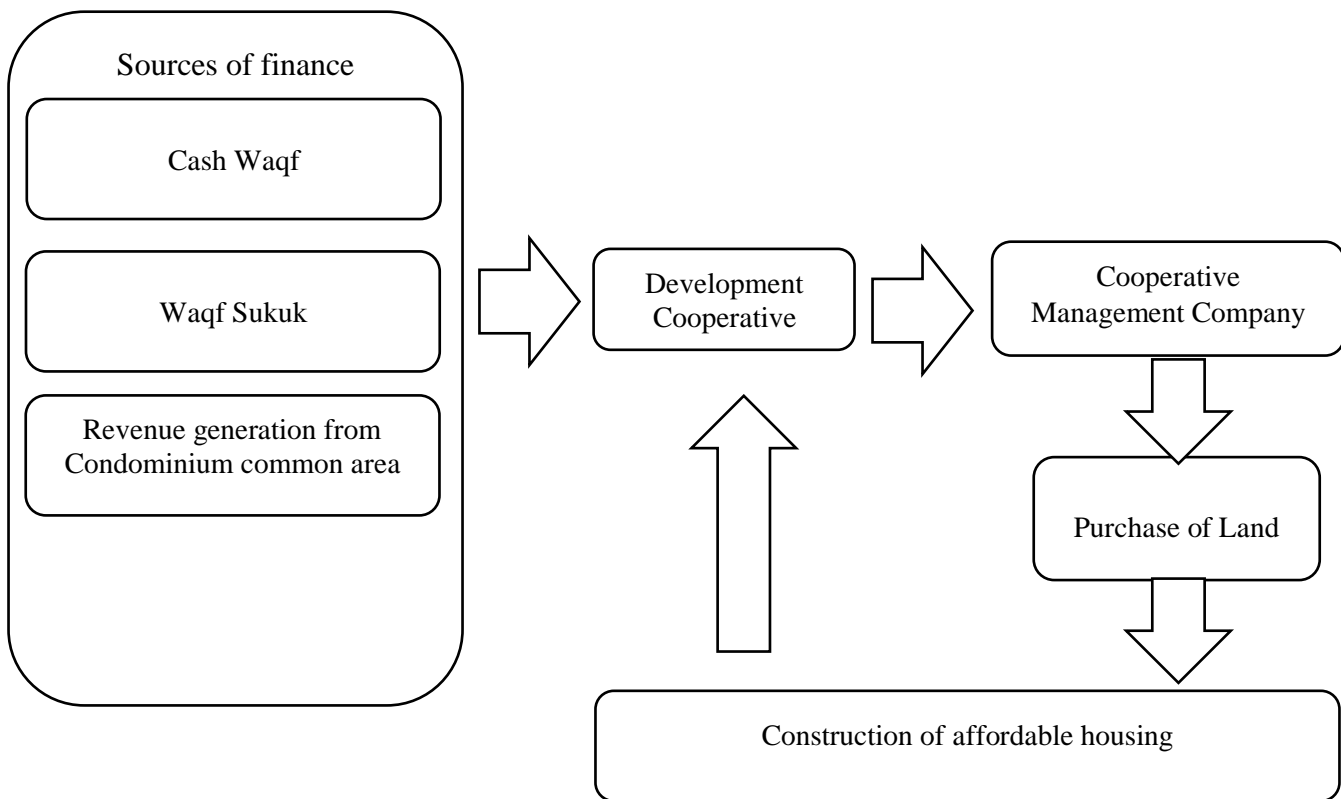
- 5- Sukuk will be redeemed and investors will be paid back their money at a future fixed date.

Thus, waqf based sukuk as an innovative Islamic financial tool may provide the necessary impetus to carry out welfare endeavors by the government or by corporate. These waqf sukuk may provide the necessary inter linkage between public sector, financial sector and social sector to achieve the Maqasid e Shariah.

*F. Waqf cooperative housing model (WCHM)*

As discussed above and keeping in view the drawbacks of other affordable housing initiatives as well as the associated problem of financing, this study proposed an innovative affordable housing model based on cooperative arrangement and financed by three innovative tools on the basis of Waqf. The model can be better understood by the figure as follows:

Figure 2. Waqf cooperative housing model (WCHM)



- *First Source of finance: Utilization of condominium common area to finance cooperative housing*

As given in the following table the finance pool is generated through the utilization of mostly unused / unutilized common area of condominium which represents about the half of the total space of every

condominium project (table 1) for revenue generation for financing the development of affordable housing in a way which does not violate the privacy and security of condo owners.

Table 1. Building control and town planning regulations 2011

Area of Plot (sq. yds.)	Allowable Covered Area	Front (ft.)	Rear (ft.)	Sides	No. of Floors	Remarks
Upto 200	90%	-	-	-	B+G+1	-
201 to 400	75%	5'-0"	3'-0"	5'-0" On right side	B+G+1	-
401 to 700	60%	10'-0"	7'-6"	5'-0"	B+G+1	Front COS for rear side plots after sub division is 5'-0".
701 and Above	50%	20'-0"	10'-0"	10'-0"	B+G+1	Subdivided plots in two portions to have 5 ft. instead of 10 ft. on the dividing line, if one side (of 1000 Sq. Yds. plot) is 60ft of less than 60ft.)

Now the owners will capitalize this common area as *Waqf* and the revenue from this specific area will go to REIT fund. The stakeholders of this scheme are JMB (joint management companies of the condominium, condominium Owners, government, Waqf management companies or Islamic banks, low income group and community leaders. For example with the consent of owners the joint management body of the condominium dedicates the area as Waqf and allow any third party to make a gym or swimming pool facility in a way that the gym access is only from the outside and the residents of condominium may subscribe to gym at a discounted fee. Then in such conditions the income from that gym/ any other facility will go directly to the cooperative development for the financing of affordable housing for low income group.

- *Second source of finance: Cash waqf*

The second source of finance for this model is to generate funds through Cash Waqf. The donor for this cash waqf may be individuals, governments, corporations and institutions. This fund through cash waqf will follow Waqf Aam that is charitable waqf because this could not fall under the purview of Waqf Ahli (Private or family waqf). Moreover, waqf interest would be waqf mutlaq for this study and not waqf muqayyad, as the donor will delegate its authority to manage the waqf fund to waqf management authority that is termed as nazir (administrator) or mutawwali. Islamic commercial bank will act as *nazir* in WCHM arrangement.

- *Third source of finance: Waqf sukuk*

The third source of finance for our model is to generate funds through issuance of Sukuk that use waqf assets as underlying assets. The holders of Sukuk will get return from the revenue generated from these waqf assets. In our study, retail sukuk will be offered for subscription to retail investors that belong to mostly general public. This low-income group will then subscribe to the cooperative as a member and pay a nominal rental amount perpetually and these rentals will also be reinvested as a part of cooperative pool so that it can finance further projects with the same aim to provide affordable low cost housing for low income group. This cooperative will be managed by a professional management body which may be a Islamic financial institutions such as any Islamic commercial bank. A mechanism keeping in view a recent example from Malaysia may be followed in which perpetual sukuk by Malaysian airlines were issued and the transaction was advised by Maybank. These perpetual sukuk were issued without any maturity date without any fixed annuities and hence repayment of principal was not obligatory by MAS (Cizakca, 2016).

### 3. Research Limitations

It is evident from previous section that because WCHM is an innovative mechanism therefore its understanding is so far limited. Although utmost care has been taken in this paper to cover all the aspects of WCHM such as its practical applicability to the problem of affordable housing and financing of any cooperative based initiative, it is understandably assumed that this review is not exhaustive. The reasons behind this assumption are, this review has been undertaken with Islamic and eastern cultures in mind and therefore its generalizability is limited. Moreover, there is a need to validate the model through employing different research techniques such as interviews, case studies and statistical based survey methods and through applying different theoretical models that include but not limited to diffusion of innovation, theory of perceived attributes, stakeholder mapping etc. Finally, WCHM is in evolution phase and there is a room available to explore other innovative financing tools such as bank charities etc.

### 4. Conclusion

It can be seen from the discussion that WCHM is an innovative and practical solution to the problem of affordable housing. WCHM can be viewed as a very good starting point on the road to solution to affordable housing problem and ultimately follow a cyclical approach that may resolve the lack of affordable housing issue once and for all. In the interest of continuous resolution of affordable housing issue, follow up studies should be conducted. They could be qualitative, quantitative, or use a mixed method approach.

First area of interest for future research is about the practical implementation of WCHM. The appropriate research questions would be: what are the costs and benefits associated with the practical adoption of WCHM? what internal and external problems may arise with the practical implementation of WCHM? what are the enablers and barriers behind practical adoption of WCHM? Secondly, there is a need to communicate the associated benefits of WCHM to all its stakeholders. Therefore, there is a need to ascertain that who will communicate the benefits of WCHM and how they are communicated to the intended audience. Thirdly, there is a need to determine that the identified source of finance are not in conflict with each other and to further explore innovative sources to finance WCHM. Finally, there is a need to ensure that WCHM pool money is reinvested so that it may operate in a cyclical manner and initiate projects to resolve the problem of affordable housing.

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