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"Analysis & Critical study of Impacts of RERA Act, 2016 on Housing Projects in Kolhapur"

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Abstract - For Indian real estate sector has been facing a slump since 2012. In this research project, the study's focus is restricted to the Kolhapur City. We will investigate the impact of RERA on India's building constructions industries in this project. To check the impact of RERA we are dealing with 25 factors for seller and 23 factors for buyer. For the analysis purpose we have made the questionnaire survey. From that we have calculated RII from collected data by using Likert's Scale. A study is conducted to determine the immediate impact of this act on the Builders and the consumer.

Key Words: RERA, RII, real Estate, Likert's Scale, Construction

1. INTRODUCTION

In the Indian Real Estate Industry's History, The Real Estate Regulation and Development Act (RERA) of 2016 is a gamechanging piece of legislation. It was enacted to encourage real estate investment while simultaneously safeguarding the interests of home buyers. The Act promotes ethical behavior in the real estate industry and attempts to increase openness. The Act covers both new and ongoing projects (which had to be registered by July 31, 2017). This statute covers both commercial and residential construction projects. Agents or brokers in the real estate industry are also covered under the umbrella.

Furthermore, the developers must report the project designs, government approvals, and the status of the land ownership to the regulatory authorities. Failure to do so will result in a fine, jail, or both, depending on the gravity of the offence. The Real Estate Industry was in critical need of such a transparent system in order to promote market mood and protect customers' interests. The bill also requires buyers to pay developers within a certain amount of time, failing which appropriate action can be taken against them. One of the most typical challenges in the construction sector is building project delays. Delays have a negative impact on the project's performance, timeliness, and cost. As a result, it's critical to understand the different sorts of delays that can arise in a project. Delays can occur for a variety of causes (or, in other words, have diverse origins); they can be compensated or not; and they can occur concurrently or

afterwards. In addition, the impact on project performance can be direct or indirect. Their presence results in increased costs, conflicts among project partners, and, in the worstcase scenario, litigation, which may result in more costs. When dealing with delays, it's necessary to not only detect them and quantify their effects on project performance, but also to identify and quantify the implications of previous delays on future project progress. The key causes and sources of delays should also be identified in order to regulate accountability and allow for learning from these unfavorable events.

1.1 RERA Act 2016

The Real Estate (Regulation & Development) Act of 2016 proposes to create a Real Estate Regulatory Authority to govern and promote the real estate industry.

The physical body will -

• Ensure that land, buildings, or projects are sold in a timely and transparent manner.

• Consumers' interests must be protected.

• Create a method to ensure that conflicts are resolved quickly.

• Create an Appellate Tribunal to oversee both residential and commercial construction projects.

2. Literature Review

Shubhangi Salunkhe, R Mahadeva Swamy – In this paper, author explains carpet area term in detail and explains its impact on RERA. Also explains with the examples. For the analysis, author uses relative importance index method. For that they done questionnaire survey and collect responses for the analysis. They also make comparative analysis of RERA approach and traditional approach for one site in Pune for the time andcost analysis. Author conclude that, builders are not allowed fake commitment to buyer for possession date.

Somdutta P. Patil, Prof. Ashish P. Waghmare – The author analyses the effect of RERA on the real estate business, including the impact on ongoing and new projects, as well as

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the impact on builders, purchasers, and agents and brokers. Additionally, they examined the economic impact of RERA on the real estate business. They spend the most of their time studying MahaRERA. They learn about the benefits and drawbacks of the RERA real estate legislation. Prompt possession of apartments, project clearance, and after-sales services are some of the benefits of RERA listed in this article. Additionally, this report discusses historical challenges, project delays, and other negatives. Additionally, they said that this legislation is a step forward in terms of boosting openness in the real estate industry, increasing promoters' and developers' responsibility, and enabling efficient channels for grievance resolution.

Akshaykumar P. Udasi, Milind M. Darade– This study is divided into two stages. To begin, a survey of the literature was conducted to ascertain the elements that contribute to building project delays. 101 sources of delays were identi fied by a literature study and divided into nine distinct categories: owner-related, contractor-related, consultant-related, designrelated, labor-related, material-related, equipment-related, and external factors- related, and RERA-related. Additionally, determine their various impacts/effects on the building project. Following that, a questionnaire survey is administered using Google forms. This Google form is sent to numerous stakeholders in the building business by email, whatsApp, and text messaging. There are a total of ten replies. Graphs in paper illustrate the relationship between RERA characteristics and the number of respondents.

Suhas G. Awari, Raju Narwade and Manisha Jamgade -

The research is divided into two stages: a literature review and interviews. The first step entails doing a literature review. As a result of this evaluation, 51 delay factors appropriate for the current investigation were found. These causes were then classified into eight distinct categories based on their nature and mode of occurrence: projectrelated, client-related, contractor- related, RCC consultantrelated, construction design-related, construction materialrelated, machinery-related, labor-related factors, and external factors. The second step is the creation of a questionnaire based on the relative importance index and the calculation of the Spearman rank correlation coefficient for the importance index. The questionnaire was split into three sections, which included reasons of construction delays, their effects, and ways for reducing construction delays. This study to identify the effective methods to reduce delays in construction projects.

Thorat Sourabh, Khandare Manish, A.K. Kanase – The empirical association between the causes and consequences of delay is also examined in this study utilizing Pearson's correlation coefficient in SPSS 23. Additionally, prescriptions for reducing delays were made in this research to clients, consultants, and contractors. The purpose of this study is to determine the causes and effects of delay in residential construction projects in India and to investigate the relationship between specific causes and specific effects. This study employs an integrated approach to ascertain the impact of specific causes on specific effects in residential construction projects in the Indian context. There are a total of 41 causes classified into seven main categories, as well as seven significant impacts of delay. A questionnaire survey was used to elicit information on the causes and impacts of delay from clients, consultants, and contractors, with 67 respondents. The study's findings were satisfactory. This research will assist practitioners and scholars in better understanding project management and making attempts to eliminate delays in residential construction.

Tibin Joy, B.Selvam - This article discussed the RERA act in depth. The author defines carpet area concept in detail. The author created identical questionnaires for builders and purchasers and conducted surveys to ascertain the replies. As a result of this regulation, each project must be registered with RERA, which will serve as the regulatory authority. It will increase openness, as the client/allotted will have access to further information about the project, promoter, promoter's historical experience, and agent, among other things.

3. Methodology

3.1 Objectives:

- 1. To study the present status & amp; collect the information about chronological event from development of RERA to till date.
- 2. Identification of ongoing problems in construction industry & amp; to analyses them.
- 3. To prepare questionnaire survey obtained through builders.
- 4. To carry out analysis of various responses obtained through live construction project in Kolhapur.
- 5. To recommend best suggestive measures for reducing costs and delay.

3.2 Research Methodology:

- 1) Collection of preliminary information through literature review.
- 2) Descriptive analysis by collection of data by questionnaire survey & interviews.
- 3) Assessing the current situation of construction industry pertaining RERA effects by questionnaire survey.
- 4) Defining problems in construction industry through survey conducted.
- 5) Giving suggestive measures for reducing problems through RERA.
- 6) Giving results & conclusions from data analyzed.

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Considered factors:

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The questionnaire designed by consideration of factors affecting the RERA act on construction industry through preexisting literature and studied model. The following factors are considered in the design of the questionnaire.

Sr.No.	BUYER'S FACTORS	SELLER'S FACTORS		
1	Restrictions to	Restrictions to		
	diversion of money	diversion of money		
2	Property sold on carpet	Punctuality		
	area			
3	Punctuality	Security of money		
4	Dispute resolution	Quality of work		
5	Penalties	More profitable to		
		buyer		
6	More profitable to	Transparency		
	buyer			
7	Transparency	Quality is improved		
8	Security of money	Penalties on delay		
9	Responsibility of	Professionalism		
	defects			
10	Professionalism	Dispute resolution		
11	Quality of work	Structural warranty		
12	Use of ICT	No misleading claims		
13	Balanced agreement	Use of ICT		
	and treatment			
14	No misleading claims	Property sold on carpet		
45		area		
15	Structural warranty	Advertising only after		
10		RERA		
16	Value of money	Easy problem solution		
17	Easy problem solution	Value of money		
18	Hike in property prices	Value of money		
19	Easy problem solution	Authorization		
20	Hike in property prices	Real advertisement		
21	Investment rate	Responsibility of		
22	Quality is improved	defects		
22	Quality is improved	Harsh penalties for seller		
23	Penalties on delay			
23	r enalues on delay	Hike in property prices Investment rates		
24 25		Supply demand		
25		imbalance		
		linualance		

2. Data Analysis by using Likert's Scale

RII is calculated as stated below.

RII (%) =
$$\frac{5(N5)+4(N4)+3(N3)+2(N2)+1(N1)}{5(N5+N4+N3+N2+N1)} \ge 100$$

Adopted scale is Five-point scale ranging from 1 (Strongly Not Effective) to 5 (Strongly Effective) and it is transformed to relative importance indices (RII) for each factor as follows: Where,

N1 = number of respondents who voted for Strongly Not Effective

N2= number of respondents who voted for Least Effective

N3= number of respondents who voted for Neutral

N4= number of respondents who voted for Effective

N5= number of respondents who voted for Strongly Effective

N is the weighting given to each factor by the respondents (ranging from 1 to 5). The RII value had a range from 1 to 5, the higher the value of RII, the more important was the factor affecting RERA.

2.3 Results:

Table -1: Result for Buyer:

RANK	BUYER'S FACTORS	RII%
1	Restrictions to diversion of money	82%
2	Property sold on carpet area	80%
2	Punctuality	80%
2	Dispute resolution	80%
3	Penalties	79%
4	More profitable to buyer	77%
5	Transparency	76%
6	Security of money	75%
6	Responsibility of defects	75%
7	Professionalism	72%
7	Quality of work	72%
8	Use of ICT	70%
9	Balanced agreement and treatment	69%
9	No misleading claims	69%
9	Structural warranty	69%
10	Value of money	68%
11	Easy problem solution	66%
1 2	Hike in property prices	65%
13	Investment rate	61%
14	Quality is improved	60%
14	Penalties on delay	60%



Table -2: Result for seller

RANK	SELLER'S FACTORS	RII%
1	Restrictions to diversion of money	94%
2	Punctuality	90%
3	Security of money	88%
3	Quality of work	88%
3	More profitable to buyer	88%
4	Transparency	86%
5	Quality is improved	84%
5	Penalties on delay	84%
5	Professionalism	84%
5	Dispute resolution	84%
6	Structural warranty	78%
7	No misleading claims	76%
7	Use of ICT	76%
8	Property sold on carpet area	74%
8	Advertising only after RERA	74%
8	Easy problem solution	74%
9	Value of money	72%
9	Authorization	72%
10	Real advertisement	70%
10	Responsibility of defects	70%
11	Harsh penalties for seller	68%
12	Hike in property prices	64%
13	Investment rates	58%
13	Supply demand imbalance	58%

3. CONCLUSIONS

A. Positive Impact

- 1. Sellers cannot make any false commitment regarding possession date. If it is not happened then seller should face the harsh penalties.
- 2. Sellers need to mention all the details which they are going to provide in the project accurately.
- 3. The sellers became more specific about the carpet area so that the buyers can get the idea about for what they are paying.

- 4. The land should be free from any type of litigation before the beginning of the project. The sellers should provide all clearance documents to the RERA.
- 5. For the transparency purpose and restriction for the money diversion, every project has to make separate bank account for transactions.
- 6. After selling the flat, the seller should provide structural warranty for 5 years span.

B. Negative Impact:

1. Registration became mandatory only for projects which are more than 500 Sq m area. But it should be bound to every seller.

2. Old projects with some litigations are supposed to be delayed because of the rules of the RERA

3. For every quarterly period government approval became mandatory for project which may be delayed because of late work of government agencies.

4. Registration fees increased that's why project values are rising.

REFERENCES

- Aditya V Kadam, Rushikesh R Jangam, Rushikesh R Pawar, Ashwini A Sagavekar, Prof. G. D. Parulekar, Prof. S. S. Patil, ' Detailed Study and Analysis of RERA Act',
- [2] www.irjet.net, Volume: 05 Issue: 04 Apr-2018.

Akshaykumar P. Udasi, Milind M. Darade, 'Delays in construction projects : causes, effects and impacts of RERA', 2018 IJRTI | Volume 3, Issue 7.

- [3] Thorat, Manish Khandare, A.K.Kanase, 'Exploratory Study Of Causes And Effects Of Delay In Indian Residential Projects', Volume: 04 Issue: 06 | June -2017
- [4] Dr. Ashish B. Joshi, Nisha Singh, 'Real Estate Regulation Act (RERA), 2016: Implementation and Issues', International Journal of Management Studies, Vol.-V, Issue -4(8), October 2018.
- [5] Meghwant Singh Thakur, 'Effect of RERA on profitability of Indian real estate developers', International Journal of Management and Applied Science, ISSN: 2394- 7926 Volume-4, Issue-9, Sep.-2018.
- [6] Prof. S. G. Rodgi, 'An Overview of "RERA" in India: A Regulatory Shift', www.rrjournals.com, Volume 4, Issue 01, January 2019.



- [7] 7) S. Radhakrishnan, Dr. K. G. Selvan, 'Impact of RERA on Construction of Multi Storied Buildings', International Research Journal of Advanced Engineering and Science, Volume 4, Issue 1.
- [8] Somdutta P. Patil, Prof. Ashish P. Waghmare, 'Impact of Real Estate Regulation and Development Act (RERA) on India's Real Estate Sector', 2017 IJSRST | Volume 3 Issue 8.
- [9] Suhas G. Awari, Raju Narwade and Manisha Jamgade, 'Analysis for cause identification for delay in building construction industry', International Journal of Modern Trends in Engineering and Research (IJMTER) Volume 03, Issue 10, October 2016.
- [10] Tibin Joy, B.Selvam, 'Impact of Real estate regulation authority (RERA) on residential project', IRJET, Volume: 05 Issue: 11 | Nov 2018.