PPP Module For PMAY For Jalgaon City – A Case Study

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Abstract- *Rapid growth of the urban population leading to housing shortages and poor urban living conditions is a prime challenge for the government of India. Recently launched affordable housing scheme, PradhanMantriAwasYojana (PMAY) -Housing for All (Urban) is drawing attention of the researchers in critically analyzing the programme.*

Public–private partnership (PPP) is an approach adopted to enhance the economic value of infrastructure outputs, and it encompasses a broad spectrum of public sector infrastructure. Many researchers have explored the application of PPP to improve the efficiency of infrastructure delivery. This study aims to review the understand PMAY, an affordable housing scheme for all specifically of Economically Weaker Section (EWS) and existing PPP research to explore the status for PPP infrastructure projects beneficiaries in India as well as in Jalgaon city of Maharashtra State.

Keywords- Public–private-partnerships (PPP); Infrastructure, Affordable housing, economically weaker section (EWS).

I. INTRODUCTION

There are a number of challenges facing affordable housing. High cost of land, which is the consequence of a number of factors, is one of the principal challenges. Financing the land is another major challenge that Developers/ Builders face in delivering affordable housing. The absence of a clear title is also a serious deterrent for participation by financial institutions and real estate developers in new as well as redevelopment projects of real estate. In the absence of redevelopment and densification of available lands, land remains underutilized - further contributing to shortage of land and to high land prices.

For any strategy to enhance the provisioning of affordable housing, therefore, government interventions through financial and non-financial support as well as through policy reforms would be critical. Financial subsidies, subsidies in kind (e.g. in the form of government land) as well as cross-subsidies will have to play a central role in addressing the problem of vast sections of India's population being unable to afford housing at market prices. While the potential for directing privately owned landtowards affordable housing at a low cost is limited, appropriate PPP structures can be used to incentivize the private sector in that direction. Strategies attempted include directing private land for affordable housing in exchange for permission for more intensive utilization of land or in exchange for permission to build high-end housing. PPP strategies including government grants and subsidies can also be potentially deployed to unlock unutilized/underutilized parcels of both government as well as privately owned lands for affordable housing.

In addition to the issue of land, addressing the affordable housing challenge through PPP will require enhanced access to financing and capital markets, which will in turn require proactive government policies and innovative and entrepreneurial risk taking by the private sector. The private sector can also play an important role in reduction in costs through efficiency gains in construction and operations.
The potential gains of Public Private Partnership as a program implementation strategy and as a governance intervention, however, rest squarely on the appropriate allocation of risks, responsibilities, rewards and punishments among the various stakeholders. This risk allocation is the defining feature of any PPP strategy. The golden principle is that risks should be allocated to the entity best equipped to manage each risk. The expectation is that such an allocation of risks will not only produce the best possible program and project outcomes but also do so at the most optimum costs. This should lead to good quality outcomes at optimum prices. Well-crafted and balanced contracts backing PPP projects are, therefore, at the heart of addressing the PPP strategy to provide affordable housing.

OBJECTIVES OF PROJECT

1) To study about Pradhanmantri Awaas Yojana Scheme.
2) To collect all the data about PMAY scheme and its verticals.
3) PPP module for PMAY for Jalgaon City – Case Study

4) Identify and classify the unique features of mass housing projects.

CONCEPT OF PPP MODULE FOR PMAY

The design and construction of standardized multiple domestic house-units usually in the same or several geographical locations, executed within the same project scheme and under the same management and contract. The methodology adopted to achieve above objectives mainly involved following steps.

1) A Study will be done on introduction, construction management environment, construction industry and cost effectiveness.
2) Data collection is obtained from construction sites, also from national and international research papers.
3) Conceptual study about Pradhanmantri Aawas Yojana Scheme and its components and policies
4) To find out the optimal construction schedule for mass housing construction projects and optimal project duration/cost with the constraints of limited resource availability.
5) Scheduling and sequencing the construction activities according to the resource availability.
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8) Conceptual study about Pradhanmantri Aawas Yojana Scheme and its components and policies
9) To find out the optimal construction schedule for mass housing construction projects and optimal project duration/cost with the constraints of limited resource availability.
10) Scheduling and sequencing the construction activities according to the resource availability.

II. STUDY AREA

Jalgaon City MAHARASHTRA

Proposed construction of 224 EWS tenements and 16 LIG tenements at Shivaji Nagar Jalgaon, Tal- Jalgaon, Dist-Jalgaon, under PMAY (Urban) in Public Private Partnership (PPP).

M/s EZZY Enterprisers has undergo construction of 224 EWS tenements and 16 LIG tenements at village Jalgaon, Taluka- Jalgaon, District - Jalgaon. Accordingly the said site had been visited by Technical committee members along with developers representative. According to site condition, the technical evaluation has done by the Technical committee and bidder has secured 74 marks out of total 100 marks which are more than minimum eligible criteria i.e. 70%. The said proposal is submitted to SLNO / PMAY through CO/ NB vide this office note no. 226 dated 26-09-2018 for further necessary approval of SLAC/SLSMC/CSMC, the same may please be perused. Meanwhile, M/s EZZY Enterprisers had submitted Detailed Project Report (DPR) for construction of 224 EWS tenements and 16 LIG tenements under PMAY and commercial unit in sale component. The DPR submitted by M/s EZZY Enterprisers has been scrutinized & observations are as under.

1. The site is situated at Jalgaon City, Tal. Jalgaon, DistJalgaon, which is 200 Meters from Jalgaon Railway Station. The said plot is adjoining to the existing old Dhule Highway recently known as Shivaji Nagar road. The site location comes within the jurisdiction of Jalgaon Municipal Corporation. The school, Hospital and shops are existing in the distance of 1 to 1.5 KM.
2. The Plot area of said Project land is admeasuring 3826 Sq. M. As per zoning remarks, the said land is in Residential i.e. R Zone and abutting by 24 M. wide road.
3. The 224 EWS & 16 LIG T/s under PMAY are proposed in wings A,B1, B2, B3, B4, C1 & C2. Whereas wings B1, B2, B3, B4, C1, C2 and wing A part comprised 224 EWS and 16 LIG T/s. Wing A part comprised commercial sale Unit. Wings A, B1, B2, B3 are stilt + 9 Floors, Wing B4 is stilt + 9 Part floor and wings C1, C2 are Stilt + 8 Floors.
4. The built up area proposed for 224 EWS & 16 LIG T/s under PMAY is 7366.26 Sq.m. + 941.92 Sq.m. i.e. 8308.18 Sq.m. in Total (FSI consumed 2.17) and for sale component is 293.40 Sq.M. (FSI consumed 0.08). Thus Total FSI will be 2.25
5. Carpet area of tenement as per RERA is calculated as EWS 29.88 Sq.m. & LIG 54.26 Sq.m. and Construction BUA is calculated as EWS – 47.11 Sq.m. & LIG – 93.43 Sq.m. It can be seen from area statement that percentage of construction BUA & RERA carpet area of EWS and LIG works out to 63.42% and 58.07% respectively.
6. FSI calculations & construction built up area calculation of EWS and LIG tenements are as per the drawings submitted in DPR.
7. The construction of EWS buildings under PMAY (PPP) proposed is in RCC shuttering framework.
8. The provision of Rainwater Harvesting system & Solar system considered in the DPR of subjected project.

9. The provision of Infrastructure services such as water supply arrangement, storm water drain, drainage system along with STP etc are considered in the DPR of subjected project.
10. The main items considered in building are R.C.C. structure, Vitrified tiles for flooring, Aluminium sliding windows, Granite kitchen platform, Internal oil bound paint, concealed plumbing, Stainless steel lift car, Electrical installations, Fire Fighting system, D.G. set etc.
11. The copy of letter dated 26-09-2018 received from M/s EZZY Enterprisers is enclosed for Power Supply assurance from MSEB MAHAVITARAN. Further developer has also applied to Jalgaon Municipal Commissioner, for purpose of domestic water supply. from City Engineer of Jalgaon Municipal Corporation has given assurance for water supply for said Project.
12. As per DPR the total project cost for construction of 224 EWS & 16 LIG tenements worked out by the Developer to Rs.49.86 crore and accordingly price of one tenement works out to EWS - Rs 19.60 lakhs & LIG – 37.26 lakhs and Project cost as per ready reckoner is worked out to Rs. 31.80 crore and accordingly price of tenement works out to EWS - Rs 10.36 lakhs, & LIG – 20.55 lakhs.
13. It is seen from DPR that price of one tenements as per ready reckoner is on lower side as compared with developers price. Hence, as per the Government corrigendum dated 11.06.2018 (copy enclosed), the sale price of EWS tenements shall have to be considered as per sale rate of Ready Reckoner.

Fig – Ongoing construction at site

Fig – Ongoing Construction at

Typical Floor Plan For EWS –

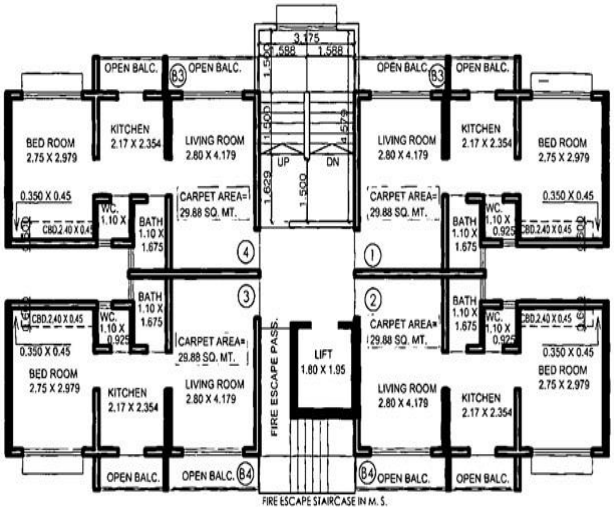

Fig – Typical Floor Plan of EWS

Typical Floor Plan For EWS and MIG –

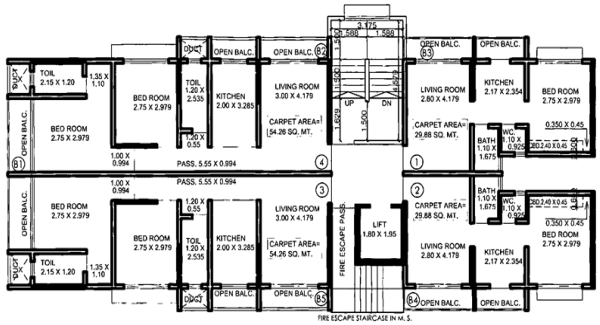

Fig – Typical Floor Plan of EWS & LIG

Built up Area for FSI Calculations –

A	AREA STATEMENT	SQ.MT.
1	AREA OF PLOT	3826.00
1	AREA OF PLOT ADOPTED FOR THE PROPOSAL	NIL
2	DEDUCTIONS	
	(A) ROAD AREA (D.P.ROAD AREA+SET BACK AREA)	NIL
	(B) P. G. RESERVATIONS	NIL
	(C) AREA OF CARVED OUT PLOT FOR SAS/MAP RESERVATIONS	NIL
	(D) AREA OF CARVED OUT PLOT FOR SPORT RESERVATIONS	NIL
	(E) LESS 5% AMENITY SPACE	NIL
	(F) TOTAL OF (A TO E)	NIL
3	BALANCE PLOT AREA (1 -2F)	3443.40
4	DEDUCT 10 % R.G. AREA	382.60
5	NET PLOT AREA (3 - 4)	3443.40
6	ADDITIONS FOR	
	(A) ROAD AREA (D.P.ROAD AREA + SET BACK AREA)	NIL
	(B) P.G RESERVATIONS	NIL
	(C) AREA OF CARVED OUT PLOT FOR SAS / MAP RESERVATIONS	NIL
	(D) AREA OF CARVED OUT PLOT FOR SPORT RESERVATION	NIL
	(E) LESS 5% AMENITY SPACE	NIL
	(F) TOTAL OF (A TO F)	NIL
7	TOTAL PLOT AREA	3443.40
8	F.S.I. PERMISSIBLE	2.50
9	TOTAL PERMISSIBLE BUILT UP AREA(F. S. I.)	8608.50
10	PROPOSED MHADA EWS. FLOOR AREA (BUA)	7366.26
11	PROPOSED MHADA LIG. FLOOR AREA (BUA)	0941.92
12	PROPOSED SALE FLOOR AREA (BUA)	0293.40
13	EXCESS BALCONY AREA TAKEN INTO FSI.	NIL
14	EXISTING FLOOR AREA	NIL
15	TOTAL PROPOSED FLOOR AREA (10 + 11 + 12 +13 + 14)	8601.58
16	BALANCE SALE AREA (9 - 15)	6.92
17	F.S.I CONSUMED (15 / 9)	0.999

Area Statement -

Proposed Construction of 224 no. of EWS & 16 no. of LIG tenements (PMAY -U) at Survey no. 299/1 Old Dhule Road, Jalgaon, Dist – Jalgaon under pradhanMantriAwasYojana (Urban) in PPP (public Private Partnership) mode on Private Land based Model Under Affordable Housing in Partnership (AHP) vertical

SR NO	DESCRIPTION	UNIT	EWS	LIG	
			Type B	Type A	
			1 BHK	1 BHK	2BHK
1	Total no of T/S (per Building)	Nos	36	18	16
2	Total no of floors	Nos	9		
3	No of T/S per floor	Nos	4	2	2
4	No of Bldgs	Nos			
5	Carpet Area (RERA)	Sqm	29.88	29.88	54.26
6	Built up Area	Sqm	39.26	39.26	66.06
7	Construction Area per Typical Floor	Sqm	177.27	233.28	
A	Typical Floor Area of 8 Floors	Sqm	1418.16	1866.24	
8	First Floor	Sqm	177.27	176.43	
9	Stilt Floor Area -50% for Parking Space	Sqm	58.36	25.57	
10	Stilt Floor Area -100% for Staircase, Lift Lobby Etc	Sqm	42.11	157.86	
11	Basement Area	Sqm	0	116.75	
B	Typical Floor Area of Stilt & First Floor	Sqm	277.74	476.61	
10	Total Paybale BUA per Building (A+ B)		1695.90	2342.85	
A+B	Total Paybale BUA Per Flat	Sqm	47.11	47.11	93.43

Total B/up Area Statement For EWS Building

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TOTAL BUP STATEMENT FOR EWS BUILDING

		Wing A	Wing-B1	Wing - B2	Wing - B3	Wing-B4	Wing-C1	Wing-C2
		S + 9	S + 9	S + 9	S + 9	S + 9	S + 8	S + 8
1	Basement	116.75	100.47	100.74	100.74	100.74	100.74	100.74
2	Ground Floor	183.43	177.27	177.82	184.82	178.13	177.82	177.82
3	1st Floor	176.43	177.27	177.82	184.82	178.13	177.82	177.82
4	2nd Floor	233.28	177.27	177.82	184.82	178.13	177.82	177.82
5	3rd Floor	233.28	177.27	177.82	184.82	178.13	177.82	177.82
6	4th Floor	233.28	177.27	177.82	184.82	178.13	177.82	177.82
7	5th Floor	233.28	177.27	177.82	184.82	178.13	177.82	177.82
8	6th Floor	233.28	177.27	177.82	184.82	178.13	177.82	177.82
9	7th Floor	233.28	177.27	177.82	184.82	178.13	177.82	177.82
10	8th Floor	233.28	177.27	177.82	184.82	178.13	177.82	177.82
11	9th Floor	233.28	177.27	177.82	184.82	103.90	-	-
Total in Sqm		**2342.85**	**1695.90**	**1701.12**	**1764.12**	**1629.68**	**1523.30**	**1523.30**
Total in Sft		**25218.44**	**18254.67**	**18310.86**	**18988.99**	**17541.88**	**16396.80**	**16396.80**
Total in Sft								

Rate Comparison Statement –

Financial Statement -

Type	BUA per Tenant (Sq.m)	Payable BUA Per Tenant (Sq.m)	Rate per Sq.m as per Detailed Working drawing	Rate per sq.m as per Ready Reckoner Rate (2017-2018)	Total Cost per Tenant as per Detailed Working	Total Cost Tenant as Ready Reckoner Rate (2017-2018)
1	2	3	4	5	6=(3 * 4)	7 = (3 * 5)
EWS Unit - 1BHK	39.26	47.11	Rs. 41.596	Rs. 22.000	19.60 Lacs	10.36 Lacs
LIG Unit-2BHK	66.06	93.43	Rs 39.882	Rs .22.000	37.26Las	20.55 Las

Note - As per the Housing Department GR dated 11th June 2018, the actual cost of the unit and cost as per the ready reckoner, whichever is less, should be taken for the calculation in the DPR. However as per new GR dated 26th Nov 2018, if The cost Difference between actual project cost &ASR cost is more than 30%, then cost of the dwelling unit will be 20% more than the actual ASR RATE.
So the Total cost Calculation of Beneficiaries is as follows as per RR Rate,

Project Cost Summary -

Type	1	EWS UNIT 1 BHK	LIG UNIT 2 BHK
No. of Tenants	2	224	16
Price per Tenants as per RR	3	10.36 Lacs	20.55 Lacs
Price as per GR dated 26th Nov 2018 (20% more than) RR	4	12.44 Lacs	24.67 Lacs
Total Recovery /Cost of the project	5 = (2 * 4)	2785.8 Lacs	394.7 Lacs
GoI grant (Rs.150 lakh per eligible EWS house)	5 = (2 * 1.50 Lacs)	336.00 Lacs	0.00 Lacs
State grant (Rs.1.00 lakh per eligible Ews house)	6 = (2 * 1.00 Lacs)	224.00 Lacs	0.00 Lacs
ImplementingAgency Share	7 = (4 – 5 - 6)	2225.80 Lacs	394.65 Lacs

Project Cost Summary –

Sr. No.	Heading	Type A			Type B		
		B/up Area Sq.ft	Cost / Sq.ft	Amount (Lacs)	B/up Area Sq.ft	Cost / Sq.ft	Amount (Lacs)
A	PMAY-U						
1	Wing A	25218.44	1998.09	503.89			
2	Wing B1				18254.67	2128.49	388.55
3	Wing B2				18310.86	2128.49	389.74
4	Wing B3				18988.99	2128.49	404.18
5	Wing B4				17541.88	2128.49	373.38
6	Wing C1				16396.80	2128.49	349.00
7	Wing C2				16396.80	2128.49	349.00
	Total Costing	25218.44	1998.09	503.89	105889.99	2128.49	2253.86
B	Infra Costing	25218.44	205.35	51.78	105889.99	205.35	217.44
C	Land Cost	25218.44	404.25	101.94	105889.99	404.25	428.06
D	Interest Capitalised	25218.44	245.41	61.89	105889.99	245.41	259.86
E	Overheads & Others	25218.44	500.72	126.27	105889.99	529.60	560.79
F	Profit-10%	25218.44	351.31	88.59	105889.99	351.31	372.00

III. CONCLUSIONS

1. The main finding of this project is that PMAY is an extremely ambitious program with a number of shortcomings from a people-cantered perspective on development.
2. The fundamental strategy underlying Public Private Partnerships as an implementation strategy for affordable housing is to combine the strengths of the private sector with those of the public sector in order to overcome challenges faced by affordable housing and to achieve superior outcomes.
3. The success of PPP as a strategy will depend critically on designing PPP structures that make an appropriate allocation of risks, responsibilities, rewards and penances, and create the incentives for value creation.
4. This is at the heart of the policies and contractual structures to be created for different PPP strategies to address the challenge of affordable housing. A sizeable and sustainable response, through strategic PPP models, will allow a self-propelled market to address the challenge of land availability and its high cost.
5. In addition, private sector participation will also enhance access to financing and capital markets as well as reduce costs through gains in construction, operations and time-bound delivery of dwelling units.
6. The underutilized potential of directing privately owned land towards affordable housing would also give a fillip to the existing verticals of PMAY (Urban).
7. Though the Model PPP Policy is yet to be released in a formal manner, states and implementing agencies have been sounded in this regard and consultative process has been initiated.
8. Some states like Gujarat, Rajasthan, Haryana, Odisha, Kerala etc have already formulated their own Affordable Housing policies. Whether all the states will quickly adopt this approach and incentivize private sector participation in PradhanMantriAwasYojana (Urban) {PMAY(U)}is what will determine the success of this ambitious mission.

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