# CHAPTER - 4 ANALYSIS OF DATA

This chapter deals with analysis of the data collected at the time of field survey along with the informations provided by Govt. Registered Valuers, Builder/developers and individual flat owners within the Guwahati Metropolitan City area. Also this chapter include the Flow chart, Diagrams, observations.

# 4.1 Analysis of Data related to Valuers:

- During the study it is found that the valuers followed various valuation methods for valuation of residential real estate property within the Guwahati Metropolitan City area. The methods are mentioned bellow:
- 1) Sale comparison method, 2) Cost approach method, 3) Income approach method &
- 4) Both Sales comparison method and Cost approach method.

Table 4.1 Method followed by the valuers for valuation of residential real estate property(flat):

Sl. No.	Methods	No. of respondents	% of respondents
1	Sales comparison method	16	53.33%
2	Cost approach method	5	16.67%
3	Income approach method	0	0%
4	Both Sales comparison and	9	30%
	Cost approach method		

Source: Field Study Total 30 100%

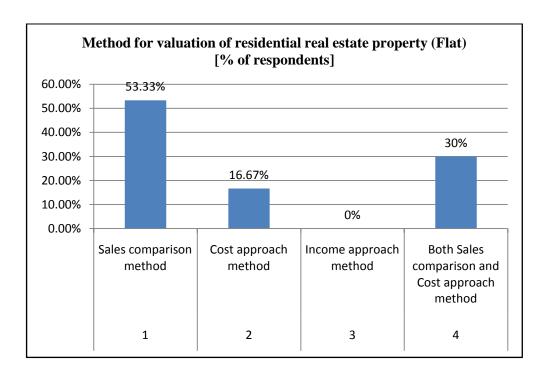


Fig.-4

#### **Observation:**

Table - 4.1 present data to highlight Method followed by valuers for valuation of residential real estate property. It has been found that majority (53.33%) of the valuers follow sales comparison method for valuation of the property in relation to flats, which is followed by both Sales comparison and cost approach method (30%). From this it could be conducted that majority of the valuers follow sales comparison method for valuation of a residential flat. Out of these methods, Income approach method is not use by the valuer while valuing a residential flat. During the study it is also found that there is no sufficient data available required for valuation of residential flat under Income approach method as the Income approach method is used to estimate the value of income-producing properties such as apartment complexes, office buildings and shopping centres etc. The income capitalization approach can be fairly straight forward when the subject property can be expected to have a future income and when its expenses are predictable and steady.

During the study it is found that the various factors considered by the valuers at the time of valuation of residential real estate property (flat) within Guwahati Metropolitan City Area. These factors are as bellow:

1) Location of the property, 2) Infrastructure, 3) Ambience, 4) Communication facility, 5) Amenities, 6) Access and accessibility, 7) Design and out looking, 8) Quality of construction, 9) Comfort ability of living & 10) Demand and Supply.

Table 4.2 Rating the factors in valuing the residential real estate property (Flat):

Sl.	Description	Not	Less	Influen-	Most	Total	Weighted	Rank
No.		at all	influen-	cing (3)	influen-	weighte	Mean	
		(1)	cing (2)		cing (4)	d Score	Score	
1	Location of the property	0	1	7	22	111	3.70	2
2	Infrastructure	0	0	22	8	98	3.26	4
3	Ambience	0	6	22	2	86	2.86	6
4	Communication facility	0	1	20	9	98	3.26	4
5	Amenities	0	4	18	8	94	3.13	5
6	Access and accessibility	0	1	14	15	104	3.46	3
7	Design and out looking	0	3	19	8	95	3.16	4
8	Quality of construction	0	0	8	22	112	3.73	1
9	Comfortability of living	1	5	19	5	88	2.93	5
10	Demand and supply	4	11	10	5	76	2.53	7

Source: Field Study



Fig.-5

## **Observation:**

This data indicates that the valuer give highest rating for quality of construction(3.73) and location of the property(3.70) in valuing the property in relation to flat within Guwahati Metropolitan City Area which is followed by accessibility(3.46) and infrastructure (3.26) and communication facility(3.26). From this it could be said that the quality of construction and location of the property are the most important factors in valuation of residential real estate property (flat) considered by a Registered Valuer. Though the other factors are less important, but also having influences in consideration the value of a real estate property (residential flat) with in Guwahati Metropolitan city area.

# **4.2 Hypothesis Testing:**

In order to examine whether there is agreement amongst the respondents on the ranking of the different attributes the following hypothesis is tested by applying descriptive statistics with Kendall's Co-efficient of Concordance.

 $H_0$ : There is no significant agreement among the respondents on the ranking of different attributes

# $H_1$ : There is a significant agreement among the respondents on the ranking of different attributes

Through the use of SPSS 16.0 software the following results have been found out:

Table-4.3 Descriptive Statistics on the ranking of different attributes

	N	Mean	Std. Deviation	Minimum	Maximum
Location of the property	30	3.70	.535	2	4
Infrastructure	30	3.27	.450	3	4
Ambience	30	2.87	.507	2	4
Communication facility	30	3.23	.568	2	4
Amenities	30	3.17	.592	2	4
Access and accessibility	30	3.47	.571	2	4
Design and out looking	30	3.17	.592	2	4
Quality of construction	30	3.73	.450	3	4
Comfort ability of living	30	2.97	.669	1	4
Demand and supply	30	2.60	.894	1	4

Table-4.4 Kendall's W Test

	Mean Rank
Location of the property	7.50
Infrastructure	5.60
Ambience	3.85
Communication facility	5.48
Amenities	5.18
Access and accessibility	6.52
Design and out looking	5.20
Quality of construction	7.60
Comfort ability of living	4.53
Demand and supply	3.53

**Table-4.5 Test Statistics** 

N	30
Kendall's W <sup>a</sup>	.296
Chi-Square	79.924
df	9
Asymp. Sig.	.000

# a. Kendall's Coefficient of Concordance

The value of Kendalls co-efficient of concordance has been found to be 0.296 which is significant at 5% level of significance. The null hypotheses is being rejected and infer that the respondents are applying essentially the same standard in ranking the 10 objects i.e. there is significant agreement in ranking by different respondents at 5% level.

- During the study it is found that the valuers have ever faced problems at the time of valuation of residential real estate property (flat) within Guwahati Metropolitan City Area and the respondents are as bellow:
- 1) Problem faced by the valuers Yes, 2) Problem faced by the valuers No.

Table 4.6 Do you face any problems during valuation of Residential Real Estate property (Flat)?

Sl. No.	Description	No of respondents	% of respondents
1	Yes	30	100%
2	No	0	0%

Source: Field Study Total 30 100%

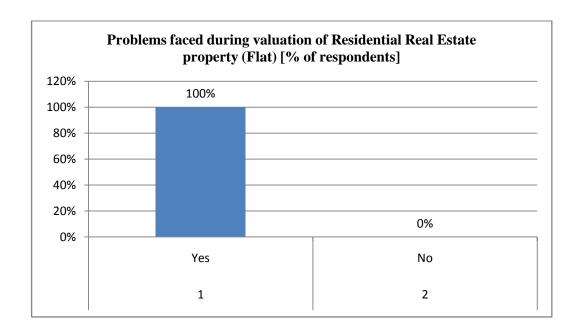


Fig.-6

#### **Observation:**

Table 4.6 present data related to problems that 100% of the respondents have face problems often at time of valuation of Real estate property.

The research study has come across that the valuers faced problems during the valuation of residential real estate property (flat) within Guwahati Metropolitan City Area which are mentioned below:

1) Not provided the NOC for construction, 2) Not provided approved drawing, 3) Not disclosed the age of the building, 4) Not disclose the share of land owner, 5) Not provide sufficient documents related to the land used for the project, 6) The builder / developers not provide the clear picture/ about the specification of the fitting and fixer inside the flat, 7) Non similarity in between Sale property and subject property generally with respect to the locality, date of sale, economic conditions, physical attributes and competitiveness, 8) Non possibility to compare the amenities of each comparable with those of the subject, quantifying the difference between the two properties.

Table 4.7 The documents/information without which the valuers faced problems at the time of doing valuation of Residential Real Estate Property (Flat)

Sl. No.	Description	Strongly Agree (5)	Agree (4)	Neither Agree Nor Disagree (3)	Disagree (2)	Strongly Disagree (1)	Total Score	Mean Score
1	Not provided the N.O.C. for construction from the concerned authority	20	9	1	0	0	139	4.63
2	Not provided approved drawing	14	7	9	0	0	125	4.16
3	Not disclosed the age of building in case of second hand flat	2	10	9	7	2	93	3.1
4	Not disclosed the share of land owner	4	12	7	7	0	103	3.43
5	Not provided sufficient documents related to the land used for the project	19	8	3	0	0	136	4.53
6	Not provide the clear picture about the specification of the fitting and fixer inside the flat	3	6	6	6	9	78	2.60
7	Non similarity in between sale property and subject property generally with respect to the locality, date of sale, economic conditions, physical attributes and competitiveness	3	4	16	5	2	91	3.03
8	Non possibility to compare the amenities of each comparable with those of the subject, quantifying the difference between the two properties	1	6	12	9	2	85	2.83

Source: Field Study

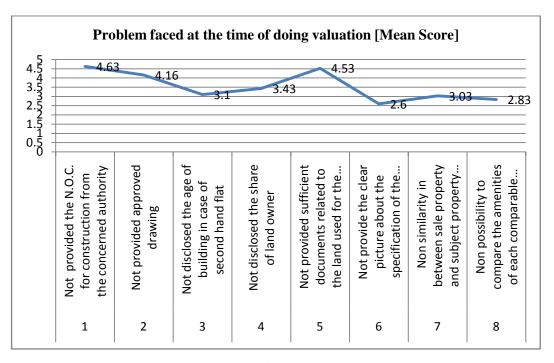


Fig.-7

# **Observation:**

Table 4.7 is showing that the valuer give highest rating for the problems faced at the time of valuation not providing NOC for construction (4.63) and not providing sufficient documents related to the land used in the project. (4.53).

On inquiry it is found that not providing the NOC for construction of building at the time of valuation the valuers faced many problems for which he may stop the process of valuation. Also, lack of other documents/information at the time of valuation of a real estate property (residential flat) with in Guwahati Metropolitan city area, create more or less problems to the valuer.

- During the study period it is found that the various approaches followed by the valuers for solving the problems arrived at the time of valuation of residential real estate property (flat) within Guwahati Metropolitan City Area. The approaches are as bellow:
- 1) Self knowledge and expertise, 2) In consultation with builder, 3) Asked builder to solve the problems, 4) Take others expert's view.

Table 4.8 Which of the approaches do you follow to solve the problems?

Sl.	Description	No. of	% of
No.		respondents	respondents
1.	Self knowledge and expertise	21	70%
2.	In consultation with builder	7	23.33%
3.	Asked builder to solve the problems	1	3.33%
4.	Take others expert's view	1	3.33%

Source: Field Study Total 30 100

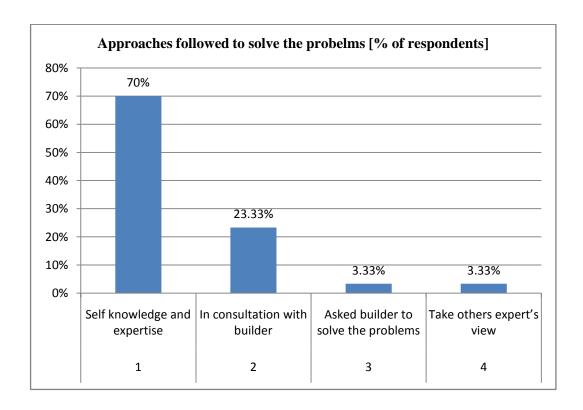


Fig.-8

# **Observation:**

Table 4.8 presents data related to the approach followed by the valuers to solve the problems by self knowledge and expertise (70%) which is followed by in consultation

with builder (23.33%). On inquiry it is found that most of the valuers are academically and professionally qualified. Through their experience and self knowledge they are capable to solve the problems faced at the time of valuation. In case of the problems related to the builders, valuers may consult with the builders to solve the problems.

# 4.3 Analysis of Data related to Builders:

During the study period it is found that the builders/developers take finance for their project / residential apartment within Guwahati Metropolitan City Area from the sources mentioned bellow:

1) Self finance only, 2) Bank and Financial institution finance only, 3) Self finance + Bank finance, 4) Self finance + Financial institution other than Bank, 5) Self finance and booking advance & others.

**Table 4.9 Source of finance for the project:** 

Sl.	Source of finance	No of	% of
No.		respondents	respondents
1	Self finance only	3	8.57%
2	Bank finance and Financial institution only	0	0%
3	Self finance + Bank finance	9	25.71%
4	Self finance + Financial institution other than Bank	6	17.14%
5	Self finance and booking / advance payment & others	17	48.57%

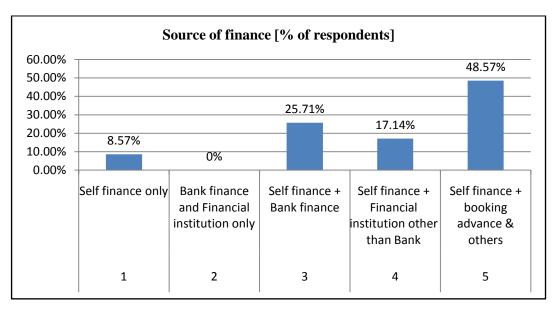


Fig.-9

# **Observation:**

In table 4.9 the source of finance for the project is being presented. It has been observed that majority (i.e. 48.57%) of the respondents have financed their project through self finance and booking/advance payment and others. This is followed by self finance + bank finance which is 25.71% as the second source of finance. From this it could be said that the Builders are not interested to take finance from banks and financial institution only because of high amount of interest to be paid to the bank for a long period of time which may extended up to complete the project as well as sold out all the flats in the project. It may cause reduce the profit margin. Therefore, most of the builders preferred to finance their project through their own finance along with the collection from the clients as booking/advance payment from the clients and other sources with lower rate of interest or without interest so that the builders can minimized the project cost and earn more profit from the project.

> During the study period it is found that the builders/developers take the land for their residential project within Guwahati Metropolitan City Area from the sources mentioned bellow:

1) Own Land, 2) Newly Purchased Land, 3) Shared with land owner, 4. Lease land, 5. Govt. allotted land.

Table 4.10 Land Details for the project

Sl. No.	Details	No of respondents	% of respondents
1	Own Land	0	0%
2	Newly purchased land	0	0%
3	Shared with land owner	35	100%
4	Lease land	0	0%
5	Govt. allotted land	0	0%

Source: Field Study Total 35 100

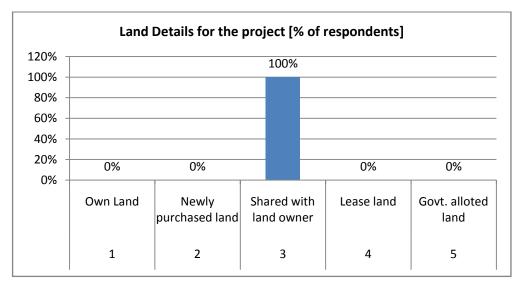


Fig.-10

# **Observation:**

The table 4.10 present that 100% of the respondents have taken land in shared with land owner mode. The builders/ developers entered in to registered agreement with the land owner with mutual understanding between the two parties with condition of development of the land against whom the builders fix the share of land owner on the project in the form of money or percentage of share of the project.

During the study it is found that the builders/developers use some valuation methods to fix the selling price as well as to find out the cost of the project for their own interest. For selecting the valuation methods the builders follow the Modes for their residential project within Guwahati Metropolitan City Area as mentioned bellow:

1) Self advice, 2) Consultation with expert, 3) Method of competitors, 4) Government policy,5) Method operated in the locality/Market.

Table 4.11 Mode selected for the valuation method

Sl. No. Mode No of respondents 19 Self advice 1

% of respondents 54.29% 2 Consultation with expert 6 17.14% 3 8 22.86% Method of competitors 0% 4 Government policy 0 5 Method operated in the 2 5.71% locality/Market

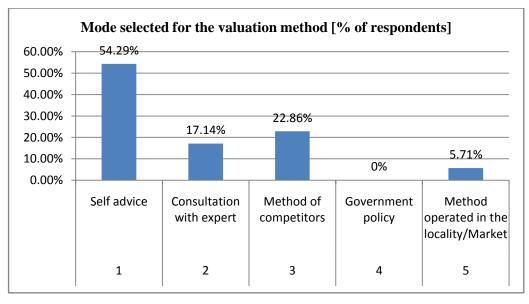


Fig.-11

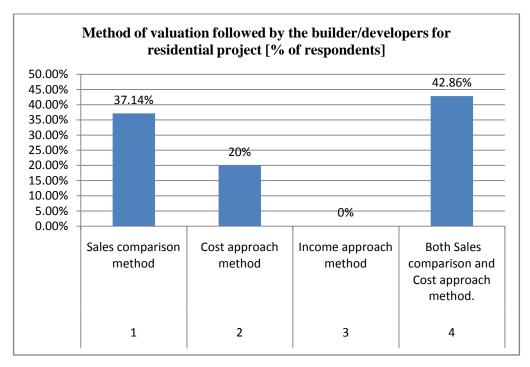
## **Observation:**

The table 4.11 present that the majority (54.29%) of the respondents have followed their own advice in the selection of the valuation method for their project. This is followed by Method of competitors, which is 22.86% have been followed in selecting the valuation method.

- During the study it is found that the builders/developers follow the valuation methods to fix the selling price as well as to find out the cost of the project for their own interest. Generally the following valuation methods are used by the builders for their residential project within Guwahati Metropolitan City as mentioned bellow:
- 1) Sales comparison method, 2) Cost approach method, 3) Income approach method,
- 4) Both Sales comparison and cost approach method.

Table 4.12 Method of valuation followed by the builders/developers for residential project

Sl. No.	Methods	No of respondents	% of respondents
1	Sale comparison method	13	37.14%
2	Cost approach method	7	20%
3	Income approach method	0	0%
4	Both Sales comparison and Cost approach method.	15	42.86%



**Fig.-12** 

## **Observation:**

The table 4.12 present that the both Sale Comparison and Cost Approach method (42.86%) is mostly followed by the builders. The next mostly used method is Sale comparison method (37.14%). This is followed by cost approach method (20%). The income approach method is not followed by the builders in case of residential apartment/flat.

Most of the builders followed the both Sale comparison and Cost approach method. Because, by applying the Cost approach method the builders can calculate the exact total project cost and find out the unit cost of the project. After knowing the unit cost, to determine the selling price of the flats in the apartment in relation to the market price, the builders follow the sale comparison method for marketing the flats. It is clearly mentioned here that the builders/developers are not authorised person to issue a valuation certificate. They use the valuation methods only for their own interest.

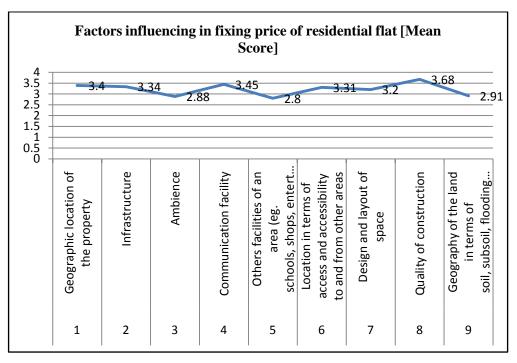
During the study it is found that at the time of fixing the price of the residential flat by the builders/developers, they considered some factors which influenced on fixing the price residential project within Guwahati Metropolitan City Area. The influencing factors are mentioned bellow:

- 1) Geographic location of the property, 2) Infrastructure, 3) Ambience,
- 4) Communication facility, 5) others facilities of an area (e.g. schools, shops, entertainment), 6) Location in terms of access and accessibility to and from other areas, 7) Design and layout of space, 8) Quality of construction, 9) Geography of the land in terms of soil, subsoil, flooding and other environmental matter.

Table 4.13 Rating of the factors influencing in fixing price of residential flat

Sl.	Description	Not	Less	Influencing	Most	Total	Mean
No.		at all	influencing	(3)	influencing	Score	Score
		(1)	(2)		(4)		
1	Geographic location of	0	2	17	16	119	3.4
	the property						
2	Infrastructure	0	0	23	12	117	3.34
3	Ambience	0	4	31	0	101	2.88
4	Communication facility	0	0	19	16	121	3.45
5	Others facilities of an	0	7	28	0	98	2.8
	area (e.g. schools,						
	shops, entertainment)						
6	Location in terms of	0	0	24	11	116	3.31
	access and accessibility						
	to and from other areas						
7	Design and layout of	0	0	28	7	112	3.2
	space						
8	Quality of construction	0	0	11	24	129	3.68
9	Geography of the land	0	6	26	3	102	2.91
	in terms of soil, subsoil,						
	flooding and other						
	environmental matter						

Source: Field Study



**Fig.-13** 

# **Observation:**

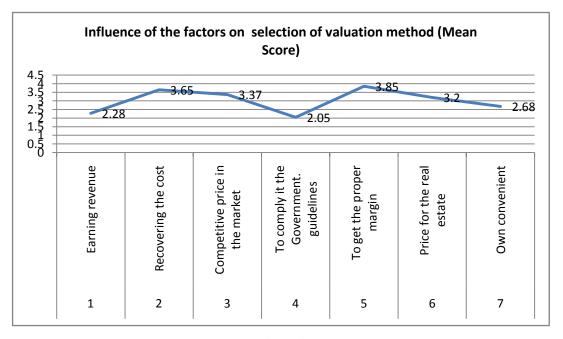
The table 4.13 presents data related to the factors influencing in fixing price. It has been found that in case of fixing price of the units the most influencing factor is Quality of construction having the mean score of 3.68. The next influencing factor is communication facility having mean score of 3.45. This is followed by third influencing factor Geographic location of the property having mean score of 3.40. These factors are being followed by other factors as per the mean score.

- During the study it is found that at the time of selecting the valuation method of the residential flat by the builders/developers, some factors which influenced on the valuation methods for the residential project within Guwahati Metropolitan City Area. The influencing factors are mentioned bellow:
- 1) Earning revenue, 2) Recovering the cost, 3) Competitive price in the market, 4) To comply with the Government guidelines, 5) To get the proper margin, 6) Price for the real estate, 7) Own convenient.

Table 4.14 Rating of the influence of the factors on selection of valuation method

Sl.	Description	Not	Less	Influencing	Most	Total	Mean
No.		at all	influencing	(3)	influencing	Score	Score
		(1)	(2)		(4)		
1	Earning revenue	3	19	13	0	80	2.28
2	Recovering the cost	0	0	12	23	128	3.65
3	Competitive price in	0	4	14	17	118	3.37
	the market						
4	To comply with the	4	25	6	0	72	2.05
	Government.						
	guidelines						
5	To get the proper	0	1	3	31	135	3.85
	margin						
6	Price for the real	0	6	16	13	112	3.20
	estate						
7	Own convenient	1	14	15	5	94	2.68

Source: Field Study



**Fig.-14** 

## **Observation:**

The Table 4.14 presents data related to the factors influencing in the selection of valuation method. It has been found that the proper margin is considered to be most influencing factor in the selection of method of valuation having the highest mean

score of 3.85. This is followed by next influencing factor recovering the cost on the selection of method having the mean score of 3.65. These are followed by other factors with their mean score.

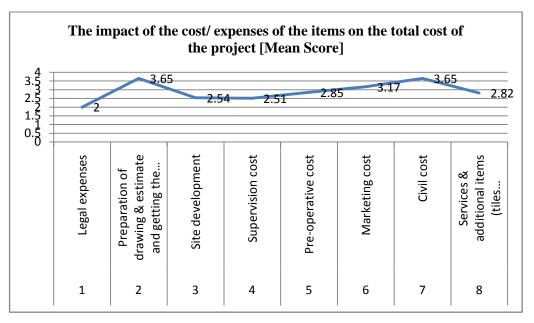
During the study it is found that the cost/expenses of some items influence on finding out the total costing of the residential project to be borne by the builders/developers within Guwahati Metropolitan City Area. The influencing items are mentioned below:

1) Legal expenses, 2) Preparation of drawing & estimate and getting the NOC from the authority, 3) Site development, 4) Supervision cost, 5) Pre-operative cost, 6) Marketing cost, 7) Civil cost, 8) Services & additional items (tiles flooring, false ceiling, fitting fixing of decorative items etc.).

Table 4.15 Rating of the impact of the cost/expenses of the items on the total cost of the project:

Sl.	Description	Not	Less	Influencing	Most	Total	Mean
No.		at all	influencing	(3)	influencing	Score	Score
		<b>(1)</b>	(2)		<b>(4)</b>		
1	Legal expenses	6	23	6	0	70	2.0
2	Preparation of drawing	0	1	10	24	128	3.65
	& estimate and getting						
	the NOC from the						
	authority						
3	Site development	1	16	16	2	89	2.54
4	Supervision cost	0	17	18	0	88	2.51
5	Pre-operative cost	0	6	28	1	100	2.85
6	Marketing cost	0	8	13	14	111	3.17
7	Civil cost	0	0	12	23	128	3.65
8	Services & additional	0	6	29	0	99	2.82
	items (tiles flooring,						
	false ceiling, fitting						
	fixing of decorative						
	items etc.)						

Source: Field Study



**Fig.-15** 

#### **Observation:**

The table 4.15 presents data related to the impact of cost/expence of items on the total cost of the project. It has been observed that Preparation of drawing and estimate cost and getting the NOC from the authority is the most influencing cost in fixing the price with a means score of 3.65. Also the Civil cost has same influencing cost in fixing the price of the units. The next factor is the marketing cost with a mean score of 3.17. These are followed by other factors i.e. Pre-operative cost, Services & additional items, Site development, Supervision cost and Legal expenses.

- During the study it is found that the builders/ developers faced problems in valuation methods of real estate property within Guwahati Metropolitan City Area. The problems faced by the builders/developers are mentioned bellow:
- 1) Difficult to understand, 2) Pure technical, 3) Related to margin, 4) Against the Government guidelines, 5) Not practiced by any competitor in the area, 6) Does not cover the cost, 7) Customers are not satisfied with the value.

Table 4.16 Most important Problem faced by the developers in case of valuation method of the real estate:

Sl.	Problems	No of	% of
No.		respondents	respondents
1	Difficult to understand	3	8.57%
2	Pure technical	6	17.14%
3	Related to margin	18	51.43%
4	Against the Government guidelines	0	0%
5	Not practiced by any competitor in the area	4	11.43%
6	Does not cover the cost	4	11.43%
7	Customers are not satisfied with the value	0	0%

Source: Field Study Total 35 100

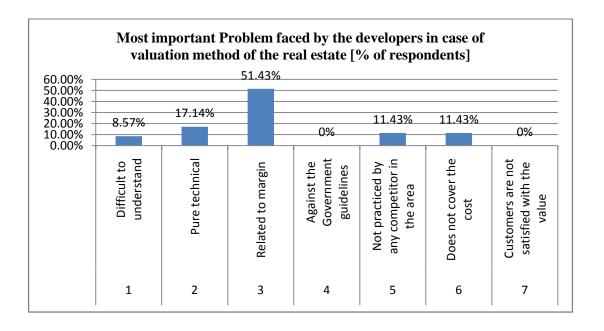


Fig.-16

# **Observation:**

The table 4.16 Presents data related to the problems faced by the developers/builders in case of valuation method of the real estate property. It has been observed that majority of the respondents have been facing problem in relation to the valuation

method is related to margin (51.43%). The problem is related to technical is important for 17% of the respondents.

During the study it is found that the builders/ developers followed the methods for appraisal of the project to recover the cost of real estate property within Guwahati Metropolitan City Area are mentioned bellow:

1) Payback period, 2) Accounting rate of return, 3) Net present value, 4) Profitability index,5) Internal rate of return.

Table 4.17 Method followed for appraisal of the project to recover the cost

Sl. No.	Method	No of respondents	% of respondents
1	Payback period	18	51.43%
2	Accounting rate of return	2	5.71%
3	Net present value	10	28.57%
4	Profitability index	0	0%
5	Internal rate of return	5	14.29%

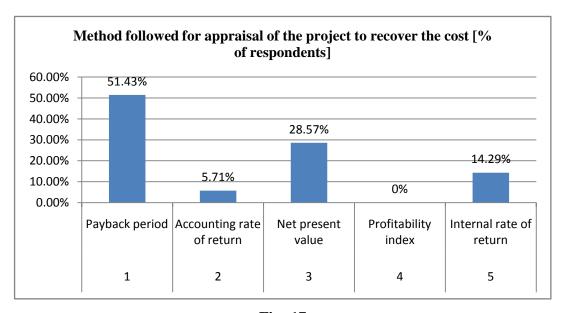


Fig.-17

## **Observation:**

The table 4.17 shows that majority of the respondents have followed Payback period method to recover the cost. The next most preferred method is Net present value method. The least preferred method is Accounting rate of return method.

During the study it is found that the builders/ developers followed the Indian Accounting standard for valuing of residential real estate property within Guwahati Metropolitan City Area.

1. Yes or 2. No,

Table 4.18 Did Indian Accounting Standard followed for valuing real estate:

Sl. No.	Description	No of respondents	% of respondents
1	Yes	0	0%
2	No	35	100%

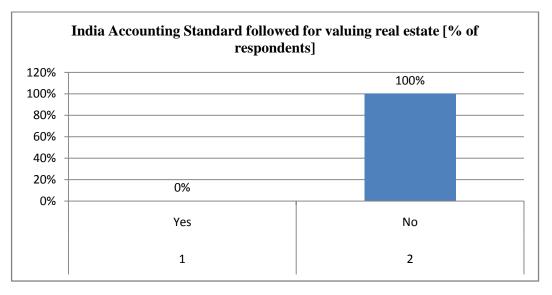


Fig.-18

## **Observation:**

The table 4.18 presents data related to accounting standard, it has been observed that the respondents have not followed any accounting standard in relation to valuing residential real estate property.

During the study it is found that the builders/ developers faced problems in developing the real estate project within Guwahati Metropolitan City Area?

1. Yes or 2. No.

Table 4.19 Did any problem faced in developing the project:

Sl. No.	Description	No of respondents	% of respondents
1	Yes	35	100%
2	No	0	0%

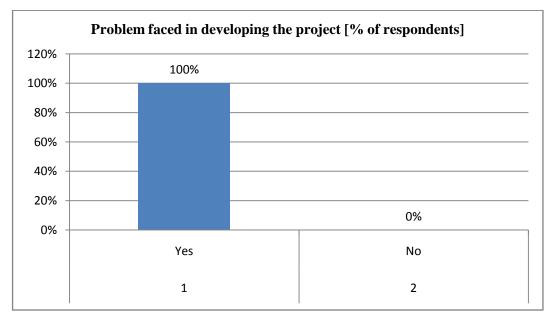


Fig.-19

## **Observation:**

The table 4.19 shows the data whether problems are being faced by the developers or not. It has been observed that almost all of them faced problem in developing the project.

During the study it is found that the builders/ developers faced problems in developing the residential real estate project within Guwahati Metropolitan City Area. The problems faced by the builders/developers are mentioned bellow:

1) Raw Material, 2) Labour, 3) Approval of the project from authority, 4) Documentation, 5) Marketing problem.

Table - 4.20 Most important Problems faced in developing the project

Sl. No.	Description	No of respondents	% of respondents
1	Raw Material	7	20%
2	Labour	4	11.43%
3	Approval of the project	18	51.43%
4	Documentation	0	0%
5	Marketing problem	6	17.14%

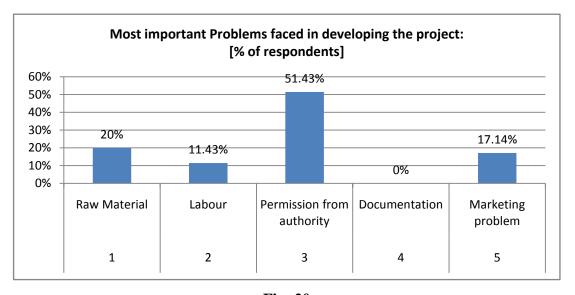


Fig.-20

## **Observation:**

The table 4.20 presents data related to the problems faced by the developers/builders in case of developing residential real estate project. Tt has been observed that majority of the respondents (51.43%) have faced problem with permission of authority in relation to their real estate. The next problem being faced by them is Raw material (20%).

- During the study period it is found that the builders/ developers follow the same method in valuing / costing of the residential real estate project over the period within Guwahati Metropolitan City Area. The respondents give their views as bellow:
- 1) Same method followed for valuing the real estate property over the period Yes.
- 2) Same method not followed for valuing the real estate property over the period No.

Table 4.21 Did the same method followed for valuing the real estate over the period:

Sl. No.	Description	No of respondents	% of respondents
1	Yes	32	91.43%
2	No	3	8.57%

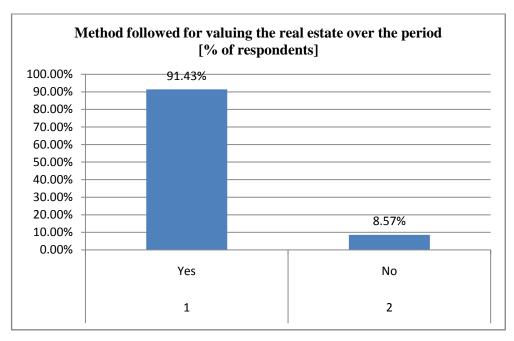


Fig.-21

#### **Observation:**

The table 4.21 presents data related to consistency in following valuation method. It has been observed that majority of the respondents (91.43%) have said that they have been following the same method of valuation in relation to their real estate, which reflects the consistency in using the valuation method.

# 4.4 Correlations of different factors and Testing of Hypothesis:

H<sub>o</sub>: There is no significant relationship between Margin and Valuation method.

Table 4.22 Descriptive Statistics between Margin and Valuation method

	Mean	Std. Deviation	N
Valuation Method	2.4857	1.37993	35
Margin	3.69	.471	35

Table 4.23 Correlations between Margin and Valuation method

		Valuation Method	Margin
Valuation Method	Pearson Correlation	1	.120
	Sig. (2-tailed)		.491
	N	35	35
Margin	Pearson Correlation	.120	1
	Sig. (2-tailed)	.491	
	N	35	35

**Inference:** The correlation between Valuation method and Margin is found to be a negative correlation which is -.120. The p-value is .491 which is greater than .05 and shows that the relationship is not significant. Hence null hypothesis is accepted.

Ho: There is no significant relationship between Price and Valuation method.

Table 4.24 Descriptive Statistics between Price and Valuation method

	Mean	Std. Deviation	N
Valuation Method	2.4857	1.37993	35
Price	3.57	.558	35

Table 4.25 Correlations between Price and Valuation method

		Valuation Method	Margin
Valuation Method	Pearson Correlation	1	.126
	Sig. (2-tailed)		.472
	N	35	35
Price	Pearson Correlation	.126	1
	Sig. (2-tailed)	.472	
	N	35	35

**Inference:** The correlation between Valuation method and Price is found to be a positive correlation which is .126. The p-value is .472 which is greater than .05 and shows that the relationship is not significant. Hence null hypothesis is accepted.

# $\mathbf{H}_0$ : There is no significant relationship between competitive price and valuation method

Table 4.26 Descriptive Statistics between competitive price and valuation method

	Mean	Std. Deviation	N
Valuation Method	2.4857	1.37993	35
competitive price	3.60	.497	35

Table 4.27 Correlations between competitive price and valuation method

		Valuation Method	competitive price
Valuation Method	Pearson Correlation	1	.077
	Sig. (2-tailed)		.659
	N	35	35
competitive price	Pearson Correlation	.077	1
	Sig. (2-tailed)	.659	
	N	35	35

**Inference:** The correlation between Valuation method and competitive is found to be a positive correlation which is .077. The p-value is .659 which is greater than .05 and shows that the relationship is not significant. Hence null hypothesis is accepted.

# $\mathbf{H}_0$ : There is no significant relationship between recovery cost and valuation method

Table 4.28 Descriptive Statistics between recovery cost and valuation method

	Mean	Std. Deviation	N
Valuation Method	2.4857	1.37993	35
Recovery of cost of the real estate	3.80	.406	35

Table 4.29 Correlations between recovery cost and valuation method

		Valuation	Recovery of cost
		Method	of the real estate
Valuation Method	Pearson Correlation	1	.084
	Sig. (2-tailed)		.631
	N	35	35
Recovery of cost of	Pearson Correlation	.084	1
the real estate	Sig. (2-tailed)	.631	
	N	35	35

**Inference:** The correlation between Valuation method and Recovery of cost of the real estate is found to be a negative correlation which is .084. The p-value is .631 which is greater than .05 and shows that the relationship is not significant. Hence null hypothesis is accepted.

# 4.5 INFLUENCE OF FACTORS ON COSTING OF REAL ESTATE (residential flat)

# **Total Respondents = 35 Nos. of Developers/builders.**

These data are collected from the developers/ builders regarding the calculation of the unit price of individual flats in an residential apartment considering the following

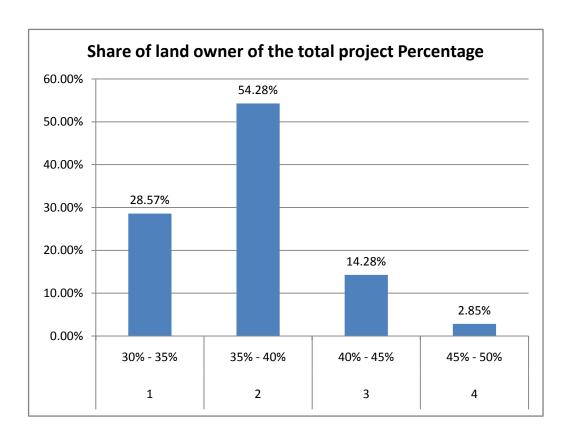
items. Generally, the developers/ builders enter in to agreement with the land owner negotiating at some percentage of the whole project which will be paid by the builder to the land owner in form of cash money or portion of the project/ building. Though the land owner becomes a share partner of the project, the cost of land has not been included in case of calculating the project cost. First of all, cost of construction of the apartment to be calculated as per the Schedule of Rate (SOR)/ approved rates by the A.PWD, Govt. of Assam and then add the other expenses to be incurred to complete the whole project considering the information given by the builder/ developers. After calculating the total project cost, it is easy to find out the unit cost of individual flat of the same apartment.

During the study it is found that the builders/developers enter in to agreement with the land owner negotiating at some percentage of the whole project as the share of land owner which will be paid by the builder to the land owner in form of money or portion of the project/ building. The percentage for the land owner in case of residential real estate project within Guwahati Metropolitan City Area generally lie in the range are mentioned bellow:

1. 30% to 35%, 2. 35% to 40%, 3. 40% to 45%, 4. 45% to 50%

Table 4.30 Share of land owner of the total project

Sl. No.	Share of land owner	No of	Percentage of
	(% age of total project)	Respondents	respondent
1	30% - 35%	10	28.57%
2	35% - 40%	19	54.28%
3	40% - 45%	5	14.28%
4	45% - 50%	1	2.85%



**Fig.-22** 

**Interpretation:** Table 4.30 presents the data related to share of land owners. Generally, the developers/ builders enter in to agreement with the land owner negotiating at some percentage of the whole project which will be paid by the builder to the land owner in form of cash money or portion of the project/ building. From the above analysis it has been found that 54.28% of the land owner demands their share in between 35% to 40% of the project from the developers. Other land owners are also demand their share based on the importance of the land and location.

During the study it is found that the builders/ developers have to bear some expenses against some legal paper or documents. These are mentioned as range of percentage of the total Construction cost:

1) 0.05% to 0.1%, 2) 0.1% to 0.5%, 3) 0.5% to 1.0%.

Table 4.31 Contribution of Legal Expenses in the project

Sl. No.	Legal Expenses (% age on	No of	Percentage of
	Total Construction Cost)	Respondents	respondent
1	0.05% - 0.1%	18	51.43%
2	0.1% - 0.5%	10	28.57%
3	0.5% - 1.0%	7	20.00%

Source: Field Study Total 35 100

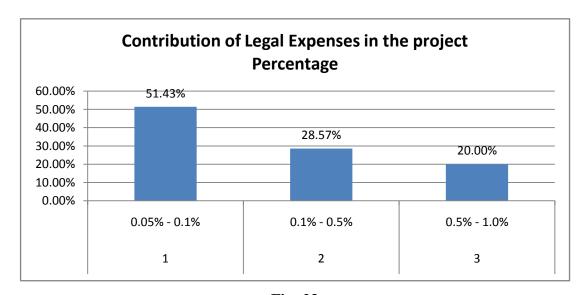


Fig.-23

**Interpretation:** Table 4.31 shows the data relating impact of legal expenses on cost of project. It has been found that in case of developing the project the builder / developer have to bear the cost for the Legal expenses 0.5-1% of the total construction cost which is agreed by 51.43% of the respondents.

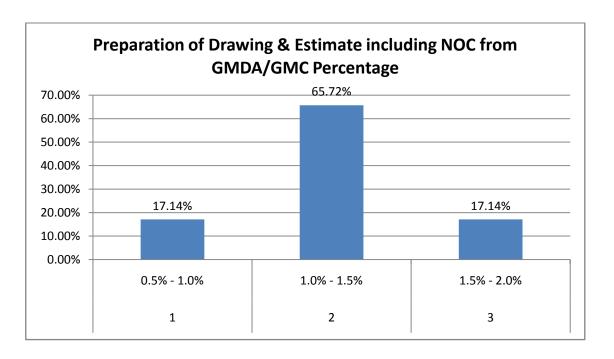
During the study it is found that the builders/developers have to bear some expenses against preparation of drawing and Estimate including obtaining the NOC for construction of the building from the GMDA/GMC. These expenses are mentioned as range of percentage of the total construction cost:

1) 0.5% to 1.0%, 2) 1.0 % to 1.5%, 3) 1.5% to 2.0%.

Table 4.32 Preparation of Drawing & Estimate including NOC from GMDA/GMC

Sl.	Preparation of Drawing & Estimate	No of	Percentage of
No.	including NOC from GMDA/GMC	Respondents	respondent
	(% age on Total construction Cost)		
1	0.5% - 1.0%	6	17.14%
2	1.0% - 1.5%	23	65.72%
3	1.5% - 2.0%	6	17.14%

Source: Field Study Total 35 100



**Fig.-24** 

**Interpretation:** Table 4.32 presents the data related to share of the cost towards drawing, estimate and obtaining NOC. It has been found that in case of calculation of the total cost of the project the preparation of drawing and estimating including NOC

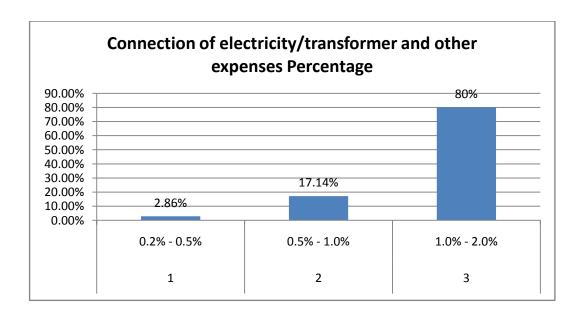
from GMDA expenses contributes 1.0-1.5% of the construction cost which is agreed by 65.72% of the respondents.

During the study it is found that the builders/ developers have to bear some expenses against electrification/transformer and other expenses which is an integral part of the total project cost. The expenses are in range of percentage of the total civil cost mentioned bellow:

1) 0.2% to 0.5%, 2) 0.5 % to 1.0%, 3) 1.0% to 2.0%

Table 4.33 Connection of electricity/transformer and other expenses

Sl.	Connection of	No of	Percentage of
No.	electricity/transformer and other	Respondents	respondent
	expenses (% age on Total Civil Cost)		
1	0.2% - 0.5%	1	2.86%
2	0.5% - 1.0%	6	17.14%
3	1.0% - 2.0%	28	80%



**Fig.-25** 

**Interpretation:** Table 4.33 shows the data relating to connection of electricity and other expenses. It has been found that in case of total cost of the project the connectivity expenses contributes 1-2% of the total civil cost which is agreed by 80% of the respondents.

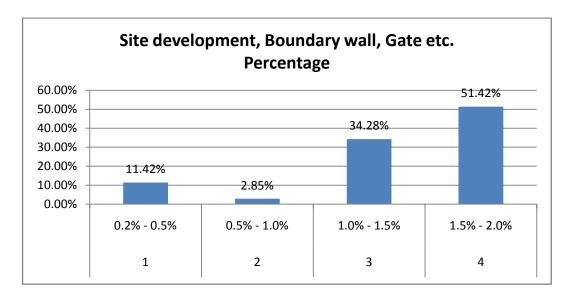
During the study period it is found that the builders/ developers have to bear some expenses against site development, construction of boundary wall, gate etc. which are integral part of the total project cost. The expenses are in range of percentage of the total civil cost mentioned bellow:

1) 0.2% to 0.5%, 2) 0.5 % to 1.0%, 3) 1.0% to 1.5%, 4) 1.5% to 2.0%

Sl. Site development, Boundary wall, Gate No of Percentage of No. etc. (% age on Total Civil Cost) Respondents respondent 1 0.2% - 0.5% 4 11.42% 2 2.85% 0.5% - 1.0% 3 1.0% - 1.5% 12 34.28% 4 1.5% - 2.0% 18 51.42%

Table 4.34 Site development, Boundary wall, Gate etc.

Source: Field Study Total 35



**Fig.-26** 

100

**Interpretation:** Table 4.34 presenting the data related to site development, boundary wall, gate etc. to civil cost. It has been found that in case of find out the total cost of the project the Site development, Boundary wall, Gate etc. expenses contributes highest 1.5-2.0% of the total civil cost which is agreed by 51.42% of the respondent.

During the study it is found that in case of implementation of a project, the builders/developers have to bear some expenses against the supervision cost which is an integral part of the total project cost. The expenses incur is in range of percentage of the total construction cost mentioned bellow:

1) 2.0% to 3.0%, 2) 3.0 % to 4.0%, 3) 4.0% to 5.0%.

Table 4.35 Supervision cost of the project

Sl. No.	Supervision cost of the project (% age on Total construction Cost)	• •	
1	2.0% - 3.0%	8	22.85%
2	3.0% - 4.0%	22	62.86%
3	4.0% - 5.0%	5	14.28%

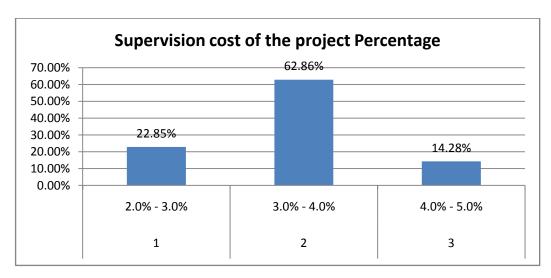


Fig.-27

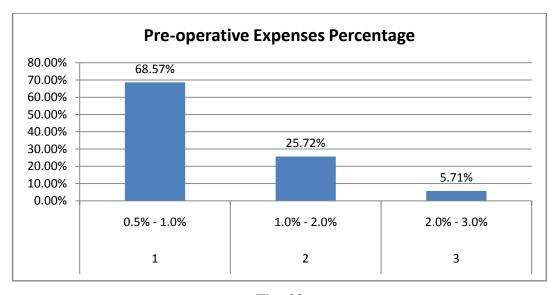
**Interpretation:** Table 4.35 presenting the data related to supervision cost of the project. It has been found that in case of total cost of the property the supervision expenses contributes 3.0% - 4.0% of the total construction cost which is agreed by 62.86% of the respondents.

During the study it is found that in case of implementation of a project, the builders/developers have to bear some expenses against the pre-operative expenses which are an integral part of the total project cost. The expenses incur is in range of percentage of the total construction cost mentioned bellow:

1) 0.5% to 1.0%, 2) 1.0 % to 2.0%, 3) 2.0% to 3.0%

**Table 4.36 Pre-operative Expenses** 

Sl. No.	Pre-operative Expenses (% age on	No of	Percentage of	
	<b>Total construction Cost)</b>	Respondents	respondent	
1	0.5% - 1.0%	24	68.57%	
2	1.0% - 2.0%	9	25.72%	
3	2.0% - 3.0%	2	5.71%	



**Fig.-28** 

**Interpretation:** Table 4.36 presents the data related to share of pre-operative expenses to total cost. It has been found that in case of total cost of a residential project the pre-operative expenses contributes 0.5-1% of the total construction cost which is agreed by 68.57% of the respondents.

During the study it is found that in case of marketing the flats of a project, the builders/developers have to bear some expenses against the marketing expenses which are an integral part of the total project cost. The expenses incur is in range of percentage of the total construction cost mentioned bellow:

1) 1.0% to 2.0%, 2) 2.0 % to 3.0%, 3) 3.0% to 4.0%.

**Table 4.37 Marketing Expenses** 

Sl. No.	Marketing Expenses (% age on	No of	Percentage of
	Total construction Cost)	Respondents	respondent
1	1.0% - 2.0%	29	82.86%
2	2.0% - 3.0%	6	17.14%
3	3.0% - 4.0%	0	0

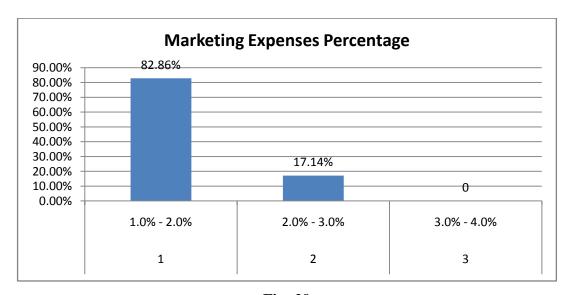


Fig.-29

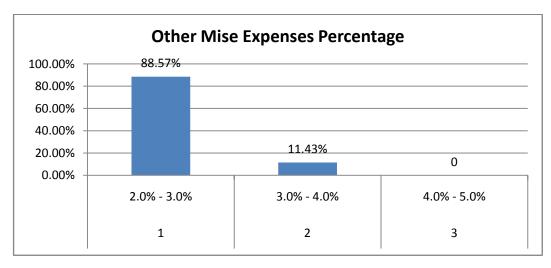
**Interpretation:** Table 4.37 presenting the data related to share of marketing expenses in total cost. It has been found that in case of find out the total cost of the project the Marketing expenses contributes 1.0-2% of the total construction cost which is agreed by 82.86% of the respondents.

During the study it is found that in case of developed of a project, the builders/developers have to bear some expenses against other miscellaneous expenses which are an integral part of the total project cost the project. The expenses incur is in range of percentage of the total construction cost mentioned bellow:

1) 2.0% to 3.0%, 2) 3.0 % to 4.0%, 3) 4.0% to 5.0%

**Table 4.38 Other Mise Expenses** 

Sl.	Other Misc. Expenses (% age on	No of	Percentage of		
No.	<b>Total construction Cost)</b>	Respondents	respondent		
1	2.0% - 3.0%	31	88.57%		
2	3.0% - 4.0%	4	11.43%		
3	4.0% - 5.0%	0	0		



**Fig.-30** 

**Interpretation:** Table 4.38 presenting the data related to other misc. expenses share in total civil cost. it has been found that in case of find out the total cost of the project, the miscellaneous expenses contributes 2-3% of the total construction cost which is agreed by 88.57% of the respondent.

During the study it is found that in case of developed of a project, the builders/developers have to bear some expenses against services (electrification, sanitary and water supply) and additional items (Tiles/marble flooring, False ceiling, Decorative doors, windows, Internal & External decoration, Modular Kitchen, Amenities etc.) which are integral part of the total project cost. The expenses incurred are in range of percentage of the total civil cost mentioned bellow:

1) 10.0% to 15.0%, 2) 15.0 % to 20.0%, 3) 20.0% to 25.0%, 4) 25% to 30%

**Expenses for Additional** No of SI. Percentage of No. **Items & Services** Respondents respondent 10% - 15% 20.00% 1 2 34.29% 15% - 20% 12 3 20% - 25% 13 37.14% 4 3 25% - 30% 8.57%

Table 4.39 Expenses for Additional Items & Services

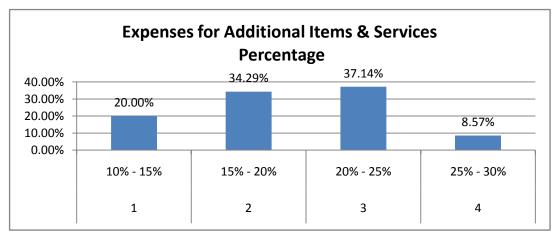


Fig.-31

**Interpretation:** Table 4.39 presents the data related to expenses for additional items and Services in total civil cost. It has been found that in case of find out the total cost of the project the expenses of additional items and services contributes 20-25% of the total civil cost which is agreed by 37.14% of the respondents.

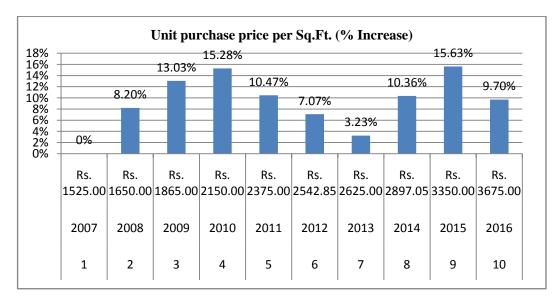
## 4.6 Analysis of Data related to Individual buyers/flat owners:

During the study period it is found that in case of purchased unit price of the individual flats, data were collected from the individual flat owners in the year 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2016. The average unit purchase price of every mentioned bellow:

Table - 4.40 Average Unit Purchase Price of Flat

Sl. No.	Year	Average Unit Price	Increase (%)
1	2007	Rs. 1525.00	0%
2	2008	Rs. 1650.00	8.20%
3	2009	Rs. 1865.00	13.03%
4	2010	Rs. 2150.00	15.28%
5	2011	Rs. 2375.00	10.47%
6	2012	Rs. 2542.85	7.07%
7	2013	Rs. 2625.00	3.23%
8	2014	Rs. 2897.05	10.36%
9	2015	Rs. 3350.00	15.63%
10	2016	Rs. 3675.00	9.70%

Source: Field Study



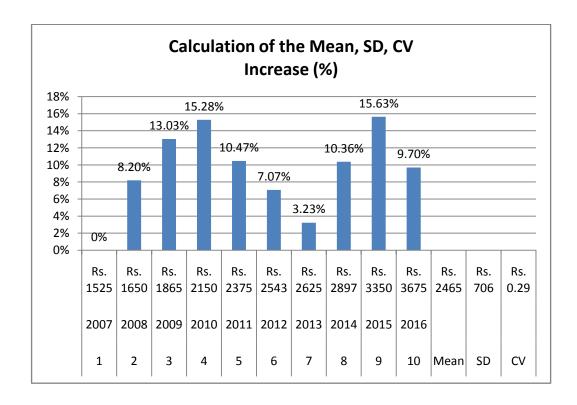
**Fig.-32** 

Table 4.41 Calculation of the Mean, SD, CV

Again, from the above table the Mean, SD, CV has been calculated as follows:

Sl. No.	Year	Average Unit Price	3-year moving average	Increase
				(%)
1	2007	1525		0%
2	2008	1650	1680	8.20%
3	2009	1865	1888	13.03%
4	2010	2150	2130	15.28%
5	2011	2375	2356	10.47%
6	2012	2543	2514	7.07%
7	2013	2625	2688	3.23%
8	2014	2897	2957	10.36%
9	2015	3350	3307	15.63%
10	2016	3675	3163	9.70%
Mean		2465		
SD		706		
CV		0.29		

**Source: Field Study** 



**Fig.-33** 

### **Observation:**

In table 4.40 and 4.41 the researcher has presented the data of moving average of price over a period of 10 years. It has been found that the basic price of the residential flat has been increasing from 2007 to 2016 from Rs. 1525.00 to Rs. 3675.00 per Sq.Ft. If the growth rate is observed it is found that highest growth in the price took place in the year 2015(15.63%) which is followed by the year 2010 (15.28%). The 3-year moving average and annual growth have been shown also. The co-efficient of variation is also calculated which found to be very low reflecting consistency of price during the period of study.

- During the study it is found that in case of purchase the flat the individual flat owner took their finance from the sources mentioned bellow:
- 1) Only Self Finance, 2) Only Bank Finance, 3) Both Self Finance and Bank Finance,
- 4) Financial Institution other than Bank, 5) Finance from other sources.

**Table 4.42 Source of Finance:** 

Sl.	Source	No. of	% of
No.		respondents	respondents
1	Only SelfFinance	0	0%
2	Only Bank Finance	0	0%
3	Both Self Finance and Bank Finance	200	100%
4	Financial Institution other than Bank	0	0%
5	Financefrom other sources	0	0%

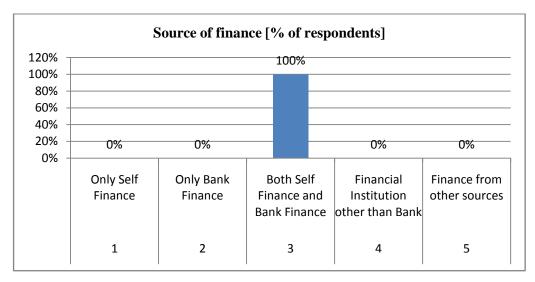


Fig.-34

### **Observation:**

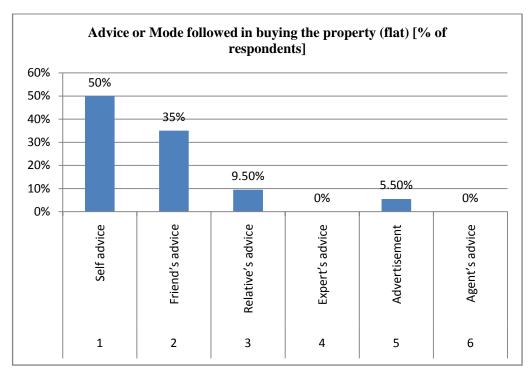
Table 4.42 is presenting the data related to sources of finance. It has been observed that 100% of the respondents have bought their flat through finance from the both self finance and Bank finance (i.e. own contribution with bank finance as per the Home Loan norms).

During the study it is found that at the time of buying the flat who advice the individual flat owners to take the decision to buy the flat, are mentioned bellow:

1) Self advice, 2) Friend's advice, 3) Relative's advice, 4) Expert's advice, 5) Advertisement, 6) Agent's advice.

Table 4.43 Advice or Mode followed in buying the residential flat:

Sl. No.	Mode	No. of respondents	% of respondents
1	Self advice	100	50%
2	Friend's advice	70	35%
3	Relative's advice	19	9.5%
4	Expert's advice	0	0%
5	Advertisement	11	5.5%
6	Agent's advice	Nil	0%



**Fig.-35** 

### **Observation:**

10) Comfortable for living.

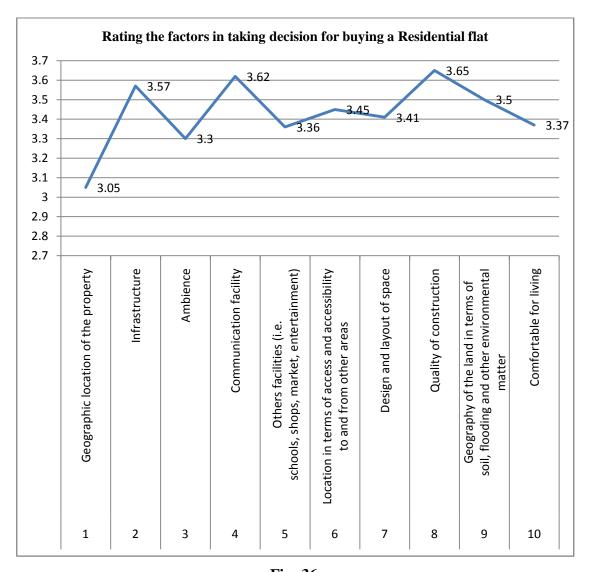
Table 4.43 showing the data related to advice or mode followed in buying residential flat. It has been observed that 50% of the respondents have bought their flat based on their self advice and 35% have bought through friend's advice. Similarly followed by other's advice.

- During the study period it is found that at the time of buying a residential flat, the purchasers have to take the decision for buying the flat based on some influencing factors which are mentioned bellow:
- 1) Geographic location of the property 2) Infrastructure, 3) Ambience, 4) Communication facility, 5) others facilities (i.e. schools, shops, market, entertainment etc.), 6) Location in terms of access and accessibility to and from other areas, 7) Design and layout of space, 8) Quality of construction, 9) Geography of the land in terms of soil, subsoil, flooding and other environmental matter,

Table 4.44 Rating the factors considered while taking a decision for buying a Residential flat:

Sl.	Description	Not	Less	important	Most	Total	Mean
No.		important	important	(3)	important	Score	Score
		(1)	(2)		(4)		
1	Geographic location of the	0	1	94	105	610	3.05
	property	0		0.5	114	710	2.55
2	Infrastructure	0	0	86	114	710	3.57
3	Ambience	0	2	136	62	660	3.3
4	Communication	0	0	76	129	724	3.62
	facility						
5	Others facilities	2		120	77	672	3.36
	(i.e. schools,		1				
	shops, market,						
6	entertainment) Location in terms	0	0	109	91	691	3.45
0	of access and	0	U	109	91	091	3.43
	accessibility to						
	and from other						
	areas						
7	Design and layout	0	0	117	83	683	3.41
	of space						
8	Quality of	0	0	69	131	731	3.65
	construction						
9	Geography of the	0	0	100	100	700	3.50
	land in terms of						
	soil, flooding and						
	other						
	environmental matter						
10	Comfortable for	0	0	125	75	675	3.37
10				123	, ,	013	3.31
	living						

Source: Field Study



**Fig.-36** 

# **Observation:**

Table 4.44 the researcher has analysed the factors considered while taking a decision for buying a residential flat. It has been found that the flat owners give highest rating for quality of construction (3.65) and communication facility (3.62) in buying the property in relation to residential flat which is followed by infrastructure(3.57) and geography of land in terms of soil, flooding, other environmental matter (3.50), comfortable for living (3.37). From this it could be said that the quality of construction of the property and communication to the property are most important factors in taking the decision for buying a residential flat.

During the study it is found that the some of the purchasers have faced problems in buying the residential flat within Guwahati Metropolitan City Area. The respondents are mentioned bellow:

1) Problems faced by the buyer - Yes , 2) Problems not faced by the buyer - No.

Table 4.45 Any problem faced in buying the Residential Flat:

Sl. No.	Description	No. of respondents	% of respondents
1	Yes	53	26.5%
2	No	147	73.5%

Source: Field Study Total 200 100

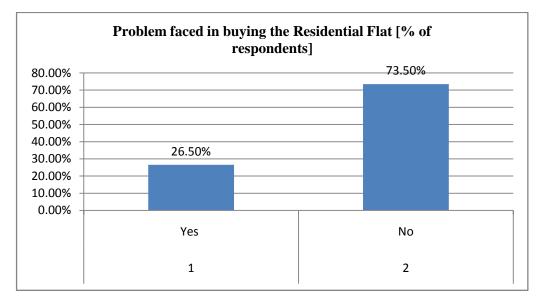


Fig.-37

## **Observation:**

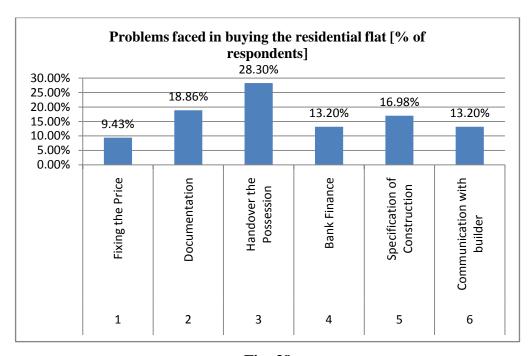
Table 4.45 showing the response related to any problem faced by the buyer. It has been observed that 26.50% of the respondents have faced problems in buying a residential and 73.50% of the respondents have bought their flat without facing any problems.

During the study it is found in the table- 4.45 that the out of the total respondents only 26.5% purchasers have faced problems in buying the residential flat within Guwahati Metropolitan City Area. The problems faced by the above purchasers are mentioned bellow:

- 1) Fixing the Price, 2) Documentation, 3) Handover the Possession, 4) Bank Finance,
- 5) Specification of Construction, 6) Communication with builder.

Table 4.46 Which of the following problems faced in buying the residential flat:

Sl. No.	Description of problems	No. of respondents	% of respondents
1	Fixing the Price	5	9.43%
2	Documentation	10	18.86%
3	Handover the Possession	15	28.30%
4	Bank Finance	7	13.20%
5	Specification of Construction	9	16.98%
6	Communication with builder	7	13.20%



**Fig.-38** 

### **Observation:**

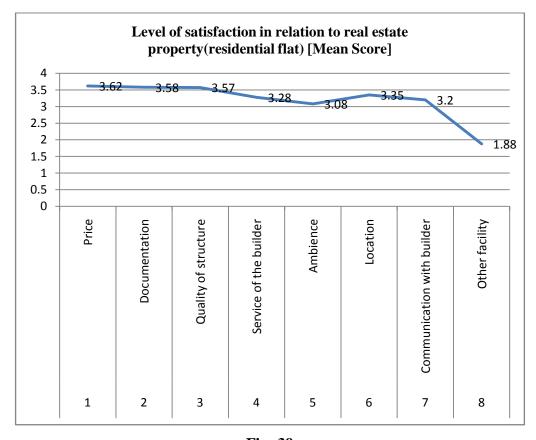
Table 4.46 the researcher has identified the problems faced by the buyer. It has been observed that out of the 53 number of respondents facing problems only 28.30% of the respondents have faced problems in handover the Possession of flat and 18.68% face problems in Documentation, 16.98 % face problems in Specification of Construction.

- During the study period it is found that the flat owners have got satisfactions after buying the residential flat. The items on which the flat owner expresses the level of satisfaction are mentioned bellow:
- 1) Price, 2) Documentation, 3) Quality of structure, 4) Service of the builder,
- 5) Ambience, 6) Location, 7) Communication with builder, 8) Other facility.

Table 4.47 Level of satisfaction in relation to real estate property(residential flat):

Sl.	Description	Not	Less	Satishfied	Highly	Total	Mean
No.		at	Satishfied	(3)	Satishfied	Score	Score
		all	(2)		(4)		
		(1)					
1	Price	0	3	69	128	725	3.62
2	Documentation	0	2	79	119	717	3.58
3	Quality of structure	0	1	84	115	714	3.57
4	Service of the	2	16	106	76	656	3.28
	builder						
5	Ambience	6	13	140	41	616	3.08
6	Location	5	7	100	88	671	3.35
7	Communication	9	15	103	73	640	3.2
	with builder						
8	Other facility	82	65	47	6	377	1.88

**Source: Field Study** 



**Fig.-39** 

## **Observation:**

Table 4.47 the researcher has assessed the level of satisfaction of buyer. It has been found that the respondents are highly satisfied with the Price (3.62), which is followed by documentation(3.58) and quality of structure (3.57). It could be said that the respondents are satisfied with the price being paid for the flats.

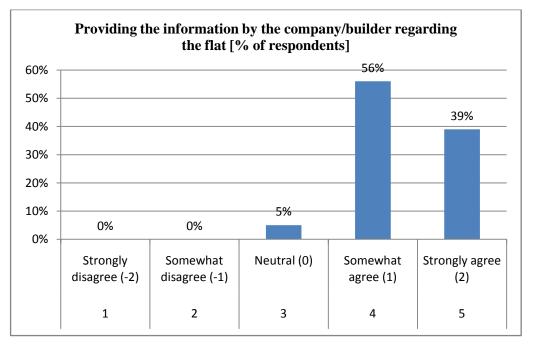
## View of flat owner in relation to the followings:

- During the study period it was asked to the respondents in relation to providing the information regarding the residential flat by the company/builder on which the flat owner have express their view as mentioned bellow:
- 1) Strongly disagree (-2), 2) Somewhat disagree (-1), 3) Neutral (0), 4) Somewhat agree (1), 5) Strongly agree (2).

Table 4.48 Providing the information by the company/builder regarding the flat:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	10	5%
4	Somewhat agree (1)	112	56%
5	Strongly agree (2)	78	39%

Source: Field Study Total 200 100



**Fig.-40** 

#### **Observation:**

Table 4.48 present data whether the company/ builder provides information to the buyers related to Flat. It was asked to the respondents in relation to providing the information by the company/builder regarding the flat it was found that 56% of the total respondents are somewhat agree, 39% are strongly agree and 5% are neutral.

During the study it was asked to the respondents about the procedure/process adopted by the company/builder regarding the purchase of the residential flatfor which the flat owner have express their view as mentioned bellow:

1) Strongly disagree (-2), 2) Somewhat disagree (-1), 3) Neutral (0), 4) Somewhat agree (1), 5) Strongly agree (2).

Table 4.49 Easy procedure/process adopted by the company/builder regarding purchase of the flat:

Sl.	Source	No. of	% of
No.		respondents	respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-	Nil	0%
	1)		
3	Neutral (0)	35	17.5%
4	Somewhat agree (1)	124	62%
5	Strongly agree (2)	41	20.5%

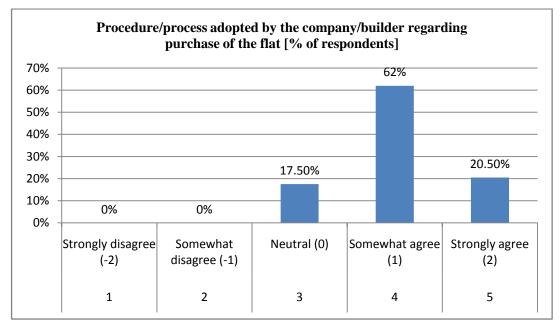


Fig.-41

### **Observation:**

Table 4.49 presents data related to easiness of the process adopted by builders for selling the flat to buyer. It was asked to the respondents in relation to adopted procedure/process by the company/builder regarding the purchase of the flat, it was found that 62% of the total respondents are somewhat agree, 20.50% are strongly agree and 17.50% are neutral.

During the study period it was asked to the respondents about the explanation by the company/builder regarding the improvement of the flat from booking to hand over the possession of the residential flatfor which the flat owner have express their view as mentioned bellow:

1. Strongly disagree (-2), 2. Somewhat disagree (-1), 3. Neutral (0), 4. Somewhat agree (1), 5) Strongly agree (2).

Table 4.50 Explaining about the improvement of the flat from booking to hand overing the possession:

Sl.	Common	No. of	% of
No.	Source	respondents	respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	21	10.5%
4	Somewhat agree (1)	117	58.5%
5	Strongly agree (2)	62	31%

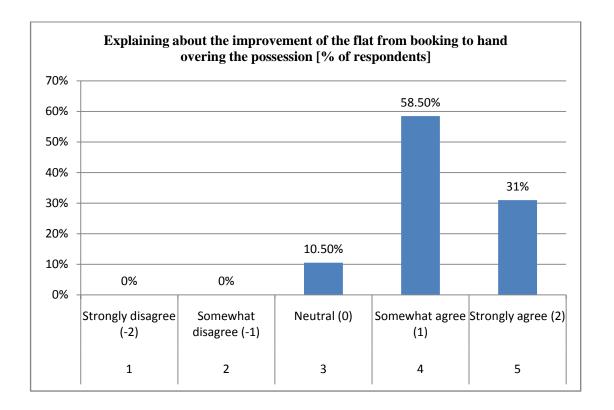


Fig.-42

## **Observation:**

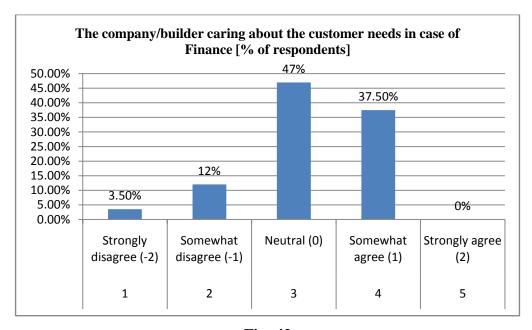
Table 4.50 presents the data related to providing various status of flat to buyers. It was asked to the respondents in relation to the improvement of the flat from booking to hand over the possession by the company/builder regarding the flat it was found that 58.50% of the total respondents are somewhat agree, 31% are strongly agree and 10.50% are neutral.

During the study it was asked to the respondents about the Customer needs carried by the company/builder regarding the Finance of the flat for which the flat owner have express their view as mentioned bellow:

Table 4.51 The company/builder caring about the customer needs in Case of Finance:

Sl.	Source	No. of	% of
No.		respondents	respondents
1	Strongly disagree (-2)	7	3.5%
2	Somewhat disagree (-1)	24	12%
3	Neutral (0)	94	47%
4	Somewhat agree (1)	75	37.5%
5	Strongly agree (2)	Nil	0%

Source: Field Study Total 200 100



**Fig.-43** 

## **Observation:**

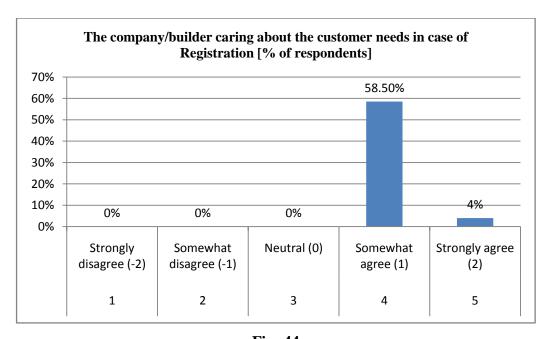
Table 4.51 presents whether the company cares in taking care of financial needs of the customers. It was asked to the respondents in relation to caring about the customer needsby the company/builder regarding the Finance, it was found that 47% of the total respondents are neutral, 37.50% are somewhat agree, 12% are somewhat disagree and 3.50% are strongly disagree.

During the study it was asked to the respondents about the Customer needs carried by the company/builder in case of Registration of the flat for which the flat owner have express their view as mentioned bellow:

1) Strongly disagree (-2), 2) Somewhat disagree (-1), 3) Neutral (0), 4) Somewhat agree (1), 5) Strongly agree (2).

Table 4.52 The company/builder caring about the customer needs in Case of Registration:

Sl. No.	Source	No. of	% of respondents
		respondents	
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	Nil	0%
4	Somewhat agree (1)	117	58.5%
5	Strongly agree (2)	83	41.5%



**Fig.-44** 

### **Observation:**

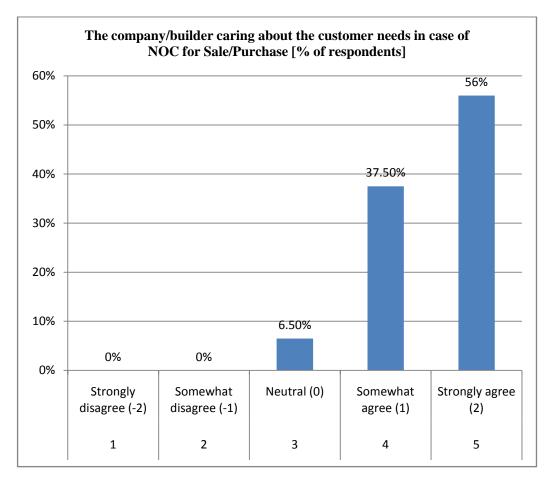
Table 4.52 shows the data related to caring of needs of buyers in registration of the flat. It was asked to the respondents in relation to caring for Registration by the company/builder regarding the flat it was found that 58.50% of the total respondents are somewhat agree, 41.5% are strongly agree.

During the study it was asked to the respondents about the Customer needs carried by the company/builder in case of NOC for sale/purchase of the flat for which the flat owner have express their view as mentioned bellow:

1) Strongly disagree (-2), 2) Somewhat disagree (-1), 3) Neutral (0), 4) Somewhat agree (1), 5) Strongly agree (2).

Table 4.53 The company/builder caring about the customer needs in Case of NOC for Sale/Purchase:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	13	6.5%
4	Somewhat agree (1)	75	37.5%
5	Strongly agree (2)	112	56%



**Fig.-45** 

## **Observation:**

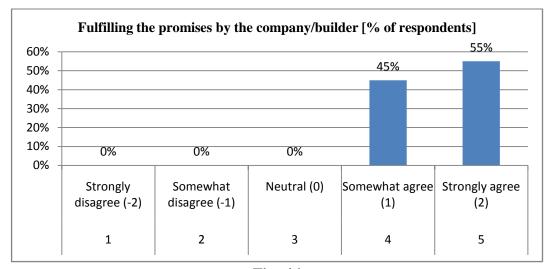
Table 4.53 shows the data related to caring of needs of buyers in case of getting NOC. It was asked to the respondents in relation to NOC for Sale/Purchase help by the company/builder regarding the flat it was found that 56% of the total respondents are strongly agree, 37.50% somewhat agree, 39% are and 6.50% are neutral.

During the study it was asked to the respondents whether the company/builder have fulfil their promises for which the flat owner have express their view as mentioned bellow:

Table 4.54 Fulfilling the promises by the company/builder:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	Nil	0%
4	Somewhat agree (1)	90	45%
5	Strongly agree (2)	110	55%

Source: Field Study Total 200 100



**Fig.-46** 

#### **Observation:**

Table 4.54 presents the data related to fulfilling of promises by the builder. It was asked to the respondents in relation to Fulfilling the promises by the company/builder regarding the flat it was found that 55% of the total respondents are strongly agree, and 45% are somewhat agree.

During the study it was asked to the respondents whether the flat owner have been facing problems after handover the flat in case of Maintenance for which the flat owner have express their view as mentioned bellow:

Table 4.55 Facing problems after purchasing the flat in Case of Maintenance:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	48	24%
4	Somewhat agree (1)	152	76%
5	Strongly agree (2)	Nil	0%

Source: Field Study Total 200 100

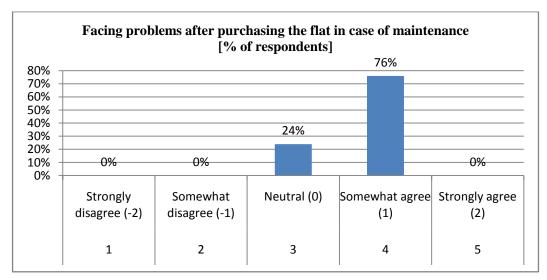


Fig.-47

## **Observation:**

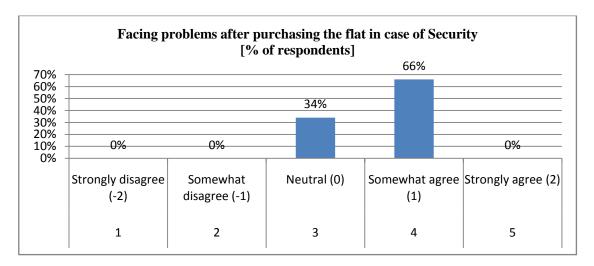
Table 4.55 shows the data related to problems faced by the buyers after purchasing flat. It was asked to the respondents in relation problems in Case of Maintenance regarding the flat it was found that 76% of the total respondents are somewhat agree, and 24% are neutral.

- During the study it was asked to the respondents whether the flat owner have been facing problems after handover the flat in case of Security for which the flat owner have express their view as mentioned bellow:
- 1) Strongly disagree (-2), 2) Somewhat disagree (-1), 3) Neutral (0), 4) Somewhat agree (1), 5) Strongly agree (2).

Table 4.56 Facing problems after purchasing the flat in Case of Security:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	68	34%
4	Somewhat agree (1)	132	66%
5	Strongly agree (2)	Nil	0%

Source: Field Study Total 200 100



**Fig.-48** 

## **Observation:**

Table 4.56 shows the data related to problems faced after buying the flats. It was asked to the respondents in relation to problems of Security by the customer regarding the flat it was found that 66% of the total respondents are somewhat agree, and 34% are neutral.

- During the study it was asked to the respondents whether the flat owner have been facing problems after handover the flat in case of Water Supply for which the flat owner have express their view as mentioned bellow:
- 1) Strongly disagree (-2), 2) Somewhat disagree (-1), 3) Neutral (0), 4) Somewhat agree (1), 5) Strongly agree (2).

Table 4.57 Facing problems after purchasing the flat in Case of Water Supply:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	12	6%
4	Somewhat agree (1)	133	66.5%
5	Strongly agree (2)	55	27.5%

Source: Field Study Total 200 100

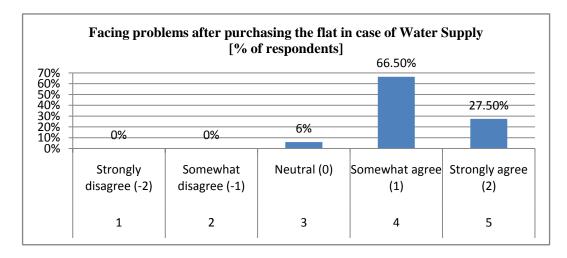


Fig.-49

### **Observation:**

Table 4.57 shows the data related to the problems of water supply after buying the flats. It was asked to the respondents in relation facing problems in Case of Water Supply regarding the flat it was found that 66.5% of the total respondents are somewhat agree, 27.50% are strongly agree and 6% are neutral.

During the study period it was asked to the respondents whether the flat owner have been facing problems after handover the flat in case of continuous Electricity Supply for which the flat owner have express their view as mentioned bellow:

Table 4.58 Facing problems after purchasing the flat in Case of Continuous Electricity Supply:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	17	8.5%
4	Somewhat agree (1)	157	78.5%
5	Strongly agree (2)	26	13%

Source: Field Study Total 200 100

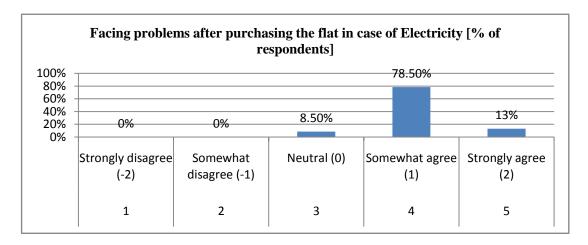


Fig.-50

### **Observation:**

Table 4.58 shows the data related to problems of electricity supply after buying the flats. It was asked to the respondents in relation facing problems in Case of continuous electricity supply regarding the flat it was found that 78.50% of the total respondents are somewhat agree, 13% are strongly agree and 8.5% are neutral.

During the study it was asked to the respondents whether the flat owner have been facing problems after handover the flat in case of Car Parking for which the flat owner have express their view as mentioned bellow:

Table 4.59 Facing problems after purchasing the flat in Case of Car Parking:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	34	17%
3	Neutral (0)	132	66%
4	Somewhat agree (1)	34	17%
5	Strongly agree (2)	Nil	0%

Source: Field Study Total 200 100

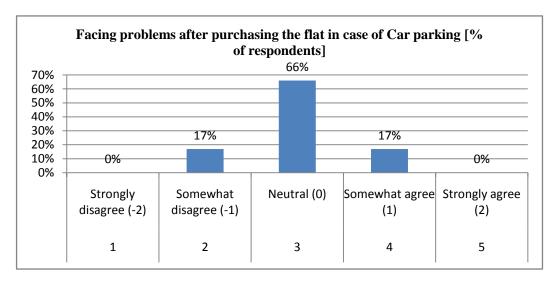


Fig.-51

### **Observation:**

Table 4.59 shows the data related to problems of car parking. It was asked to the respondents in relation facing problems in Case of Car Parking regarding the flat it was found that 66% of the total respondents are Neutral, 17% are somewhat agree and 17% are somewhat agree.

During the study it was asked to the respondents about solving the problems through the Company/ builders which have been facing problems by the flat owner after handover the for which the flat owner have express their view as mentioned bellow:

Table 4.60 Solving the problems through company/builder:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	45	22.5%
2	Somewhat disagree (-1)	114	57%
3	Neutral (0)	41	20.5%
4	Somewhat agree (1)	Nil	0%
5	Strongly agree (2)	Nil	0%

Source: Field Study Total 200 100

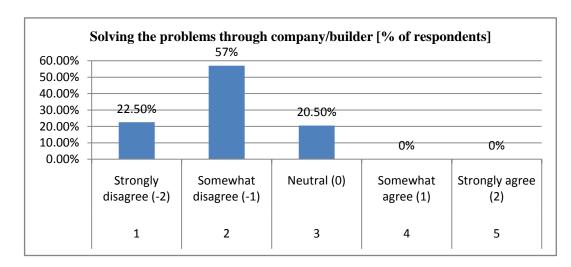


Fig.-52

### **Observation:**

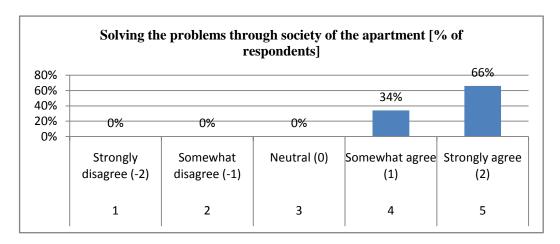
Table 4.60 shows data related to solve the problems through builder. It was asked to the respondents in relation to Solving the problems through the company/builder regarding the flat it was found that 57% of the total respondents are somewhat disagree, 22.50% are strongly disagree and 20.50% are neutral.

During the study it was asked to the respondents about solving the problems through the society of the apartment which have been facing problems by the flat owner after handover the for which the flat owner have express their view as mentioned bellow:

Table 4.61 Solving the problems through the society of the apartment:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	Nil	0%
4	Somewhat agree (1)	68	34%
5	Strongly agree (2)	132	66%

Source: Field Study Total 200 100



**Fig.-53** 

## **Observation:**

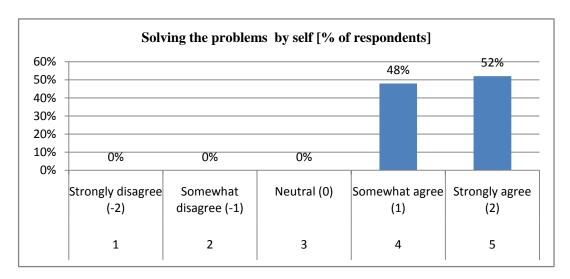
Table 4.61 shows data related to solve the problems by the society of the apartment. It was asked to the respondents in relation to solving the problems through the Society of the apartment regarding the flat, it was found that 66% of the total respondents are strongly agree and 34% are somewhat agree.

During the study it was asked to the respondents about solving the problems by Self which have been facing problems by the flat owner after handover the for which the flat owner have express their view as mentioned bellow:

Table 4.62 Solving the problems by self:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	Nil	0%
4	Somewhat agree (1)	96	48%
5	Strongly agree (2)	104	52%

Source: Field Study Total 200 100



**Fig.-54** 

#### **Observation:**

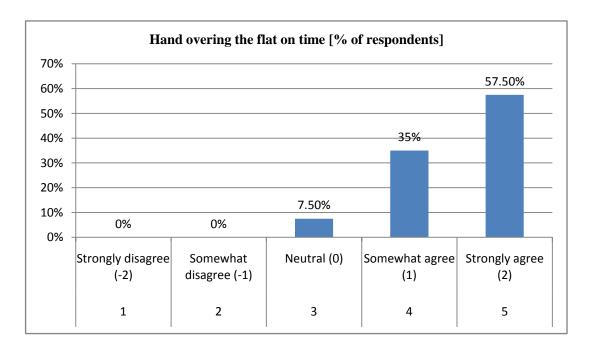
Table 4.62 shows data related to solve the problems by the buyer self. It was asked to the respondents in relation to solving the problems by self regarding the flat, it was found that 52% of the total respondents are strongly agree and 48% are somewhat agree.

During the study period it was asked to the respondents whether the builders/developers handed over the flat to the client at scheduled time for which the flat owner have express their view as mentioned bellow:

Table 4.63 Hand overing the flat at the Scheduled time:

Sl. No.	Source	No. of respondents	% of respondents
1	Strongly disagree (-2)	Nil	0%
2	Somewhat disagree (-1)	Nil	0%
3	Neutral (0)	15	7.5%
4	Somewhat agree (1)	70	35%
5	Strongly agree (2)	115	57.5%

Source: Field Study Total 200 100



**Fig.-55** 

# **Observation:**

Table 4.63 shows data related to timely handover of flat. It was asked to the respondents in relation to hand over the flat on time by the company/builder, it was found that 57.50% of the total respondents are strongly agree, 35% are somewhat agree and 7.5% are neutral.