

# **Challenges in Privately Joint-Ventured Project: A Case Study**

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**Abstract.** Ensuring housing for the urban dwellers is one among the main steps towards sustainable urban development. However, affordable housing for middle income households has been marked as a challenge because the ideas and interpretation differs in countries thanks to social and economic contexts. Despite the context, housing affordability is suffering from the prevailing market conditions and individuals' income sources, equally with the prevailing policy environment under various social and economic variables. Khulna, the third largest city of Bangladesh, is undergoing rapid urbanization process and housing demand is increasing here day by day due to concentration of individuals. The study area is Sonadanga residential district, which is found in Ward no.17 of Khulna City Corporation Area. It's in proximity to the town center and is one among the main residential areas in Khulna City. The space of the study area from CBD is 1 to 1.5 km and well connected with the CBD through a planned road network. This study is undertaken to spot the main barriers on affordability of middle-income group in multi-ownership housing in Sonadanga residential district. To conduct this study secondary data are used from existing literature during this field.

**Keywords:** Middle-income group, housing affordability, multi-ownership housing, Sonadanga residential area

## **1. Introduction**

Khulna is that the third largest city of Bangladesh and one among the prime industrial cities. Due to industries people gather here for employment opportunities and provides rise to an increased number of households. As a result, demand in dwelling units is uprising here for this extra households and it had been estimated that by the year 2020, Khulna City would require additional 2,24,736 new units of housing (Hossain, 2004). For this reason, adequate housing supply is required by public and personal sectors. But because the public sector housing isn't sufficient in

Khulna City, people are checking out private sector housing. consistent with Mondal (2012), among the 2 parties of personal sector housing (private land owners and personal land developers), recently people aren't counting on private landowners mostly due to illegal landowner ship and for this reason they're now getting to the private development agencies who are implementing many housing projects in several parts of the Khulna City. The Khulna Development Authority (KDA) was established in 1961 for the design and management of the town and therefore the only public sector authority in Khulna for development (Hossain, 2004). The KDA prepared a plan for Khulna city in 1961. The plan was prepared for a neighborhood of 70 square miles. In 2001 a second plan was prepared for extended area of 174 square miles and replaced the previous one (Chowdhury, 2013). Present population of Khulna is about 2.3 million (BBS, 2017) and estimated annual rate of growth is about 3.8% (USAID, 1999, as cited in Ahmed et al., 2013). Most of the populations of Khulna City are migrants comprised of about 47.80% of the entire population during which major factor identified as employment purpose (KDA, 1998, as cited in Ahmed et al., 2013). As a result, housing may be a necessity for this increased amount of population. Since 1960 up to 2004, KDA and Housing and Settlement Directorate (HSD) jointly provided about 6000 serviced plots, which was considered insufficient compared to the particular annual demand of 8300 units (Hossain, 2004). Therefore, the main supplier of urban land in Khulna is that the private sector, supplying about 90% of homes per annum (Hossain, 2004). Public sector housing initiatives are mainly on lower income groups, those that cannot afford to pay rent for housing and therefore the private sector primarily serves the upper income group for better profit. For this reason, middle income group don't have significant amount of accessibility in both sectors of housing. As a result, middle income group depends on rental housing for meeting their housing needs (Mazumder, 2016).

### **1.1. Socio-economic profile of Khulna City**

There were several phases of increase in Khulna City. Thanks to the extension of railway line from Jessore to Khulna the primary growth came during British period in 1885 (Naznin, 2012). Forest came during the partition of India in 1947, due to the influx of the refugees. Industrialization of Khulna within the 1960s caused third phase of increase during this region. Consistent with Mondal (2012), Khulna City experienced an incredible growth of population following liberation in 1971, which was mainly thanks to the agricultural urban migration and natural increase of population, thus contributed to extend about 4.13 percent per annum. This suggests that migration from other places to Khulna had been the dominant factor of the increase. His study revealed that, among the entire population, about 60 percent belong to the age bracket of 14-44 years, 22 percent belong to the age bracket 14 years and fewer and 5.9 percent have age 60 years and over. Among these three groups, the age bracket 14-44 is that the most economically active above the

economy of Khulna City. Moreover, he showed, monthly income of about 66 percent employed people of Khulna City is within Tk. 5,000 while 30 percent of them is within Tk. 2,500. Only 3.5 percent of the employed people belong to monthly income group of Tk. 15,000 and above (Mondal, 2012).

## 1.2. Housing demand in Khulna City

As population is increasing more dwelling units are needed for increasing population in Khulna City. Although the amount of households is increasing at a better rate, housing stock is increasing at a slower rate (i.e. by self, HSD and developers) and thus the speed of housing crisis is increasing (Mondal, 2012). In Table 1, we will see that the shortage for brand spanking new houses in 1991 was 8,200, in 2001 it had been 31,616 and in 2011 it had been 93,493. This picture reflects the trend of increase rate in Khulna city, which goes up per annum and with decreasing household sizes, housing crisis is additionally incremental. Table 1, therefore, shows that population is increasing in Khulna City but household size is decreasing from 1991 to 2011.

Table 1: Necessity for New House in Khulna City

Year	Household Size	Total Household	Housing Stock	Necessity for New House
1991	5.7	114,918	106,739	8,200
2001	4.5	171,826	146,209	31,616
2011	4.2	341,767	248,274	93,493

Source: Mondal (2012)

### 1.2.1. Housing Delivery System in Khulna City

Housing delivery system in Khulna City is dominated by private informal sector, like other cities of Bangladesh. Although the cooperative housing system was found to be negligible, private formal sector in Khulna City has not yet been developed properly (Hossain, 2004). There are housing project sub-systems that provide housing for the workers of the govt. and semi-government organizations (Hossain, 2004). Table 2 shows the main housing delivery sub-systems in Khulna.

Table 2: The housing delivery sub-system in Khulna City

No.	Housing Delivery Sub-system	Percentage (%)
1	Private housing sub-system	90
2	Public housing sub-system	1.5
3	Development authorities' site and service scheme	4
4	Slum and squatter sub-system	4.5

### 1.2.2. The Definition of Middle-Income Group and Components of Housing Affordability

The World Bank classifies every economy on the idea of Gross value (GNI) which is taken into account to be the simplest indicator of economic capacity and progress (Mazumdar, 2016). Table 3 provides the classification and income range of the middle-income group consistent with International Bank for Reconstruction and Development. Middle income housing means housing for those people that can afford permanent safety and hygienic condition of housing at an area for suitable job and other economic or certain activities (Mazumdar, 2016). But within the actual case of middle-income people its lower amount of accessibility to afford permanent housing. The housing scarcity problems also adversely affect the middle-income people that eagerly wish to have a house with secure tenure but generally are notable to have in current market situations. Thanks to the absence of public and personal housing providers within the middle-income housing market, middle income households depend upon one is to measure in self-built housing and therefore the other is to rent housing from their individual owners.

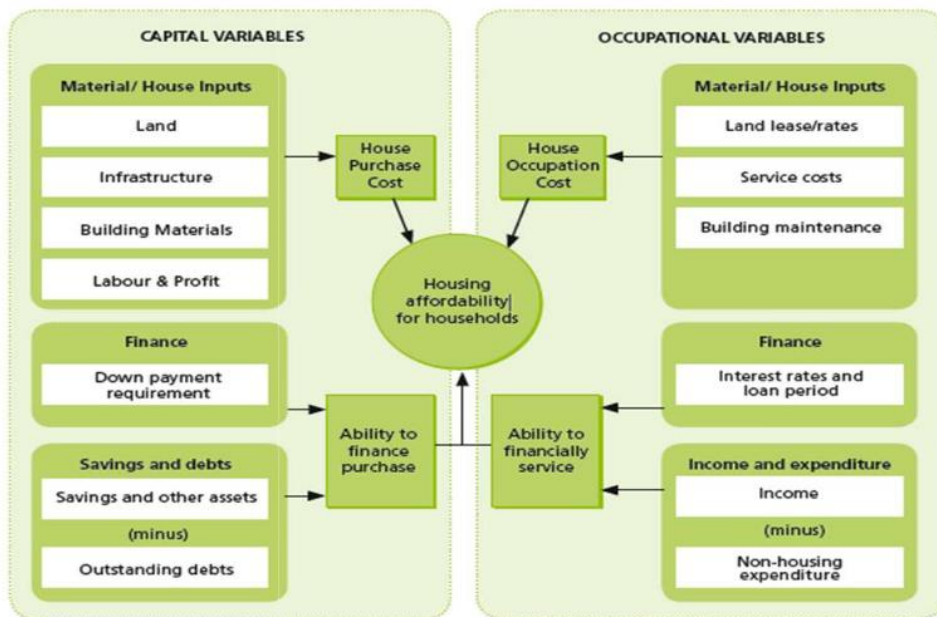


Fig. 1: Basic components of housing affordability.

Throughout the planet, especially within the developing countries, the middle-income groups are found to be the struggler of house-ownership problems due to incessant land price hikes, inflation and high prices of construction materials. In spite of national and international efforts aimed toward developing appropriate shelter policies and methods, no effective remedy has been found to cure housing

deficits (UNCHS, 1995, 1996), especially for the middle-income group. Though there are organizations and policies to solving house ownership problems, they mostly suit either the upper-income group or lower-income group. So, the middle-income group should remain within the spotlight due to their difficulties in house-ownership and thus affordability.

Table 3: The income range of middle-income group

Income group	Category	Monthly income range (In Tk.)
Middle income group	Lower Middle	13200-24999
	Middle	25000-49999
	Upper Middle	50000-70000

Source: World Bank, (2014) as cited in Mazumdar, (2016)

## 2. Methods of the Study

This study has been administered by mainly using secondary data sources. Secondary data includes various books, research works, journals and works of undergraduate and postgraduate students i.e. theses, projects, etc. These are collected from the various institutions and organizations. Urban and Regional Planning discipline and Architecture Discipline of Khulna University were the sources of those secondary data. The tactic includes analysis of the info on the case study area to spot the main constraints which impede the affordability of the actual group i.e. middle-income group during this case.

### 2.1. A brief overview of the Sonadanga residential district and therefore the major income group

Since 1967, KDA has developed 8 residential areas in several locations of Khulna for various income groups with 3161 plots occupying total 263.79 acres of land including Sonadanga residential district, located North Western a part of Khulna city (Hossain, 2004).

Its importance is extremely high within the context of the residential areas prevailing within the city because it has very close proximity to the town center. From a recent survey conducted by 4th year students of Architecture Discipline, Khulna University, the main group identified during this area are mainly upper-middle and middle-income group comprising mainly businessmen, doctors, teachers, Govt. and personal service holders. Sonadanga residential district was developed as site and repair scheme of Khulna Development Authority (KDA) and had been developed in two phases (Hossain, 2004). The primary phase was started in 1967 and completed in 1981 which was first planned development project in Khulna undertaken by KDA. The second phase was started in 1987 and was completed in 1994. Table 4 illustrates the specification of the 2 phases. The general Sonadanga area (1st phase and 2nd phase) features a very high concentration of residential plots

with reference to other land uses (Architecture Department, Khulna University, 2018). Due to its close proximity to the town center, many upper and middle-income group people are concentrating during this area.



Fig. 2: Location of different residential areas of KCC Area.

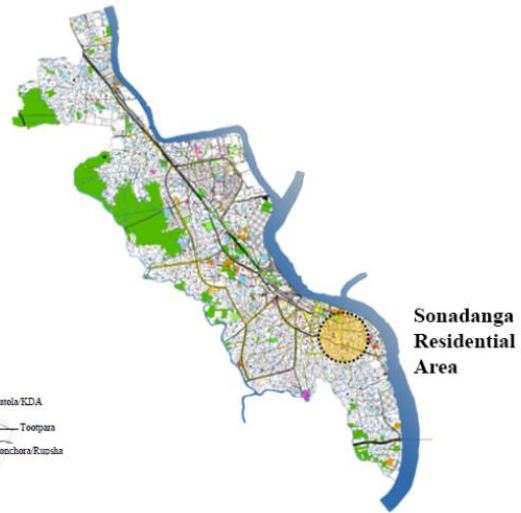


Fig. 3: Map of Sonadanga Residential Area.

Table 4: Sonadanga Residential Area Development Project taken up by KDA

Name of the Residential area (R/A)	Area (acre)	Project period	Total Plot nos
Sonadanga R/A (1st phase)	30.69	1967-81	205
Sonadanga R/A (2nd phase)	34.84	1987-94	443

### 2.1.1. Sonadanga Residential Area (1st phase)

Sonadanga 1st phase is found within the North-western a part of Khulna City. It's located within the Ward no. 17 and is in proximity to the town center. The importance of the Ward No. 17 is extremely high within the context of residential district of Khulna city because it is extremely almost the town center. The space of the study area from CBD is 1 to 1.5 km and well connected with the CBD through a planned road network. Existing road network and plot distribution is shown in Figure 4.

According to the study of Hossain (2004), in Sonadanga residential district 1st phase, there are 206 plots of about 1146.26 katha in a neighborhood of 30 acres of land with approximately 400 households with the typical plot size is 5.56 katha (445.15 sq. yards) and therefore the area of maximum number plots is 400 sq. yards. 98 you look after the entire built structure is permanent, where the upper income

people (highest house rent providers) of Khulna live (Hossain, 2004). From a recent survey conducted by 4th year students of Architecture Discipline, Khulna University, it had been revealed that, in Sonadanga 1st phase the dimensions of flats varies between 450-1600 sq. ft during which tenure ship is usually rental and sublet consisting of income groups mainly middle, upper middle- & upper-income group.

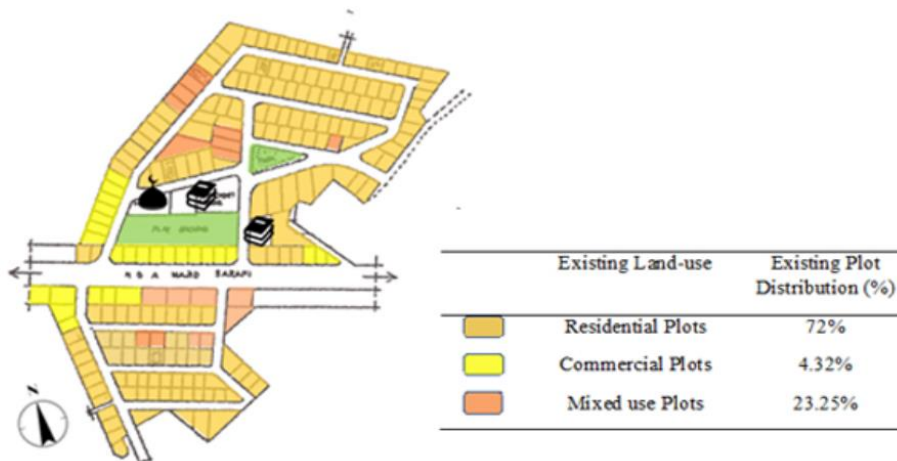


Fig. 4: Plot distribution of Sonadanga Residential Area (1<sup>st</sup> phase).

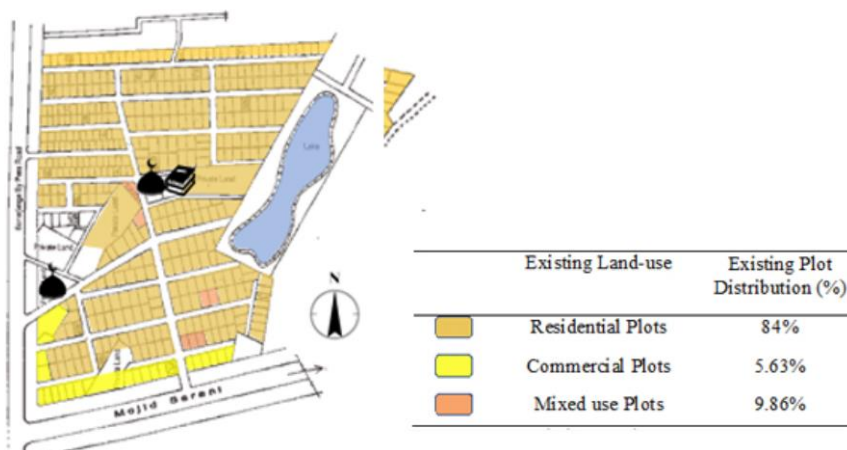


Fig. 5: Plot distribution of Sonadanga Residential Area (2<sup>nd</sup> phase).

### 2.1.2. Sonadanga Residential Area (2nd phase)

Sonadanga residential district 2nd phase was started in 1987 at Sonadanga of Khulna City under the management of KDA (sites and services schemes) and therefore the plot distribution led to 1994 (Hossain, 2004). After acquisition, the land was developed by providing different services and facilities then distributed/sold to prospective plot buyers. From the survey conducted by 4th year students of Architecture Discipline, Khulna University, it had been revealed that, in

Sonadanga 2nd phase, the dimensions of flats varies between 800-2000 square foot, which are mostly used as rental and a couple of flats employed by respective owners. Study further showed that income groups are mainly lower middle, middle, upper middle- & upper-income group derived from interviewing 30 households.

## **2.2. Multi-ownership housing delivery system in Sonadanga residential district**

Multifamily residential i.e. multi dwelling unit or MDU may be a housing typology where multiple separate housing units of residential inhabitants are contained within one building or several buildings within one complex and this process starts with the formulation of the system through which the work or project are going to be executed (Razon and Ahmad, 2017). it's going to be defined because the property held by tenancy in common and therefore the property comprises of quite one dwelling unit accommodated during a vertically repetitive structural system and every unit separated by its floor and roof slabs and walls with common access and services. Multi-ownership housing delivery process could also be divided into five phases (Razon and Ahmad, 2017):

- The land procurement phase,
- Design phase,
- Initial investment Phase,
- Construction phase,
- Handover phase (by lottery basis)

Overall the system of housing delivery are often categorized as: Group effort, Co-operative Society and Developer. Group effort comprises of 4 to 5 households which can be among the family and friends. Co-operative Society is an institutionalized body and has fairly sizable amount of households as members. In theory, both the above systems have non-profit motives. Whereas developer-built project is typically characterized by profit motives and thereby may become costlier than that of other two delivery systems. Multi-ownership housing delivery system in Sonadanga residential district is dominated by private informal sector like other areas of Khulna City. Generally, Multi-ownership housing delivery system in Sonadanga residential district is characterized by Group efforts and comprises of the many households which can be among the family and friends or relatives. But recently private formal sector is developing which incorporates private land developers and cooperative housing scheme.

## **3. Result and Discussion**

### **3.1. Housing Affordability Situation in Sonadanga Area: Major Impediments**

The current scenario of housing affordability situation of middle-income group in



Sonadanga residential district is described in light of the subsequent components.

### 3.1.1. Income trends and expenditure scenario

There are primarily three predefined economic classes within the urban areas of Bangladesh. They're the upper crust, the center class and therefore the class. But within the big cities, the difference between the class and therefore the upper classes is sort of wide. As a result, bourgeoisie has been classified into several sub-sections. Consistent with the study of Zahoor (2016), the center class has been classified into the Lower-middle, Middle-middle and Upper-middle income group. From a recent study of 4th year students of Architecture Discipline, Khulna University it's found that folks from middle-middle, upper-middle- and higher-income group live in Sonadanga 1st phase. And lower-middle, middle-middle, upper-middle and higher-class people live within the Sonadanga 2nd phase. Flat or apartments are needed for mainly lower-middle and middle-middle income class people. Upper-middle income and higher-class people aren't curious about developing apartments (Razon and Ahmad, 2017). They build 6–storied building by their own finance where they use one floor to measure and therefore the other floors are wont to give rent to tenants. Basically, the building acts as an income source for them. But lower-middle- and middle-income class people aren't capable to shop for plot due to higher rate of land. They like to shop for apartment because the price is comfortable to them. because the lower-middle and middle-middle income class people live here, their income range is monthly 20,000 Tk. to 70,000 Tk. Table 5 shows the share of income group and their monthly income of both Sonadanga 1and 2nd phase.

Table 5: Percentage of income group in Sonadanga residential area (1st and 2nd phase)

Income group	Average monthly income range (Tk.)	Percentage (Total sample =30 households)
Lower	5,500-8000	6.67
Lower middle	20000*	3.33
Middle	20,000-40,000	20
Upper middle	30,000-80,000	40
Upper	85,000-1,20,000	30

About 63.33% of the surveyed group consists of the middle-income group and from a total sample (30 households) 40% were upper-middle-income groups. Among them, occupations are mainly businessmen, doctor, teacher, Govt. and personal service holders. From a study conducted by Biswas (2015) on the income structure of the middle-income group in Khulna City, it had been found that about 56% earn (13,200-24, 999) BDT per month and their percentage is that the highest. About 23% earn (25,000-49, 999) who are within the 2nd positions and 21% earns

(50,000-70,000) BDT who are within the last position. He surveyed 263 households throughout the Khulna City for this research.

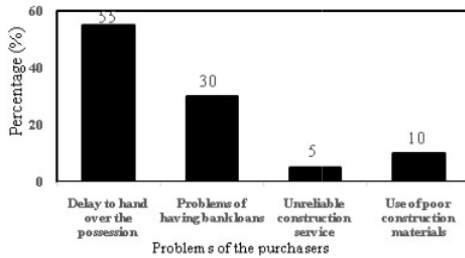


Fig. 6: Current trends of Expenditure of the middle-income group in Khulna City.

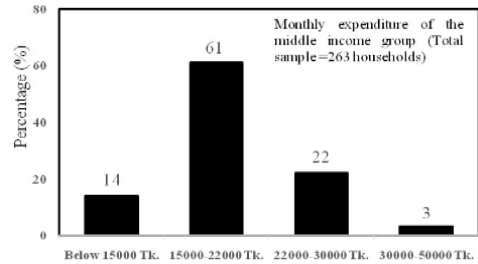


Fig. 7: Opinions of purchasers on performance of private real estate developers.

In the case of expenditure measurement of those households, he acknowledged that, the typical monthly expenditure (15,000-22,000) BDT holds the very best percentage (61%) after the 8th national pay scale. Figure 6 summarizes findings on the expenditure range of Khulna City that specialize in the middle-income group.

### 3.1.2. Absence of other sources of income

Most of the people of Khulna City particularly middle-income group have just one source of income unlike the inhabitants of Dhaka who have multiple sources of income. So, it's difficult for them to get apartments with single income source.

### 3.1.3. Social problems

Most of the people of Khulna City aren't accustomed with apartment living i.e. they're not prepared to have a flat because of their social requirements and still possess dream about owning a house rather than flat ownership Another problem with the flat ownership lies with the performance of the private land developers in Khulna City. Many of us aren't relying upon the developers due to their poor performance. Consistent with Mondal (2012), the issues mainly faced by the purchasers are:

- Delay handy over the possession
- Problems of getting bank loans
- Unreliable construction service
- Use of poor construction materials by land developers to maximise profit

Figure 7 illustrates the views of the purchaser on the performance of the private land developers.

### 3.1.4. Increasing land value

At present people of our country face housing scarcity problems due to increase in land price, building materials and rapid climb of population (Jabbar, 2004). Also,

this land price is one among the main criteria for selection of land by the developers. Land price is strongly associated with the position of the land, soil condition, amenities which are related to the property (Ray, 2014). Land price vary from one place to a different place due to these factors. At the present in Khulna City land price is increasing due to scarcity of land. For this reason, middle- and lower-income people are more willing to shop for flats as they're facing problems regarding acquiring property. Table 6 shows the land price of various location in Khulna KCC area. As Sonadanga residential district was developed as planned residential district under the supervision of KDA, land owning demand is high during this area as a results of demand theory. Land price are high enough for struggle to afford land for middle-income group (Mazumder, 2016). Actually, middle-income groups are inhabitants during this area but reside in rental apartment. Table 6 shows the residential land value changes over time in several areas of Khulna City.

Table 6: Real Scenario of Land price in different location of Khulna KCC Area

Residential Area	Govt. price/katha in Tk. (Lac)	Market price/katha from developers in Tk. (Lac)
Helatola/KDA	8.81	60-100
Nirala/Baniakhamar	4.87	20-30
Tootpara	5.12	20-25
Banorgati/Gollamari	3.40	15-20
Lobonchora/Rupsha	1.75	10-15
Sonadanga	2.78	20-30
Khalishpur	2.91	15-20

Source: Mondal (2012)

Throughout the Khulna City for residential purpose average land price increasing rate is 23%. Within the planned residential areas i.e. Sonadanga and Nirala, land price increasing rate is higher (30%-40%) than other areas of Khulna City during which land price in Sonadanga residential district is that the highest.

### 3.1.5. Construction and material cost

Although in Khulna City there's comparatively lower material and labor cost than in Dhaka, the entire construction cost is nearly equivalent. due to the practice of deep foundation (piling) for the soil condition and added maintenance cost in exterior finishes for salinity of water, the entire construction cost for building here is nearly almost like Dhaka, which is above the other suburban areas of Bangladesh. From the observation of Biswas (2015), there has been a gradual rise within the cost of construction materials in Bangladesh with prices doubling over the past 10 years and quadrupling over the past 20 years, but still but the exceptional property price escalation within the country. But he argued that this rise within the cost have

roughly followed the inflation trend, and thus rise in income levels. From this, he concluded, “it’s the increase of the land prices that basically has pushed the property prices to unaffordable levels”. Figure 8(a) shows the increase within the prices of construction materials in 2005-2015.

Year	Price of brick, per thousand pieces (Tk.)			Price of Sand, per cu ft (Tk.)		Price of cement, per bag (50 Kg) (Tk.)		Price of iron bar, per ton (Tk.)		
	1 <sup>st</sup> class brick	2 <sup>nd</sup> class brick	3 <sup>rd</sup> class brick	Local sand	Sylhet sand	Shah cement	Confidence cement	Royal cement	BSRM steel	KSRM steel
2005	4500	3800	2500	8.00	22.00	400	360	380	40000	42000
2010	7800	6800	5400	12	35	450	400	440	48000	50000
2015	8000	7000	6500	28	38	465	415	425	56000	56500

Fig. 8 (a): Rise in the Prices of Construction Materials, selected years (2005-2015) (Biswas, 2015).

Mouza name	Land Value (in Tk. per sq ft)	Building material Cost (in Tk. per sq ft)	Total Cost (in Tk. per sq ft)
Baniakhamar	1306	594	1900
Tutpara	1680	594	2274
Boyra	2083	594	2677
Sonadanga	4166	594	4760
Lobonchora	2083	594	2677

Figure 8 (b): Per sq. ft land value and construction cost in different mouzas of Khulna City (Biswas, 2015).

In Figure 8(b) total cost of a building comprising per sq. ft. land value and construction cost in several mouzas of Khulna City is given. From figure 8(b), it's evident, total cost is that the highest within the Sonadanga mouza among all the mouzas in Khulna City.

### 3.1.6. Constraints in housing finance

For housing construction finance is a crucial factor. Thanks to lack of adequate fund, some plot owners are unable to construct their houses. Currently in Bangladesh the prevailing sources of housing finance includes House Building Finance Corporation (HBFC), personal saving funds of potential urban house builders and buyers, Government loan, Government budgetary allocation, construction by internal donor agencies, commercial banks, specialized financial institutions and NGOs (Hossain, 2004). The share of housing publicly sector development programs are comparatively less in Bangladesh and only 5% of the housing units constructed in Bangladesh are financed from the formal sector (Hasan, 2002).

Lack of Housing finance may be a common problem in Bangladesh also as in Khulna. a really few percentages of population have access to public sector loans provided for development (Jabbar, 2004). Present condition of the housing finance

in Khulna City is given within the Figure 8. From a socio-economic survey of Khulna City, it had been found that of the 64% of the households' owning dwelling units, 96% financed the development of homes from their own sources (Jabbar, 2004). Only 1.4% of households have access to institutional finance like from HBFC, bank or NGOs etc. and about 2% households borrowed from relatives and friends while a really insignificant proportion borrowed from their colleagues (Hossain, 2004). The housing Finance sources of Sonatina residential district (1st phase and 2nd phase) is illustrated in Table 10.

### **(1) Personal savings/finance**

It was seen that majority of the people within the Sonatina residential district finances their housing from their own fund (about 80% within the 1st phase and 63% within the 2nd phase). Inhabitants here are mostly upper-middle income group (about 40%). Next dominant group is middle-middle income group consisting about 20% of the residents. Within the Table 11 the monthly housing and non-housing consumption and associated savings of various income groups of Sonadanga residential district is provided.

It is seen that among the all income groups only the middle-middle income group face difficulties in personal savings due to higher housing consumption than non-housing consumption (about 28.33%) and their savings consists of about 11.66% of the entire household income.

### **(2) Institutional finance**

HBFC (House Building Finance Corporation) is that the major and specialized institution that advances credit to the overall public for housing in Khulna City. Consistent with Hossain (2004), about 2500 applications are accepted by HBFC during 1985-2004 but stopped disbursement later. This is often thanks to the rise in defaulters for low rate of rent and thus the nobility of the borrowers to repay installments (Hossain 2004).

However, HBFC is contemplating to resume sanctioning loan as soon as 45% of the disbursed credit is recovered. Besides HBFC, Government banks i.e. Sonali bank, Rupali Bank and Agrani Bank are mainly for urban areas housing and as given to its employees and other indirect participants in Housing Finance are KDA, HSD and PWD (Hossain 2004).

In Khulna City Bangladesh Bank, Agrani Bank, Sonali Bank and a couple of private banks provide loans for housing. Bangladesh Bank sanctions loans for both the phases to shop for the land for housing and for the construction of building against the right application of its employees (Hossain 2004). The Agrani Bank sanctions loan of house building for both general people and their staffs. Sonali Bank also provides a loan of house building but it's very difficult to spot the particular amount of loan for housing purposes thanks to the mismanagement of maintaining the defaulter list in the head office of Sonali Bank in Khulna.

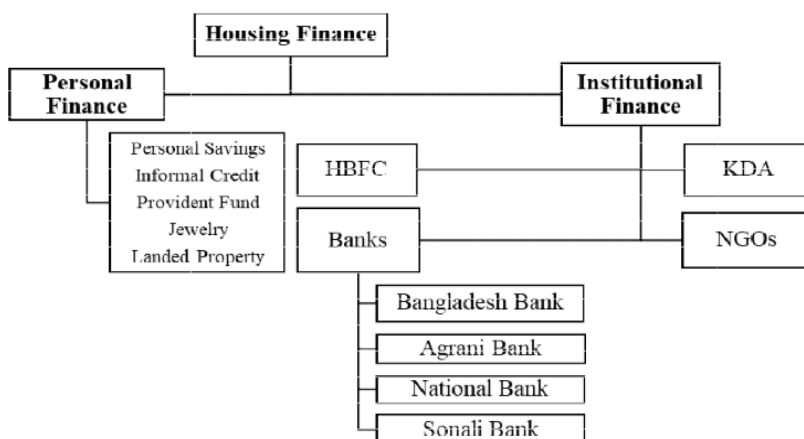


Fig. 9: Sources of Housing Finance for Construction in Khulna City (Hossain, 2004).

### 3.1.7. Problems in terms of availability of loans, high-interest rates and repayment time

According to Mondal (2012), loans for purchasing flat are only available in Dhaka and Chittagong City with the interest rates for 9 to 11 percent and their repayment period is 20 years or 240 regular monthly installments, but not altogether cities. He added, in a specific case for Khulna, class and lower-middle-class families have poor access but the center class and better bourgeoisie haven't any access to loans and face financial problems. His study revealed some loan providing organizations in Khulna, such as Delta BRAC Housing Finance Corporation Ltd. (DBH), a personal sector. Non-bank financial organization and House Building Finance Corporation (HBFC), a specialized public financial organization providing loans for construction of homes and extension of existing residential areas. DBH features a very high rate of interest 16% to 17% depending upon the dimensions of land whereas HBFC has a rate of interest 2.5% to eight varying with debenture (Mondal, 2012). Also, mortgage requirements restrict getting the loan.

Table 7: Name of the Institution of Housing Loan and its Interest Rate and Repayment time

Name of the Institution	Interest Rate (%)	Repayment time (Year)
House Building Finance Corporation	8	15
Delta Brace Housing Finance Corporation Ltd.	16-17	15
Bangladesh Bank	14	12

The Bangladesh Bank provides loan for development with high rate of interest (14% per annum) and repayment time is brief, particularly for the middle-income group who barely can avail (Mondal, 2012). He added, the respondents are owning

apartments by installations with only five years repayment time. Table 12 shows the rate of interest and repayment time of the various institutions. The rate of interest of the House Building Financial Corporation is less than the others but this loan isn't available for all (Mondal, 2012).

### 3.2. Major Findings

From this study major impediments found for middle income group in Sonadanga residential area are mainly economic insolvency thanks to increasing expenditure, lack of other sources of income, increase in land value, higher construction cost, unwillingness for apartment living, unavailability of loans thanks to less financial institutions, high interest rates, mortgage requirements for loan conditions, underdeveloped private formal sector, lack of reliance on formal private developers, minimum number of site and services scheme by public sector and lack of appropriate Government initiatives for affordable housing for middle-income group. Although Co-operative housing scheme is developing recently, there's a scarcity of coordination among the individual land-owners. a number of the impediments are common for major urban areas i.e. Dhaka, Chittagong but in Khulna City alternative sources of income, social values, loan opportunities and lack of reliance on developers play significant role for the struggle of middle-income group to afford multi-ownership housing. We will summarize the findings in Figure 10.

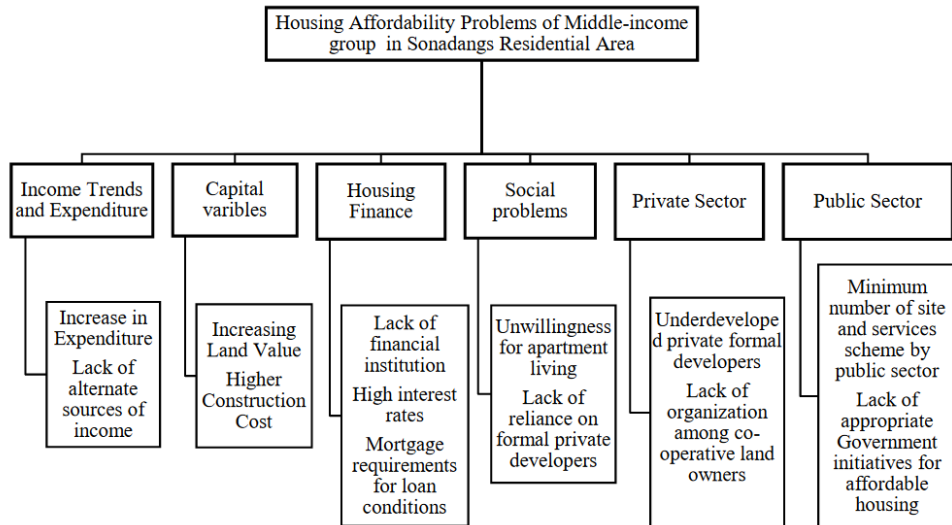


Fig. 10: Constraints on affordability of Middle-income group in Sonatina Residential Area.

### 4. Conclusion and Proposals

Housing is one among the essential needs of person and Government has the prime duty to supply affordable housing for all income groups. During this regard,

Government has got to take adequate measures for policy implication that specialize in the middle-income group in terms of budgeting, loans from provident funds, pension etc. If these provisions were made, several real estate loan opportunities will rise easing the financial requirements of housing for middle-income group. Public sector should undertake a greater number of site services scheme for exploitation and will work ashore policy and land price mechanism. For instance, in Sonadanga area most of the serviced plots are acquired by higher-middle income group. If certain number of small plots (2-3 katha sized) were developed and facilities were provided considering the middle-middle and lower-middle income group then they also could easily afford those plots. So, Government should develop land considering people of specific income group to supply affordable housing for all people. On the opposite hand, formal private sector in Khulna City isn't yet developed properly due to lack of reliance on the developers and lack of organizations among the individual owners just in case of co-operatives. Government can take initiative during this regard providing an organizational body for funding and monitoring the works of personal formal sector. By this, more people are going to be ready to afford housing by raising funds for initial deposit requirement and can also believe the standard and facilities provided by the developers.

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