Evaluation of Governance Parameters of Pradhan Mantri Awaas Yojana- Gramin (PMAY-G)

Third Report Submitted to

Ministry of Rural Development
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Submitted by

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List of Abbreviations	
ASHA	Accredited Social Health Activist
ATM	Automated Teller Machine
AWC	Anganwadi Centres
CAG	Comptroller and Auditor General
CGI	Corrugated Galvanized Iron
CIB	Citizen Information Board
DBT	Direct Benefit Transfer
DDUGJY	Deen Dayal Upadhyay Gram Jyoti Yojana
GP	Gram Panchayat
GRS	Gram Rozgar Sevak
IAP	Integrated Action Plan
IAY	Indira Awas Yojana
JE	Junior Engineer
LPG	Liquefied Petroleum Gas
MGNREGS	Mahatma Gandhi National Rural Employment Generation Scheme
MIS	Monitoring of the Implementation of the Scheme
MoRD	Ministry of Rural Development
NRDWP	National Rural Drinking Water Programme
NSDC	National Skill Development Corporation
OBC	Other Backward Classes
PH/ PWD	Physically Handicap/ Person with Disability
PHC	Primary Health Centre
PMAY-G	Pradhan Mantri Awaas Yojana- Gramin
PMUY	Pradhan Mantri Ujjwala Yojana
PR Officials	Panchayati Raj Officials
PWL	Permanent Wait List
QP	Qualification Pack
RCC	Reinforced Cement Concrete
SBI	State Bank of India
SBM	Swachh Bharat Mission
SC	Schedule Caste
SC	Scheduled Caste
SECC	Socio- Economic Caste Census
SHG	Self Help Group
SMS	Short Message Service
Sq.m.	Square Metre
ST	Schedule Tribe
ST	Scheduled Tribe
TA	Technical Assistant

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EXECUTIVE SUMMARY

Under the "Housing for All by 2022" slogan, the Government has initiated the Pradhan Mantri Awaas Yojana –Gramin (PMAY-G) scheme to provide *pucca* houses to all rural homeless and those households living in *kutcha* and dilapidated houses. In addition to the rural housing, the Government of India has also aimed at providing a dignified life to the beneficiaries by providing basic amenities such as improved sanitation, piped drinking water, electricity & gas connection, etc., under convergence with existing Central and State sponsored schemes. Given this background, the NIPFP was asked to examine the macro as well as micro economic impact of the PMAY-G on the economy as well as on the beneficiaries' livelihood. The first report assessed the direct and indirect employment of skilled and unskilled labour generated due to PMAY-G and its spin-off effects related to construction of houses. The second report focussed on tracking the fund flow mechanism under PMAY-G and assessing whether the reforms have led to decrease in leakages and its impact on quality of construction and savings arising to the government due to reforms in IT and space technology and its impact on quality of construction.

As the impact of PMAY-G programme is not limited only to macro parameters, i.e., income and employment, in this third report we look at micro impacts in terms of both tangible as well as intangible benefits that the beneficiaries derived due to the construction of *pucca* house as well as other basic amenities. A perception based survey was conducted by the NIPFP team to assess such benefits and other socio-economic changes of the PMAY-G households. The survey was conducted in five selected states as suggested by the Ministry of Rural Development (MoRD) namely, Assam, Madhya Pradesh, Odisha, Rajasthan, and Uttar Pradesh using a semi-structured interview schedule. The survey had few control households including PMAY-G waitlisted and the beneficiaries of Indira Awaas Yojana (IAY) for comparison purpose. Apart from the intangible benefits, the study also assesses challenges and issues in the implementation of the programme observed at the ground level, which may be useful for the implementing agencies to make the scheme more efficient.

The survey findings suggest that the quality of PMAY-G houses have certainly improved in terms of *pucca* roofs, deployment of better construction material, larger area, and ventilation. Most of the PMAY-G households were found to be satisfied with the quantum of unit assistance provided for construction of the house as well as the quality of the house. However, it was observed that there is some discrepancy in terms of completed houses shown in the AwaasSoft and the status of houses at the ground level. It appears that to achieve the

targets set for the ground level officials, some of the incomplete houses shown as complete, indicating an over-reporting of physical progress. Some of these houses were observed without flooring, plastering, doors, windows, and paint as well. A few houses were also observed with cracks post completion of the PMAY-G construction, suggesting some compromise on the quality of construction.

The survey suggests that the introduction of Direct Benefit Transfer (DBT) in the programme has improved the financial inclusion in rural areas. There has been an increase in the use of banking services among the PMAY-G households through the usage of ATM cards and withdrawal slips during the construction period and post-construction as compared to the pre-construction period. There has also been substantial use of services provided by the Kiosk centres and banking correspondents in the absence of bank branches.

The pace of convergence is found to better in case of MGNREGS, SBM, and Ujjwala schemes in providing some of the basic facilities including LPG connection and toilets compared to DDUGJY/Saubhagya scheme for electricity connection, and NRDWP for piped water. Efforts may be made for rapid convergence of these schemes to cover all the beneficiary households.

It was reported that due to *pucca* house that can withstand all weather conditions, a considerable reduction in open defecation post-PMAY-G house, usage of the toilet and floor cleaners, etc., have led to clean and hygienic conditions, which led to an improved health status of the PMAY-G household members. While the majority of the households still use firewood as main source of fuel for cooking purpose, there has been a significant increase in the use of green fuel (LPG) among the PMAY-G households. It is also reported that there has been an improvement in the schooling of children of the households post-PMAY-G period in terms of both enrolment and performance at school owing to *pucca* house that can withstand all weather conditions, electricity, and availability of other basic amenities. It was also observed that owning a *pucca* house had a positive impact on the beneficiary's perception about living their lives with dignity and safety, and the majority of the beneficiaries felt a significant improvement in terms of social inclusion as well. From the field visits, it is also observed there are both exclusion as well as inclusion errors in the SECC database.

Apart from intangible benefits, the perception of a significant number of beneficiaries regarding the income and employment opportunities was also found to be positive. This is due to massive construction activities undertaken under PMAY-G programme. In addition to this, the mean expenditure also rose in post- PMAY-G in both food and non-food items as compared

to the pre-PMAY-G house as well as the control group of non-PMAY-G households indicating an improved living standard.

Overall, the PMAY-G has been bringing transformational (both social and economic) changes among the rural households. However, there is also a need for further strengthening of monitoring mechanism in order to make the scheme more efficient in terms of maintaining quality, saving time and resources, and at the same time, ensuring both tangible and intangible benefits to the beneficiaries.

Evaluation of Governance Parameters of Pradhan Mantri Awaas Yojana-Gramin (PMAY-G)

1.   Introduction

1.1.   Envisaging the 'Housing for All by 2022' and addressing the shortage of rural housing quantified by the Working Group on Rural Housing for the Twelfth Five-Year Plan in India to be 43.67 million in 2012[1], the Ministry of Rural Development (MoRD) launched the Pradhan Mantri Awaas Yojana Gramin (PMAY-G) in 2016 by restructuring the erstwhile rural development housing scheme, Indira Awas Yojana (IAY). Being the world's largest programme for rural poor[2], it aims to provide *pucca* houses to all rural homeless and those households living in *kutcha* and dilapidated houses by 2022. The government with its housing programme accelerated the rural development process is changing the landscape of the rural economy. The programme was enforced with a foresightedness of inclusive development that would not only provide the rural poor with a pucca house but also the fulfilment of the challenge of providing the beneficiaries a dignified life, increasing their capabilities and entitlements by providing basic amenities by converging the programme with various Centrally and State sponsored schemes.

1.2.   Since its inception, the rural economy witnessed forward linkages through both direct and indirect channels. The construction activities undertaken in PMAY-G programme positively impacted the two major macro parameters namely employment and gross value addition (output). As an effect of the expenditure on PMAY-G, there are both direct and indirect impacts at macro level. One of the macro-parameter assessed in the First Report is output refereeing the gross value addition to a sector (say housing) and overall economy. Further, the reforms introduced in PMAY-G such as the introduction of direct benefit transfer of funds (DBT) from state to beneficiaries' account and real-time geo-tagging of houses resulted in timely availability of funds and timely monitoring of the houses. Through these changes, it has also addressed the gaps that existed under IAY, identified by Comptroller and Auditor General (CAG) in its 'Performance Audit Report' 2014 like lack of transparency in selection of beneficiaries, low quality of house, lack of technical supervision, lack of convergence with other

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[1] http://planningcommission.nic.in/aboutus/committee/wrkgrp12/rd/wgrep_iay.pdf

[2]http://www.in.undp.org/content/india/en/home/operations/projects/poverty reduction/ruralhousing.html

schemes for providing basic amenities, not having a robust monitoring mechanism, etc. This, in turn, has helped to increase the pace of construction as compared to IAY (2015-16) as estimated in the report 'Evaluation of Governance Parameters of PMAY-G' (NIPFP, 2018). In addition to this, these reforms especially in the fund flow mechanism substantially reduced the financial burden on the government and helped in increasing the savings of the government[3].

1.3.   However, the impact of PMAY-G programme is not limited to macro parameters i.e. income and employment, savings and pace of construction. The reforms introduced is expected to have socio-economic impact on the beneficiaries as well. To assess the same, a perception based survey of the beneficiaries was conducted in five States suggested by the MoRD namely, Assam, Madhya Pradesh, Odisha, Rajasthan and Uttar Pradesh with the aim to assess the plausible socio-economic impact on the PMAY-G beneficiaries. An attempt is made to assess the outcome realized from the PMAY-G houses in comparison to the non-PMAY-G households.

1.4.   In terms of implementation issues, the study would also outline the challenges and issues in the implementation of the program observed during the survey. The report will also come out with recommendations for strategizing and strengthening the rural housing programme and devising strategies for making further improvements.

2.   Sampling Method

2.1.   Target Population and Sampling Design

2.1.1. *Study Area:* The study is based on primary data collected from five states of India. The states are chosen purposively in consultation with the Ministry of Rural Development, Government of India. The states thus considered are Assam, Madhya Pradesh, Odisha, Rajasthan, and Uttar Pradesh. For sampling purpose, the study considers the available information on PMAY-G houses from the sample states as on 31st March 2018, which will be discussed below.

2.1.2. *Sample Units:* Primary data were collected from two groups of households namely PMAY-G households and Non-PMAY-G households.

2.1.3. *PMAY-G Households:* PMAY-G households include all the beneficiaries who have been sanctioned a house under the rural housing program PMAY-G, and completed their construction activities as on 31st March 2018. In order to witness some tangible and

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[3]Please see NIPFP's earlier reports submitted to MoRD.

intangible benefits of the new housing scheme, another assumption that the beneficiary should have started staying in the house was also considered for selection of the final sample. This was done at the time of the interview and if any households who have completed houses but not staying in the new house were substituted by the beneficiaries from the replacement list.

2.1.4. *Non-PMAY-G Households:* The non-PMAY-G household category that is used for a comparative study, includes both group of households who are in the PMAY-G Permanent Waiting List (PWL) as well as few households who have availed house under Indira Awaas Yojana (IAY) during the 2015-16 financial year. The IAY 2015-16 beneficiaries were chosen in order to see how the revamped PMAY-G scheme has brought changes to the landscape of the rural people. Similarly, the PMAY-G waitlisted households were chosen in order to understand their perception about the scheme and how it will bring a change to their lives.

2.1.5. *Sample Size:* The minimum sample size required for the present study is calculated based on Cochran's formula for sample size determination (Cochran, 1977), which can be represented as

$$n = \frac{(t)^2 \times (p)(q)}{(d)^2}$$

where *n* is the minimum sample size, *p* is the standard deviation of an attribute of the population $(q=1-p)$, *t* is the abscissa of the normal curve value at the desired alpha (α) level in each tail, and *d* is the acceptable margin of error for the proportion being estimated (Cochran, 1977).

2.1.6. Considering a *standard* deviation of 0.5, a Z-value of 1.96 with 0.025 alpha level[4] in each tail (i.e., 95% confidence interval) and acceptable margin of error (0.05) for the proportion being estimated (acceptable amount of error for a researcher), the minimum sample size require for the present study will be:

$$n = \frac{(1.96)^2 \times (0.5)(0.5)}{(0.05)^2} = 384.16 \cong 385$$

2.1.7. Keeping *the* minimum required sample size of 385, a total of 388 PMAY-G beneficiaries were interviewed for the present study. The sample units were then allocated to the five sample states in two steps given the total number of completed houses.

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[4]The alpha level indicates the level of risk that a researcher is willing to take where the true margin of error may exceed the acceptable margin of error (Gujarati, 2003).

a) Half of the sample size ($385/2=192.5 \cong 195$) were divided equally among the five states, i.e., 39 each.

b) The remaining sample units ($385-195=190$) were divided proportionately as per the number of completed houses.

2.1.8. This was done to get a representative sample from Assam given that it had a small number of completed houses as on 31st March 2018. With a target of total 500 sample size, the remaining ($500-385=115$) were the non-PMAY-G households and allocated to the states proportionately as per the representation of PMAY-G households in the sample.[5] A total of 502 households were included in the sample with 388 PMAY-G households and 114 Non-PMAY-G Households.

2.1.9. Fig. 2.1 presents the category-wise distribution of sample households considered for data analysis. In the total sample, major respondents[6] belong to Uttar Pradesh followed by Madhya Pradesh, Odisha, Rajasthan, and Assam (Fig. 2.1).

Fig. 2.1: Distribution of Sample across Households Categories
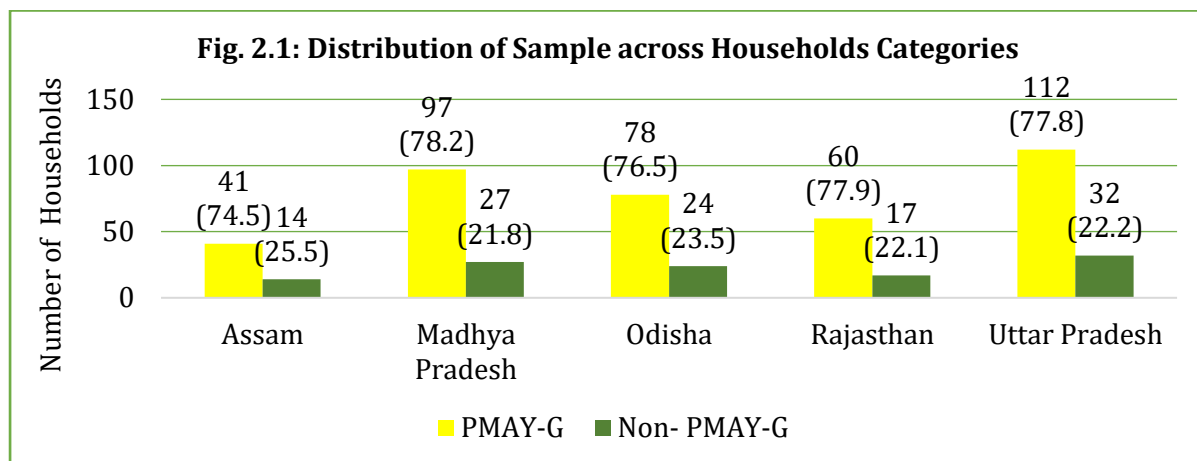
Note: The figures in parentheses are the state's percentage in total sample.

2.1.10. Further, two districts[7] from each State, two blocks from each district, and two gram panchayats from each block were chosen for data collection. While distributing the sample units at lower level, i.e., districts, blocks, and gram panchayats, the same distribution as followed while allocating the sample to the State was followed. The sampling distribution up to gram panchayat level is shown in Table 2.1.

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[5]For the state-wise estimated sampling distribution, please refer to Annexure 2.a.

[6]The terms 'Beneficiary' and 'Respondent' are used interchangeably. Wherever, the beneficiary was not available for interview, one of his family members had been interviewed.

[7]As few districts (Alirajpur, Jhansi, Kalahandi, and Goalpara) were suggested by State officials, a proper statistical procedure could not be followed while selecting the districts. Based on the completed houses and sample requirement, the remaining districts were chosen purposively.

Table 2.1: Distribution of Sample Households up to Gram Panchayat (GP) Level

States	District	Block	GP	PMAY G	Non-PMAY G	Total
Assam	Goalpara	Krishnai	Meselkhowa	6	2	8
			Tukura Bormohoha	4	3	7
		Kuchdhuwa	Darangiri	5	2	7
			Kushdhowa	6	1	7
	Sivasagar	Demow	Pachim Panidehing	7	0	7
			Rajabari	6	4	10
		Nazira	Makeypur	2	1	3
			Rajabheta	5	1	6
Madhya Pradesh	Alirajpur	Kattiwada	Bokadiya	9	3	12
			Wav	9	3	12
		Sondhwa	Chhaktala	11	3	14
			Gendra Badi	13	1	14
	Vidisha	Basoda	Baretha	14	4	18
			Jhilipur	14	3	17
		Kurwai	Mala	13	5	18
			Pathari	14	5	19
Odisha	Kalahandi	Junagarh	Habaspur	9	3	12
			Matigaon	9	3	12
		Narla	Rupra	8	3	11
			Sergarh	8	3	11
	Sambhalpur	Bamra	Jarabaga	11	3	14
			Kinabaga	11	3	14
		Jamankira	Gundruchuan	11	3	14
			Kulundi	11	3	14
Rajasthan	Banswara	Ghatol	Ghatol	11	5	16
			Kanthao	11	1	12
		Kushal Gadh	Mundari	9	3	12
			Teemera- Kala	10	3	13
	Nagaur	Khinwasar	Khatora	4	0	4
			Panchori	5	1	6
		Maakrana	Bhaiya Kalan	5	4	9
			Safer Badi	5	0	5
Uttar Pradesh	Jhansi	Bangra	Luhargaon Ranipur	9	3	12
			Sakrar	8	3	11
		Mauranipur	Badagaon	9	2	11
			Kotra	9	2	11
	Sitapur	Misrikh	Aant	18	5	23
			Panahnagar	18	4	22
		Reusa	Golok Kodar	21	7	28
			Gwari	20	6	26
ALL				388	114	502

Source: NIPFP Field Survey 2019

Photo 2.1: Primary Survey Being Conducted in Various States by NIPFP Team

2.2. Reference Period

2.2.1. The PMAY-G program was launched on November 20, 2016. As a major focus of the present report is to analyse the tangible/intangible benefits accrued to the beneficiaries, the sample was chosen among the houses which were completed prior to 31 March 2018. Thus, in terms of the financial year, the present study considers 2016-17 and 2017-18. Further, the interviews were conducted from July 2018 to August 2018.

2.3. Semi-Structured Interview Schedule

2.3.1. The primary data from both PMAY-G and non-PMAY-G households were collected through separate semi-structured interview schedules designed for both the beneficiaries of the scheme or any respondent from the household in case of non-availability of the beneficiary and non-beneficiaries consisting of some common questions for both the groups. The interview took on an average 45 minutes to complete (Photo 2.1). The schedule was used as a stand-alone technique to collect data covering a range of information such as awareness about the programs, details of construction materials, financial inclusion, convergence, education, health, and sanitation issues, employment details, and household expenditure[8].

2.4. Registration of PMAY-G House

2.4.1. Registration of a house against one implies the ownership of a property. For females in specific, it would also work as a tool in empowering them. In the sample, 48.46 per cent

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[8]The questionnaire schedule is presented the Annexure-2.a.

of PMAY-G houses are found to be registered in the name of male members, 35.83 per cent in the name of the female members, and 15.73 per cent jointly (Table 2.2).

2.4.2. Out of the five sample states, Madhya Pradesh (74.22%) has the highest number of male beneficiaries followed by Uttar Pradesh (53.25%). Similarly, PMAY-G houses registered against a female is found to be highest in Rajasthan (85.00%) followed by Odisha (39.74%) and the lowest in Madhya Pradesh (13.40%). The joint registration is found to be highest in Assam (46.34%) followed by Odisha[9].

Table 2.2: Registration of Sample PMAY-G Households across States (%)

State	Male*	Joint	Female	Total
Total	48.46	15.72	35.83	100
	(188)	(61)	(139)	(388)
Assam	34.15	46.34	19.52	100
	(14)	(19)	(8)	(41)
Madhya Pradesh	74.22	12.37	13.4	100
	(72)	(12)	(13)	(97)
Odisha	38.46	21.79	39.74	100
	(30)	(17)	(31)	(78)
Rajasthan	15.00	0.00	85.00	100
	(9)	(0)	(51)	(60)
Uttar Pradesh	56.25	11.61	32.15	100
	(63)	(13)	(36)	(112)

Note: * Male category also includes two male beneficiaries under PH category were allocated PMAY-G houses out of the total sample.

[9] For a comparison at macro level, see Annexure 2.b.

3. Demographic Details

3.1. This section provides some of the demographic details of the sample households.

3.2. Age Profile of the Households

3.2.1. In the sample, a large number of beneficiaries (28.49%) come from the age group of 30-40 year followed by 40-50 year and 50-60 year (Annexure 3.a). The representations of the age group of 30-40 year in the sample are 28.61 per cent and 28.07 per cent in the PMAY-G and Non-PMAY-G categories, respectively (Fig. 3.1).

3.2.2. The smallest proportion of the sample (6.37%) comes from the age group of 70+ years with representatives of 6.70 per cent and 5.26 per cent in the categories of PMAY-G and Non-PMAY-G households respectively (Fig. 3.1).

Fig. 3.1: Age Profile of the Sample Households
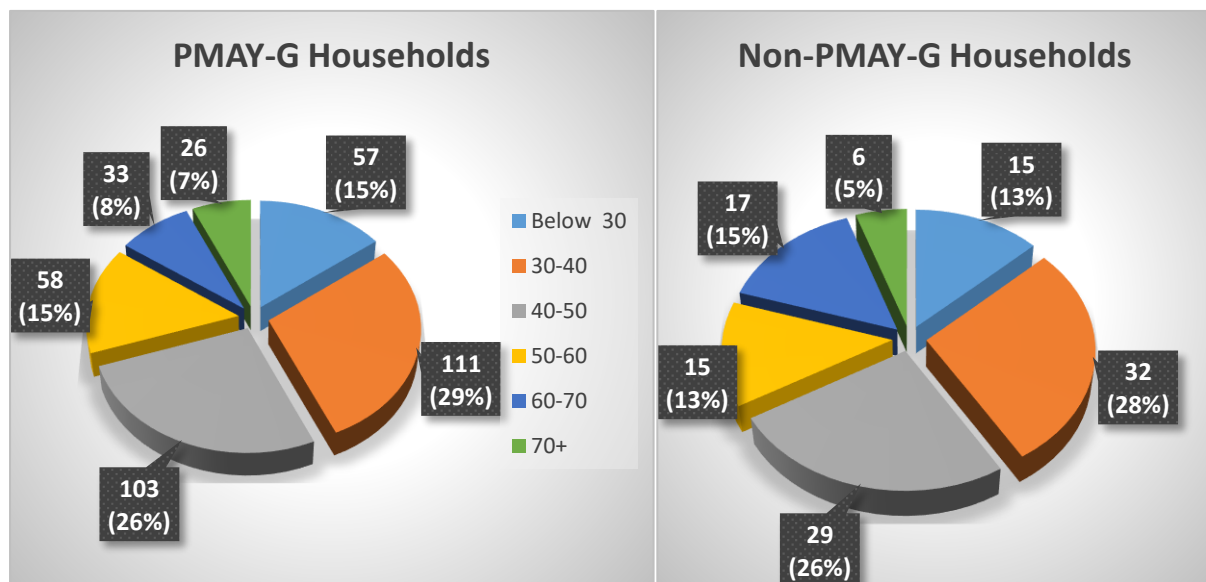
3.3. Education Profile of the Households

3.3.1. The education profile of the respondents across the two household categories is found to be similar. Majority of the beneficiaries are found to be illiterate. The proportions of illiterate respondents were 68.58 per cent and 66.67 per cent for the PMAY-G and Non-PMAY-G respectively (Fig. 3.2).

3.3.2. The proportion of respondents with an education level of high school and above is very low. Only 6.70 per cent among the PMAY-G and 9.65 per cent among the Non-PMAY-G are having a high school and above level of education.

3.3.3. At the state level, the highest percentage of illiterate PMAY-G beneficiaries was found in Rajasthan (81.67%) followed by Madhya Pradesh (76.29%) and Uttar Pradesh (67.86%). Similarly, the higher percentage of the respondent with the education level

of high school and above is found in Assam (17.07%) followed by Odisha (10.26%) (Annexure 3.b).

Fig. 3.2: Education Profile of the Sample Households (%)
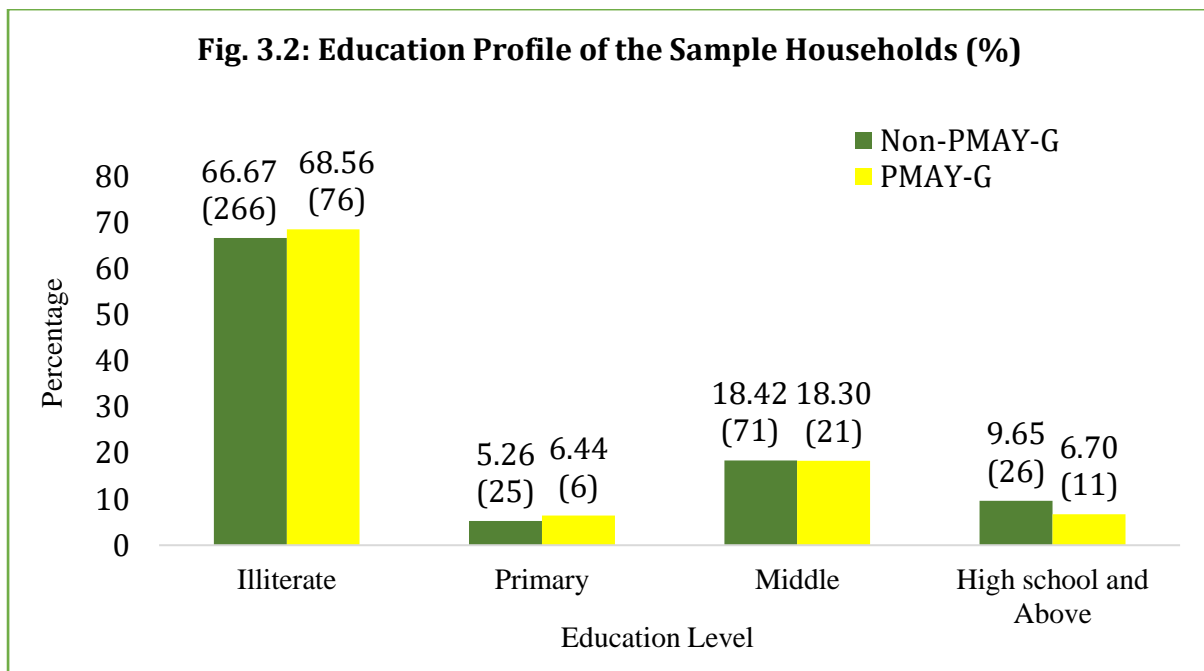
Note: Figures in the parentheses represent the sample size

3.4. *Social Category of the Households*

3.4.1. The highest percentage of the PMAY-G houses in the sample belongs to Schedule Tribes (42.27%) followed by Schedule Caste (28.87%) and OBC (20.88%). Similarly, the lowest representation of the PMAY-G households in the sample is from the general category (2.58%) followed by Minority (5.41%) (Fig. 3.3).

3.4.2. The highest percentage of the Non-PMAY-G houses in the sample belongs to OBC (37.72%) followed by Scheduled Tribes (35.09%) and Scheduled Caste (15.79%). Similarly, the lowest representation of the Non-PMAY-G households in the sample is from the Minority (4.39%) followed by general category (7.02%) (Fig. 3.3).

3.4.3. It is found that the maximum number of PMAY-G houses were sanctioned to Schedule Tribes in all the states except for Uttar Pradesh (0.89%) where the majority (59.82%) of the houses were sanctioned to Schedule Caste (Table 3.1).

Fig. 3.3: Social Category of the Sample Households
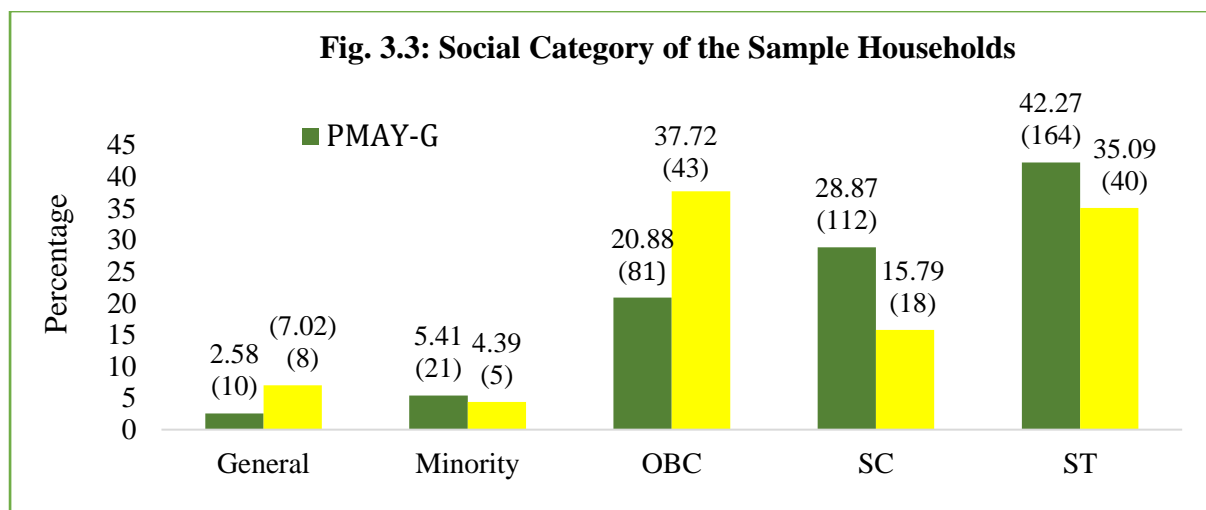
Note: Figures in the parentheses represent the sample size

3.4.4. Out of the five states, Uttar Pradesh recorded the highest registration of houses to the minorities (17.86%) and Scheduled Castes (59.82%). On the other hand, Odisha has the highest registration under the OBC category (34.62%).

3.4.5. Assam has the highest registration of houses for the General category (12.20%).

Table 3.1: Social Category of the Sample Households across States (%)

Social Category	Households	Assam	Madhya Pradesh	Odisha	Rajasthan	Uttar Pradesh	Total	
SC	PMAY-G	4.88	21.65	15.38	16.67	59.82	28.87	(112)
	Non-PMAY-G	0.00	18.52	8.33	23.53	21.88	15.79	(18)
ST	PMAY-G	68.29	59.79	47.44	66.67	0.89	42.27	(164)
	Non-PMAY-G	57.14	40.74	33.33	70.59	3.13	35.09	(40)
OBC	PMAY-G	12.2	15.46	34.62	16.67	21.43	20.88	(81)
	Non-PMAY-G	21.43	37.04	54.17	5.88	50	37.72	(43
General	PMAY-G	12.2	3.09	2.56	0.00	0.00	2.58	(10)
	Non-PMAY-G	14.29	3.70	4.17	0.00	12.5	7.02	(8)
Minority	PMAY-G	2.44	0.00	0.00	0.00	17.86	5.41	(21)
	Non-PMAY-G	7.14	0.00	0.00	0.00	12.5	4.39	(5)

Note: Figure in the parentheses are the sample size of the social category

3.5. *Employment Status of the Respondents*

3.5.1. In terms of primary occupation (Table 3.2), most of the respondents were engaged in own farm activities (37.85%) followed by wage labour (19.32%) and farm labour (16.53%). Only a few respondents were engaged as a full-time mason (1.20%) and

construction workers (2.39%). This section of the respondents is expected to be benefitted more during the PMAY-G scheme period given the surge in the construction of dwelling units in the rural areas.

3.5.2. The distribution of respondents among the PMAY-G and Non-PMAY-G respondents are of similar pattern as own farm activities are found to be the primary means of livelihood.

3.5.3. Across states, there are a few differences in the share of primary occupations. For example, the proportion of own farm activities among the PMAY-G households is found to be highest in Rajasthan (61.67%) followed by Odisha (41.03%) and Madhya Pradesh (38.14%).

3.5.4. In terms of engagement in economic activities, most of the PMAY-G beneficiaries are found to be engaging for more than 300 days (22.94%) in the survey year. About 5.67 per cent beneficiary engage themselves for 250-300 days, 12.11 per cent for 200-250 days, 21.91 per cent for 150-200 days, 15.72 per cent for 100-150 days, and 21.65 per cent for less than 100 days annually (Table 3.3).

3.5.5. Across states, 300 and above days of employment is found to be highest in Uttar Pradesh (29.46%), followed by Rajasthan (25.00%), Madhya Pradesh (23.08%), Assam (21.95%), and Odisha (14.43%).

3.5.6. The proportion of PMAY-G beneficiary with less than 100 days of employment is found to be highest in Odisha (42.31%), followed by Rajasthan (26.67%), Madhya Pradesh (17.53%), Uttar Pradesh (14.28%), and Assam (4.88%).

3.5.7. The proportion of Non-PMAY-G beneficiary with less than 100 days of employment is found to be highest in Madhya Pradesh (48.15%), followed by Rajasthan (35.29%), Odisha (29.17%), Uttar Pradesh (25.01%), and Assam (35.71%).

3.5.8. The Chi2 value (/pr value) suggest significant differences in the distribution of respondents in terms of employment status (no. of working days) in Assam and Madhya Pradesh, whereas the distribution across categories is same in the remaining three states.

Table 3.2: Primary Occupation of the PMAY-G Beneficiaries and Non-Beneficiaries across States (%)

Occupation	Assam		Madhya Pradesh		Odisha		Rajasthan		Uttar Pradesh		Total		
	Non	PMAY G	Non	PMAY G	Non	PMAY G	Non	PMAY G	Non	PMAY G	Non	PMAY G	All
Own Farm Activities	14.29	26.83	22.22	38.14	37.50	41.03	29.41	61.67	43.75	33.04	31.58	39.69	37.85
Farm Labour	21.43	12.20	33.33	21.65	33.33	19.23	5.88	5.00	3.13	15.18	19.30	15.72	16.53
Other Wage Labour	21.43	21.95	33.33	19.59	16.67	10.26	35.29	10.00	18.75	24.11	24.56	17.78	19.32
Business	7.14	12.20	3.70	3.09	0.00	1.28	0.00	0.00	9.38	5.36	4.39	3.87	3.98
Mason	7.14	0.00	0.00	2.06	0.00	2.56	0.00	0.00	0.00	0.89	0.88	1.29	1.20
Construction Labour	0.00	4.88	3.70	0.00	0.00	1.28	5.88	3.33	3.13	3.57	2.63	2.32	2.39
House wife	0.00	9.76	3.70	1.03	4.17	5.13	17.65	10.00	6.25	5.36	6.14	5.41	5.58
Others	0.00	4.88	0.00	5.15	4.17	1.28	0.00	3.33	0.00	1.79	0.88	3.09	2.59
Not working	28.57	7.32	0.00	9.28	4.17	17.95	5.88	6.67	15.63	10.71	9.65	10.82	10.56
Total	100	100	100	100	100	100	100	100	100	100	100	100	100
	(14)	(41)	(27)	(97)	(24)	(78)	(17)	(60)	(32)	(112)	(114)	(388)	(502)

Note: Figures in the parentheses represent the sample size
Source: NIPFP Field Study, 2018

Table 3.3: Employment Days of PMAY-G Beneficiaries and Non-Beneficiaries across States (%)

Employment Days	Assam		Madhya Pradesh		Odisha		Rajasthan		Uttar Pradesh		Total		
	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	All
<=50	7.14	0.00	7.41	0.00	0.00	5.13	0.00	5.00	3.13	3.57	3.51	2.84	2.99
51-100	28.57	4.88	40.74	17.53	29.17	37.18	35.29	21.67	21.88	10.71	30.70	18.81	21.51
101-150	28.57	24.39	7.41	18.56	41.67	21.79	11.76	13.33	15.63	7.14	20.18	15.72	16.73
151-200	7.14	21.95	18.52	32.99	8.33	8.97	11.76	15.00	21.88	25.00	14.91	21.91	20.32
201-250	0.00	19.51	7.41	11.34	0.00	2.56	5.88	18.33	9.38	13.39	5.26	12.11	10.56
251-300	0.00	7.32	3.70	5.15	8.33	1.28	0.00	1.67	3.13	10.71	3.51	5.67	5.18
300+	28.57	21.95	14.81	14.43	12.50	23.08	35.29	25.00	25.00	29.46	21.93	22.94	22.71
Total	100	100	100	100	100	100	100	100	100	100	100	100	100
	(14	(41)	(27	(97)	(24)	(78)	(17)	(60)	(32)	(112)	(114)	(388)	(502)
Chi-Square	13.58		15.74		9.03		4.08		6.53		13.84		
Pr-value	0.035		0.015		0.172		0.665		0.366		0.031		

Source: NIPFP Field Study, 2018

3.6.   *Income Profile of the Households*

3.6.1. The respondents were classified into 9 different categories (with Rs. 15000 intervals) to assess for any differences in the distribution respondents across income groups and states.

3.6.2. Most of the PMAY-G beneficiaries (29.90%) have an annual income level of INR 15000-30000. The proportion of PMAY-G respondents with the highest level of income slab (INR 120000 and above) is found to be 16.49 per cent. Comparatively, the proportion of respondents with an income level of less than INR 15000 per annum appears to be 24.74 per cent (Table 3.5).

3.6.3. At the state level, the proportion of PMAY-G beneficiary with an annual income of INR 120000 and more is found to be highest in Rajasthan (25.00%), followed by Odisha (20.51%), Assam (19.51%), Uttar Pradesh (17.86%), and Madhya Pradesh (5.15%).

3.6.4. The proportion of PMAY-G beneficiary with an annual income of less than 15000 is found to be highest in Madhya Pradesh (17.53%), followed by Odisha (16.67%), Uttar Pradesh (4.46%), Rajasthan (5.00%), and Assam (2.44%). The distribution of respondents is found to be different across the income group in case of Assam as suggested by the Pr value while there is no significant difference in the distribution of respondents in other states.

Table 3.4: Annual Income of PMAY-G Beneficiaries and Non-Beneficiaries across States (%)

Annual Income	Assam		Madhya Pradesh		Odisha		Rajasthan		Uttar Pradesh		Total		
	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	All
<=15000	42.86	9.76	40.74	26.80	25.00	42.31	5.88	25.00	18.75	16.07	26.32	24.74	25.10
15000-30000	35.71	29.27	37.04	41.24	50.00	28.21	35.29	26.67	37.50	23.21	39.47	29.90	32.07
30000-45000	0.00	29.27	11.11	14.43	8.33	6.41	11.76	11.67	18.75	17.86	11.40	14.95	14.14
45000-60000	0.00	9.76	3.70	8.25	0.00	1.28	17.65	8.33	9.38	10.71	6.14	7.73	7.37
60000-75000	0.00	0.00	3.70	2.06	0.00	1.28	5.88	1.67	3.13	8.04	2.63	3.35	3.19
75000-90000	0.00	2.44	0.00	1.03	4.17	0.00	0.00	1.67	0.00	4.46	0.88	2.06	1.79
90000-105000	0.00	0.00	0.00	1.03	0.00	0.00	0.00	0.00	0.00	1.79	0.00	0.77	0.60
105000-120000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120000+	21.43	19.51	3.70	5.15	12.50	20.51	23.53	25.00	12.50	17.86	13.16	16.49	15.74
Total	100	100	100	100	100	100	100	100	100	100	100	100	100
Chi-Square	12.25		3.12		8.65		4.98		5.38		6.03		
Pr-value	0.031		0.873		0.194		0.546		0.614		0.536		

Note: The Chi2 and Pr value indicate whether the distribution of beneficiary across respondents'' group (non vs PMAY) and different income groups. A Pr value less than 0.1 refers that the two groups are statistically different with respect to a characteristics (here, the income level).

Table 3.5: Per Capita Income of Sample Households across States (%)

Per Capita Income	Assam		Madhya Pradesh		Odisha		Rajasthan		Uttar Pradesh		Total		
	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	Non	PMAYG	All
Average households size	3.5	4.6	4.5	5.3	4.1	4.3	5.5	5.1	4.1	5.3	4.3	5.0	4.8
<=5000	14.29	2.44	11.11	17.53	4.17	16.67	0.00	5.00	6.25	4.46	7.02	10.05	9.36
5000-10000	35.71	46.34	59.26	38.14	41.67	51.28	29.41	46.67	40.63	32.14	42.98	41.24	41.63
10000-15000	28.57	26.83	14.81	26.80	45.83	21.79	35.29	26.67	28.13	32.14	29.82	27.32	27.89
15000-20000	21.43	12.20	7.41	13.40	8.33	5.13	35.29	15.00	9.38	14.29	14.04	12.11	12.55
20000-25000	0.00	2.44	7.41	2.06	0.00	2.56	0.00	6.67	6.25	7.14	3.51	4.38	4.18
25000+	0.00	9.76	0.00	2.06	0.00	2.56	0.00	0.00	9.38	9.82	2.63	4.90	4.38
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Chi-Square	5.29		7.05		7.85		6.05		1.31		2.58		
Pr-value	0.382		0.217		0.165		0.195		0.93		0.764		

4. Construction of PMAY-G Houses: Some Physical Aspects

4.1. Background

4.1.1. The aim of the flagship program "PMAY-G" is to provide a pucca house with a technically sound structure that could withstand the changing weather conditions and natural calamities, with zero or minimum maintenance cost in the succeeding years supplemented with basic amenities like electricity, piped water connection, toilet, etc., to the rural poor.

4.1.2. The quality of construction primarily depends on the various factors like the layout/ design of the house along with the incorporation of disaster-resilient features, durability, employment of trained masons, use of quality construction materials, etc., supplemented with some auxiliary factors like robust monitoring/technical supervision, adequate size of the house, quantum of unit assistance, and proper ventilation system.

4.1.3. Considering these parameters to ensure the quality of houses constructed under PMAY-G, MoRD published a suggestive resource book, 'PAHAL- A Compendium of Rural Housing Typologies' describing more than 100 housing designs for 15 States illustrating the technical, material, and cost specifications to construct a durable and technically sound structure giving due importance to locally available material for cost-effective construction. Further, keeping in mind the adequate space for free movement, the size of the PMAY-G house was increased to 25 sq.m. as compared to houses in the previous IAY regime.

4.1.4. Like PAHAL, many states also develop designs according to the suitability of local customs, needs and resource availability (Photo 4.1). However, these designs are again only suggestive in nature, and the beneficiary has the freedom to construct his/her house as per his/her desires.

4.1.5. To improve the quality of construction and ensure availability of skilled masons, the Framework for Implementation (FFI) of PMAY-G provides for rural mason training programs to be conducted by States/UTs. The training is held as per the Rural Mason Qualification Pack (QP) of the National Skill Development Corporation (NSDC). To ensure quality of construction material, the FFI urges states to set up material banks at the district level for bulk procurement, with strict quality control by way of Third Party verification.

Photo 4.1: PMAY-G House Made in Traditional Sang Ghar (Stilts House) in Assam

4.1.6. Following the recommendation of erstwhile Planning Commission Report (2013)[10] the quantum of monetary assistance was increased to 1.20 lakh (plain areas/1.30 lakh (Himalayan, North Eastern States, difficult areas and IAP) per unit of the house along with the minimum size of the house with the proper ventilation system. The increase in the monetary assistance contributes to both purchasing better quality material as well as timely completion of the house. Therefore, the size of monetary assistance can be considered as a potential indicator of the quality of houses. Similarly, robust technical supervision/ monitoring which also contributes to timely and quality construction are also entailed in the guidelines.

4.1.7. In order to provide basic amenities to the beneficiaries that contributes to living a quality life, the program was converged with various centrally sponsored as well as state-sponsored schemes such as Swachh Bharat Mission and/or MGNREGS for construction of toilets as well as solid and liquid waste management, PMUY for providing LPG connections as a means to efficient cooking fuel, DDUGJY/Saubhagya for electricity connection, NRDWP for access to safe drinking water etc. The States are also encouraged to take initiatives to dovetail other welfare schemes with PMAY-G program.

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[10] http://planningcommission.gov.in/reports/peoreport/peo/rep_iay2202.pdf

4.1.8. In this chapter, an attempt has been made to gauge the beneficiary's perception about the quality of their newly constructed houses. The beneficiaries were interviewed on various quality parameters such as size of the house, material used in the construction process, type of roof, the damages occurred (if any), ventilation system, beneficiary's level of satisfaction regarding the amount of unit assistance as well as the quality of the construction of house, etc.

4.2. Completion Status of PMAY-G Houses

4.2.1. Based on the observation during the field survey, a house is considered to be incomplete if the house is not having suggestive flooring (pucca floor), plastering, installation of the door and window. Additionally, a number of houses without paint was also observed. Although the house is not completed as per the criteria, the households were interviewed if they were staying in the new houses.[11] Similarly, households who do not have completed house and also are not staying are replaced by the households from the replacement list.

4.2.2. In the sample, 52.06 per cent of the houses were found to be not fully complete at the time of the survey in terms of not having at least one of the parameters mentioned above. Only 47.94% of the houses were completed (Fig 4.1). The high percentage of incompletion and stating it to be completed in AwaasSoft could be due to the pressure of completing the target specified for the local level officials. This could also be one of the reasons for the low occupancy of the PMAY-G houses as observed during the survey.

4.2.3. At the state level (Table 4.1), Assam (92.68%) had the highest percentage of completed houses in the sample followed by Odisha (82.05%) and Madhya Pradesh (62.89%) at the time of the survey. In contrast, the percentage of the incomplete house is higher in Rajasthan (86.67%) and Uttar Pradesh (86.61%).

4.2.4. Of the incomplete houses, the majority do not have suggestive flooring (72.28%). About 51.49% of the houses did not have plaster which is necessary for increasing and restoring the strength of the walls. Similarly, houses without door and window were found to be 37.62 per cent and 39.11 per cent respectively. Also, 65.35 per cent of the PMAY-G houses were not painted (Table 4.1).

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[11] Although guideline mandated construction of a toilet to consider a house to be completed, several issues including mapping with SBM and MGNREGS and lack of fund restricted the sanction of money to the beneficiary were found during field visit. About 46 per cent sample households had not received fund for constructing a toilet till the time of survey. Therefore, the definition of construction of houses has been relaxed for toilet in the present report.

Fig. 4.1: State-Wise PMAY-G House Completion status (% complete houses/incomplete houses)
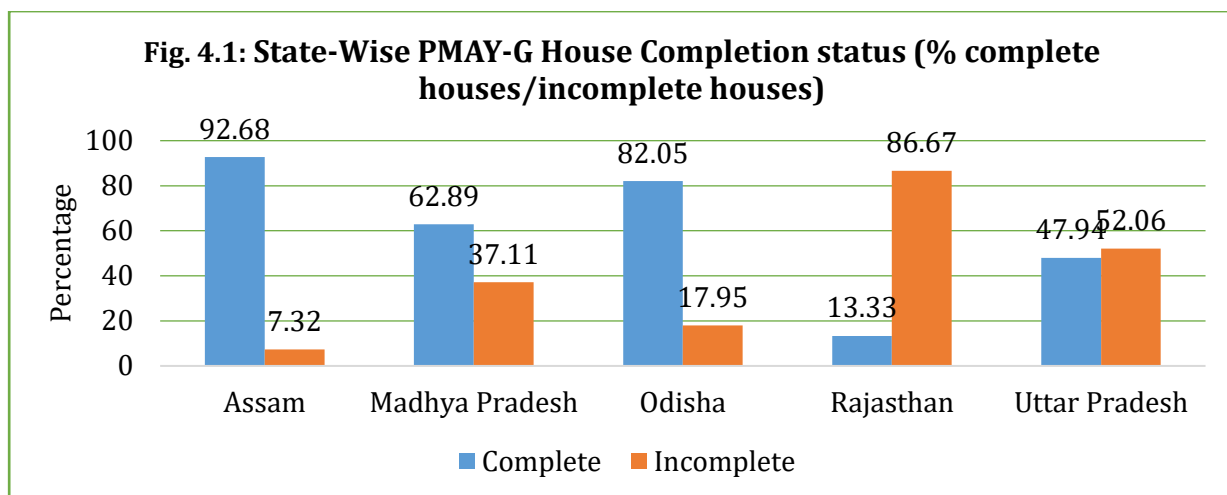
Table 4.1: Completion Details of PMAY-G Houses across Sample States

State	Complete	Incomplete	Physical component of a house (% of incomplete houses)				
			Plaster	Flooring	Door	Window	Paint
Assam (41)	92.68	7.32	33.33	33.33	66.67	66.67	33.33
	(38)	(3)	(1)	(1)	(2)	(2)	(1)
Madhya Pradesh* (97)	62.89	37.11	27.78	66.67	30.56	30.56	33.33
	(61)	(36)	(10)	(24)	(11)	(11)	(12)
Odisha (78)	82.05	17.95	57.14	78.57	35.71	42.86	64.29
	(64)	(14)	(8)	(11)	(5)	(6)	(9)
Rajasthan (60)	13.33	86.67	30.77	92.31	69.23	69.23	92.31
	(8)	(52)	(16)	(48)	(36)	(36)	(48)
Uttar Pradesh (112)	13.39	86.61	71.13	63.92	22.68	24.74	63.92
	(15)	(97)	(69)	(62)	(22)	(24)	(62)
All (388)	47.94	52.06	51.49	72.28	37.62	39.11	65.35
	(186)	(202)	(104)	(146)	(76)	(79)	(132)

Note: 1. The figures in the parentheses represent sample size.
   2. One house in Madhya Pradesh does not have a wall on one side.
   3. A house is considered to be complete if the plaster, flooring, paint, and fittings of doors and windows are done. The criteria of construction of toilets for a house to be shown as complete is relaxed.

4.2.5. At the state level, the flooring is not done in many houses in Rajasthan (92.31% of total incomplete in the State) (Photo 4.2), and plastering is missing in Uttar Pradesh (71.13 of total incomplete in the State).

4.2.6. However, all these sampled houses were shown in the AwassSoft/AwassApp as completed. It thus raises a serious concern with regard to inspection and geo-tagging process that was done. For example, the completed house of one beneficiary is shown as the house of another beneficiary taking a photo from another angle/point that matches with the latitude/longitude information (Photo 4.2.1 and 4.2.2).

Photo 4.2: An incomplete PMAY-G House shown as Complete in AwaasSoft
Note: The house is shown as complete in AwaasSoft while there is no flooring, fittings of doors, and windows, in Nagaur District, Rajasthan. *Source:* Photo taken during the survey in Rajasthan
Photo 4.2.1: A House which is Shown in AwaasSoft as Completed.
Source: Photo taken during the survey in Uttar Pradesh
Photo 4.2.2: Photo uploaded against the same beneficiary in the AwaasApp/AwaasSoft
Source: AwaasSoft   Source: AwaasSoft

4.3. Quality of PMAY-G House

4.3.1. Type of Roof

4.3.1.1. The type of roof may be considered as a parameter of quality of the house. For example, a house with Reinforced Cement Concrete (RCC) roof is superior to that of Corrugated Galvanized Iron (CGI) which in turn is more superior to a kutcha roof. Giving the mandates for pucca roofing (RCC/CGI) has definitely helped in improving the quality of house of the rural poor (Photo 4.3).

4.3.1.2. As compared to the IAY houses, the percentage of PMAY-G with RCC roofing is higher. Out of the total PMAY-G houses, the majority of the beneficiaries opted for RCC roofing (60.76%), and only 14.95% of the houses had CGI sheets used for roofing (Annexure 4.a). Some states mandated the construction of RCC roofing like Odisha, Madhya Pradesh, and Uttar Pradesh which is the reason for the majority of beneficiaries opting for RCC roofs (Fig. 4.2).

Photo 4.3: Type of Roofing across States

CGI sheet roofing in Assam

RCC roofing in Rajasthan

Stone Roof in some districts of Rajasthan
Source: Photos were taken during the primary survey

Fig. 4.2: Type of Roof in PMAY-G and Non-PMAY-G Houses
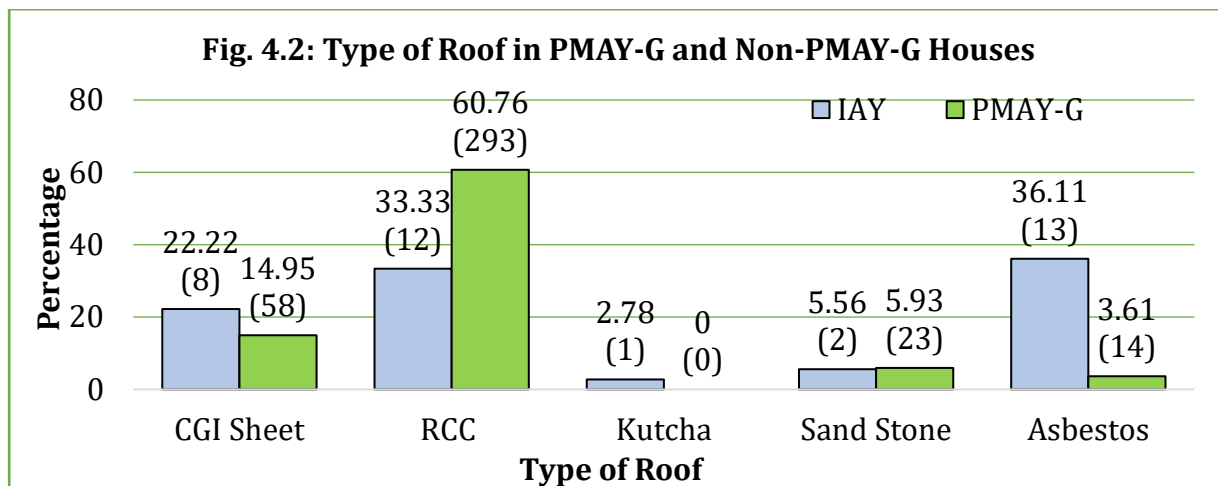
Note: Figures in the parentheses represent the sample size

4.3.2. Construction Material used in PMAY-G and IAY House

4.3.2.1. It has been found that beneficiaries of both IAY and PMAY-G across all states used cement, stone chips, sand and bricks (burnt, laterite or fly ash) in the construction of their houses, which added to the durability of the houses (Table 4.2).

4.3.2.2. There has been a significant improvement in the overall usage of steel in roofing and pillars in the PMAY-G houses as compared to IAY houses (91.75% in PMAY-G as compared to 78.79% in IAY). However, there are still some PMAY-G houses especially in Rajasthan and Odisha are not using the steel either for the pillar, plinth, and roofing as the houses are built with stone blocks and, thus, they do not require much steel due to their ability to uphold the structure.

4.3.2.3. In contrast, the use of sandstone, asbestos, and CGI sheets for roofing in the PMAY-G houses show a declining trend. The less use of CGI sheets in PMAY-G has been replaced by RCC roofing as many states mandated the same.

4.3.2.4. Although the use of paint has increased in PMAYG houses in absolute term, relatively, there has been little improvement as many of the PMAY-G houses are yet get plastered and completed.

4.3.2.5. Although there has been substantial use of local material such as bamboo during the construction process, the final use has been decreased from 36.36% in IAY to 11.55% in PMAY-G (Table 4.2). Such a decline in the final use of bamboo is due to increased use of other durable materials. For example, bamboo is often used for flooring and wall among the *Mishing* community of Assam (Photo 4.4). However, some of the PMAY-G households from the community have constructed RCC wall and flooring in their houses.

Table 4.2: State-wise usage of Construction Material in IAY House and PMAY-G Houses

	Assam		Madhya Pradesh		Odisha		Rajasthan		Uttar Pradesh		Total	
	IAY (2)	PMAY-G (33)	IAY (7)	PMAY-G (71)	IAY (8)	PMAY-G (70)	IAY (4)	PMAY-G (52)	IAY (12)	PMAY-G (77)	IAY (33)	PMAY-G (303)
Cement	100	100	100	100	100	100	100	100	100	100	100	100
Stone Chips	100	100	100	100	100	100	100	100	100	100	100	100
Burnt Brick/Laterite/Fly Ash	100	100	100	100	100	100	100	100	100	100	100	100
Steel	100	100	100	100	50	94.29	50	59.62	91.67	100	78.79	91.75
Sand	100	100	100	100	100	100	100	100	100	100	100	100
Bamboo	100	42.42	57.14	1.41	12.50	28.57	25	0	33.33	0	36.36	11.55
Sand Stone	0	0	28.57	7.04	37.50	7.14	50	26.92	50	0	39.39	7.92
CGI Sheet	100	100	14.29	0	37.50	0	25	32.69	8.33	0	24.24	16.50
Asbestos	100.00	100.00	14.29	7.04	12.50	0.00	0.00	32.69	0.00	1.30	12.12	18.48
Paint	50.00	75.76	28.57	50.70	75.00	60.00	75.00	7.69	25.00	12.99	45.45	38.61
Others	0.00	72.73	0.00	25.35	25.00	1.43	0.00	17.31	8.33	31.17	9.09	25.08

Note: Figures in the parentheses represent sample size

Photo 4.4: Use of Local Materials (Bamboo)
Use of local material like bamboo in the construction of houses in Assam.
Construction of *pucca* walls instead of traditional bamboo walls making the house more durable. *Source: Photos were taken during primary survey*

4.3.2.6. About 37.11 per cent of the PMAY-G households reported that they had faced some difficulties during the construction activities. Almost all the beneficiaries expressed concern over rising prices of construction materials, whereas, about 20.22 per cent PMAY-G households raised concern over the increased wages of mason and

construction workers. It is also found that because of the increased demand, the local traders hike the prices of construction materials, and also, many beneficiaries located at the remote areas had to pay a much higher amount on transportation. About 29.12% of the beneficiaries reported as constructions of so many houses were happening at a time, securing a trained/experienced mason/construction workers was also difficult, and they had to wait for some time to get their work done by an experienced mason. Although we could not collect quantitative data, a few beneficiaries reported that their houses were constructed by third parties (unofficially assigned) using poor quality of construction materials. In contrast, in few areas, it was also found that such unofficial arrangement has resulted in timely construction of quality houses, and beneficiaries were happy with such arrangements although the PMAY-G FoI does not allow it. According to local officials, such arrangement was done to avoid issues like unproductive expenses by the beneficiaries, communication (road) & infrastructure problems, remoteness, etc.

4.4.   Size of the House and Ventilation System

4.4.1. One of the factors of enhancing the quality of a house is the adequate space for free movement in the house and a proper ventilation system. The average approximate area of the PMAY-G house is found to be 34.56 square meters, which is significantly higher than the IAY houses. The average areas of both IAY (26.39 sq.m.) and PWL (19.37 sq.m.) houses were found to be smaller than PMAY-G houses (34.56 sq.m.) (Table 4.3).

4.4.2. However, it was found that despite the prescribed minimum area, some houses were constructed below 25 sq.m. in the carpet area. The area of the PMAY-G house ranged from 9.29 sq.m. (in Uttar Pradesh) to 98.9 sq.m. (in Madhya Pradesh)

4.4.3. The ventilation system in PMAY-G houses was found to be better than IAY and Permanent Wait List (PWL). The average number of doors fitted in a PMAY-G house is found to be 2 with a maximum of 5 doors. Similarly, the average number of windows and ventilators are also found to be higher as compared to the IAY and PWL houses (Photo 4.5).

Photo 4.5: PMAY-G House in Assam

Complete and well-constructed PMAY-G house with a carpet area of 25 sq.m. in Assam.
Source: Photos was taken during Primary Survey

Table 4.3: Details of Area, Doors, Windows and Ventilators

State	Households	Area of house (SQM)		Doors		Windows		Ventilators	
		Mean	Range (Min-Max)	Mean	Range (Min-Max)	Mean	Range (Min-Max)	Mean	Range (Min-Max)
All	PWL	19.37	0- 51.10	1.54	0-5	0.74	0-8	0.11	0-2
	IAY	26.39	11.15-69.68	2.19	1-8	1.69	0-7	1.19	0-7
	PMAY-G	34.56	9.29-98.9	2.14	1-8	2.07	0-10	2.04	0-13
Assam	PWL	25.86	17.84-39.02	1.42	1-4	1.67	0-8	0.00	0
	IAY	23.27	20.07-26.48	1.50	1-2	2.00	2-2	1.00	0-2
	PMAY-G	37.00	25.00-80.27	1.80	1-3	3.17	0-7	2.51	0-10
Madhya Pradesh	PWL	19.56	9.29-51.1	1.50	0-4	0.94	0-6	0.19	0-2
	IAY	26.68	20.00-41.81	2.56	1-8	2.56	0-7	1.11	0-7
	PMAY-G	37.11	20.00-98.9	2.18	1-6	2.33	0-10	2.24	0-10
Odisha	PWL	24.24	9.29-37.16	1.81	1-5	0.56	0-2	0.06	0-1
	IAY	24.30	18.58-37.16	1.88	1-3	1.50	0-3	1.00	0-2
	PMAY-G	25.66	18.6-41.81	1.94	1-3	1.60	0-4	2.33	0-7
Rajasthan	PWL	11.31	5.94-20.00	1.42	0-3	0.50	0-3	0.25	0-2
	IAY	27.73	23.23-34.84	3.25	1-7	2.00	0-3	1.25	0-3
	PMAY-G	43.00	14.31-97.55	2.57	1-6	3.08	0-9	2.63	0-13
Uttar Pradesh	PWL	16.49	0-33.45	1.50	0-4	0.28	0-2	0.06	0-1
	IAY	27.54	11.15-69.68	1.92	1-3	1.08	0-3	1.38	0-6
	PMAY-G	33.14	9.29-83.61	2.16	1-8	1.22	0-8	1.17	0-8

4.5.   Occurrence of Damages in the PMAY-G House Post Completion

4.5.1.   The occurrence of damages post the completion of PMAY-G houses was gauged to ascertain the quality of construction. Though the majority of PMAY-G houses did not show any sign of damage like cracks, leakages, etc., some percentage of beneficiaries (8.25%) reported damages across all states except in Assam (Fig. 4.3).

4.5.2.   At the state level, about 15.38% of the houses constructed in Odisha get damaged in terms of cracks and falling concrete/cement to some extent due to poor construction. It is to be noted that the construction in Odisha was done by contractors[12], and thus, there could have been scope for the use of poor quality of materials compromising the quality of construction. Similar incidence also observed in some villages of Madhya Pradesh (Photo 4.6). Out of such PMAY-G households, 18.75 per cent had to incur expenses on repairing post-completion period. On the other hand, the houses constructed in Assam were of comparatively better quality and did not show any damages.

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[12] About 11 beneficiaries reported involvement of third party (contractor) other than Gram Panchayat who had to foregone the incentives provided by the stated for speedy completion.

Fig. 4.3: Incidence of Occuring Damages during post completion of the PMAY-G construction (%)
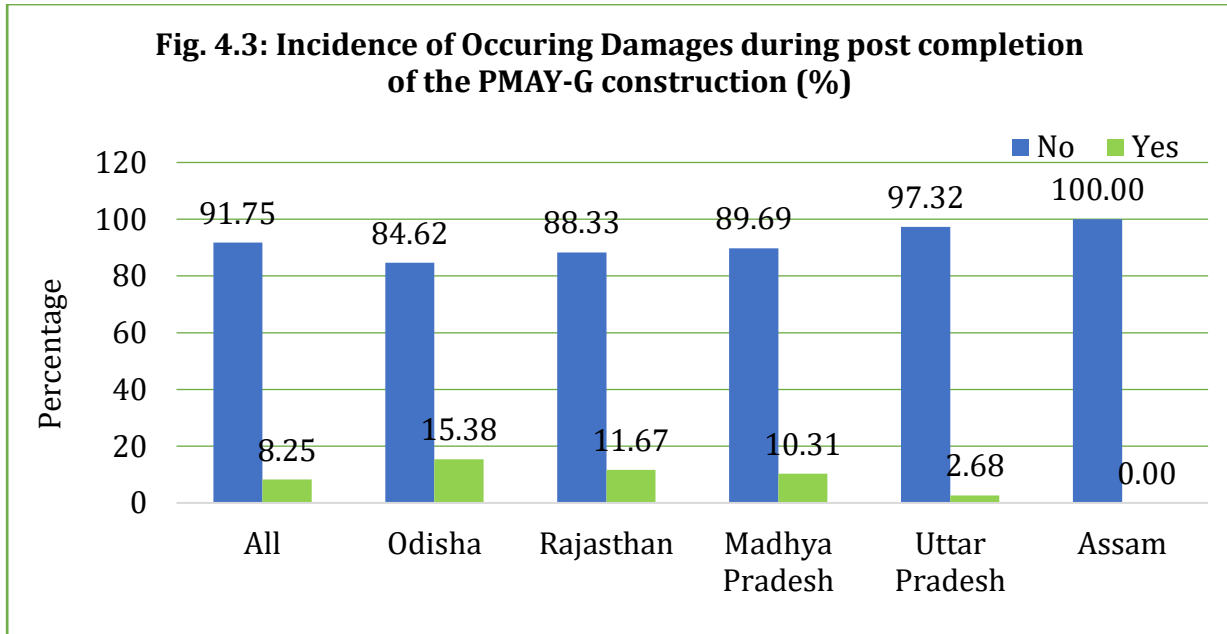
Photo 4.6: Occurrences of Damages post Construction of Houses

The wall of the PMAY-G house fell down in heavy rain due to non- plastering, Uttar Pradesh.

Seepage in the newly constructed PMAY-G house, Odisha

Source: Photos were taken during Primary Survey

4.6. Level of Satisfaction for Unit Assistance and Quality of House

4.6.1. The quantum of monetary assistance contributes both in the purchase of quality of construction material and trained labour as well as the timely completion of the house. The monetary assistance has been increased for PMAY-G to Rs. 1.20 lakh (Rs 1.30 for Himalayan, North Eastern, difficult and IAP districts) as compared to Rs 70 thousand (Rs 75 thousand for Hilly States, difficult areas, and IAP districts) for construction of IAY houses. The enhanced assistance is expected to help in meeting the requirements for quality construction of the house.

4.6.2. An attempt is made to analyse the satisfaction level of the PMAY-G households with respect to the unit assistance and quality of construction. It is found that majority of the beneficiaries (59.54%) believed that the amount of unit assistance was enough to cover for both labour and construction material to build a 25 sq.m. house and found to be satisfied with the monetary assistance (Fig. 4.4).

4.6.3. At the state level, Odisha had the highest percentage of beneficiaries who are satisfied with monetary assistance (74.36%) followed by Uttar Pradesh (67.86%). On the other hand, Rajasthan has the highest percentage of dissatisfied beneficiaries (13.33%) (Annexure 4.b).

4.6.4. The prime reason for dissatisfaction was the increase in the prices of construction materials and labour wages. A few others also stated that given the size of the family, the unit assistance is not enough to build a house of adequate size.

Fig. 4.4: Level of Satisfaction with Monetary Assistance

Fig 4.5: Level of Satisfaction with Quality of Construction
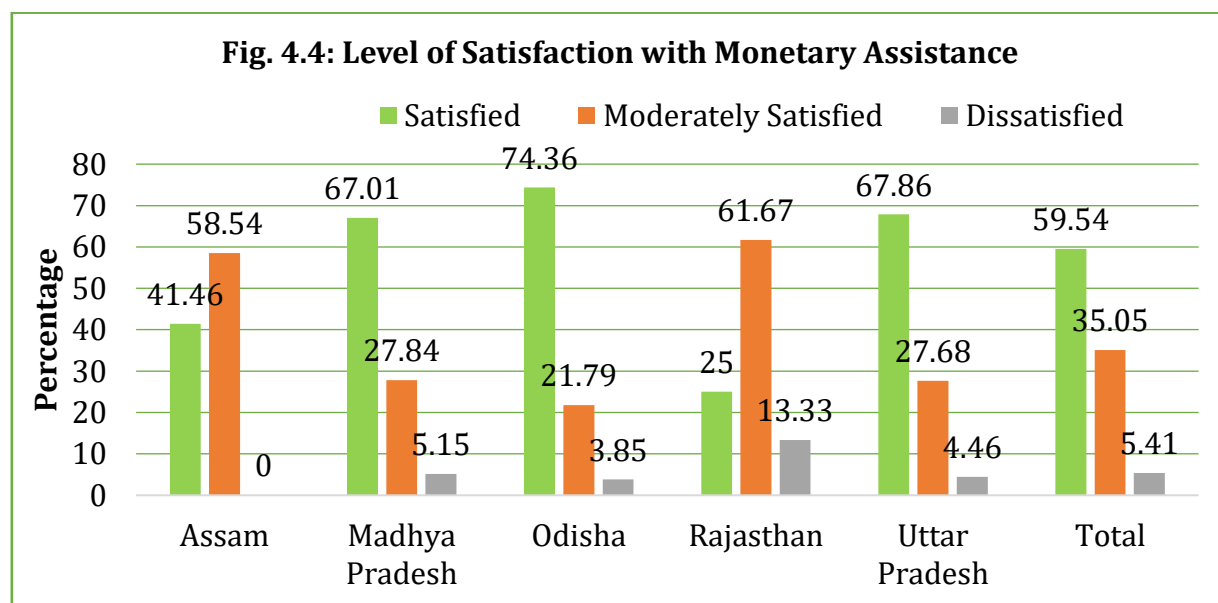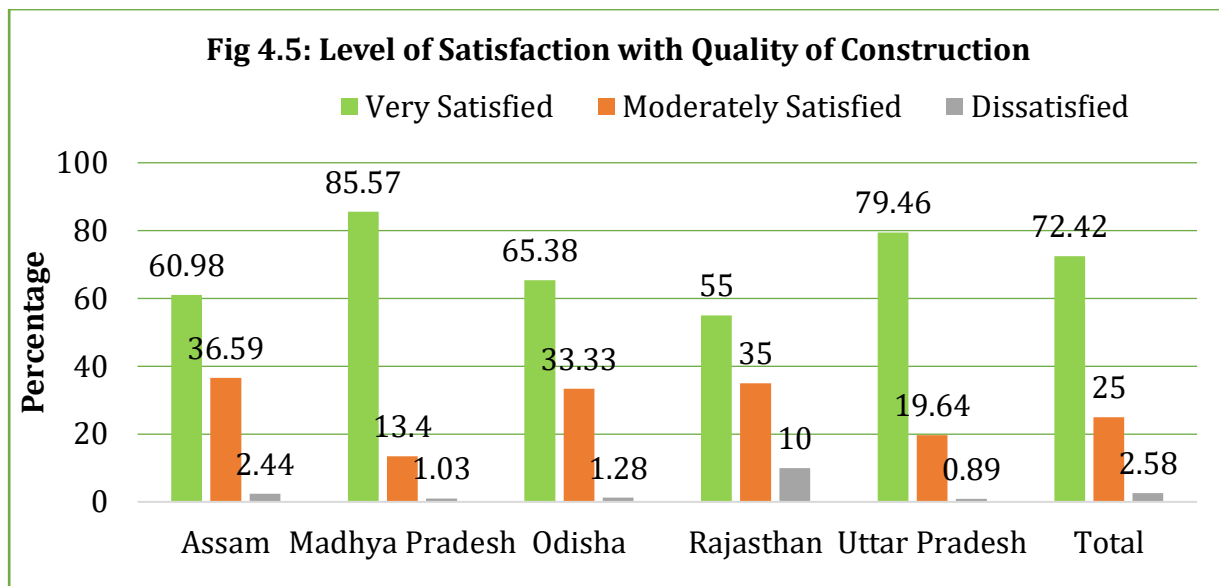
4.6.5. Majority of the PMAY-G beneficiaries were found to be highly satisfied with the quality of construction (72.42%), highest being in Madhya Pradesh (85.57%) followed by Uttar Pradesh (79.46%) whereas 25% of the beneficiaries were found to be moderately satisfied, and only 2.58% of the beneficiaries were found to be dissatisfied with the quality of the construction (Fig. 4.5) (Annexure 4.c).

4.6.6. One of the primary reasons cited for dissatisfaction with the quality of house is the construction of the house was not done as per the beneficiary's expectation even though some of such houses were built by beneficiary themselves. A few households stated that they used a lower grade of materials while constructing, and a few others found cracks in post construction.

4.6.7. About 20% of the beneficiaries also felt that they were not properly sensitized regarding the construction process like housing designs, checking the quality of construction material, hiring of trained masons, the requirement of material at different stages of construction etc., which has lowered their satisfaction level.

4.7.   Progress in Release of Instalments

4.7.1. The States are allowed to decide on the total number of instalments to be paid to the beneficiary but there should be a minimum three instalments. As per the FoI of PMAY-G, the first instalment should be released to the beneficiary bank account electronically within 7 days of administrative sanction. The 2nd and 3rd instalments can be mapped to foundation/plinth level and lintel/roof-cast level respectively, but there are no specific timelines for releasing the money to beneficiary's account after 1st instalment.

4.7.2. The survey instruments do not capture the Instalment amounts credited to the beneficiaries' bank account. During the fields visit, it was found that significant proportion of the beneficiary did not update their bank passbook, and many beneficiaries do not have a passbook (they used to have only a kiosk card which can be used for transactions). Therefore, a sample was drawn from the AwaasSoft to assess the average time taken for the release of the respective instalment to the beneficiary. The respondents were drawn from the sample 5 states considered for survey. From AwaasSoft, the data was drawn from the two districts with highest number of completed houses from each sample states for the year 2016-17, 2017-18, and 2018-19. The data for a total 20 respondents in each year were downloaded from each state.

4.7.3. In order to assess the time gap in fund flow to the beneficiary level, three parameters have been considered namely time taken for order sheet generation and FTO generation for three instalments. The 1st instalment is mapped with the date of administrative sanction, 2nd instalment is mapped with the plinth level, and 3rd instalment is mapped with lintel level of construction. Figure 4.6 presents the average time taken for releasing instalment in each stages of construction. Due to unavailability of the only two instalments (1st and 3rd) are mapped for IAY 2015-16.

4.7.4. The average number of days taken for releasing the money takes a substantial amount of the time in the first year of PMAY-G, but there has been a steep decline over the years. The average no of days taken to generate FTO after the administrative sanction was 38 days in 2016-17 which has declined to 22 days in 2017-18, and a further decline to 21to 16 days in 2018-19. However, it is still taking more time as compared to what is given in the framework of implementation. The proportion of respondents receiving instalments with 7 days for 1st Installment was very low in 2016-18, but over time, it has increased significantly (Fig. 4.6).

Fig. 4.6.a: Time Taken for Release of Instalment at Various Stages (in days)

Fig 4.6.b: Distribution of PMAY-G households who Received Installments within 7 Days (%)
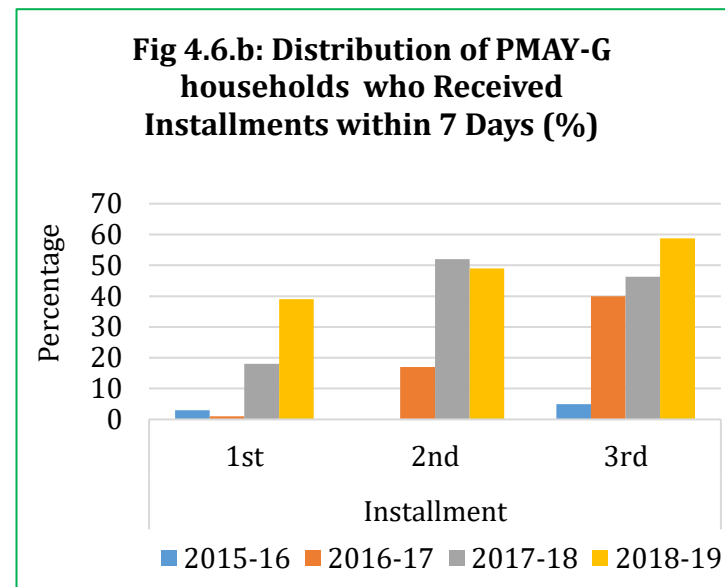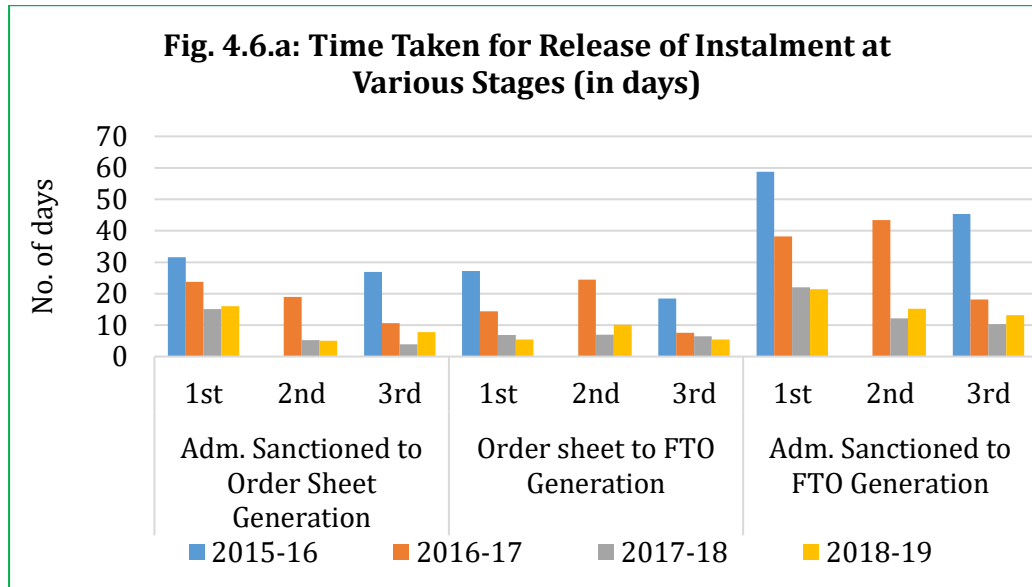
Source: Compiled from AwaasSoft Data

4.8. Convergence of Various Schemes with PMAY-G

4.8.1. The objective of PMAY-G is not only to provide a pucca house but the overall upgradation of the lifestyle of the rural poor. The program helped in achieving a better standard of living as well as provided livelihood as a positive externality along with basic amenities in the house itself. In order to provide some basic amenities for a healthy and comfortable living along with the pucca house, the government has converged the scheme with other rural development programmes. These schemes include MGNREGS for employment of 90/95 days of wage employment, SBM for toilets, PMUY for LPG (clean and efficient fuel), DDUGJY/Saubhagya for electricity connection, and NRDWP for piped water. The States are also encouraged to converge other State Sponsored Schemes. It is expected that the PMAY-G house converged with the schemes will offer a number of tangible and intangible benefits to the households, and thus, it will ensure a better quality of life for them.

4.8.2. This Section provides an understanding of the extent of convergence of PMAY-G with schemes like MGNREGS, SBM, PMUY, DDUGJY/Saubhagya, NRDWP, and other state schemes (if any). It also analyses the benefits in terms of health, hygiene, education, child development and social inclusion drawn by PMAY-G beneficiaries post construction period due to the pucca housing along with basic amenities.

4.8.3. The convergence provisions:

i)   Provision of 90/95 days of unskilled wage employment under MGNREGS to the households to cover their cost of living as s/he has to work/supervise during the construction of the house.

ii)   SBM is converged with PMAY-G under which the beneficiary is provided Rs. 12,000 for the construction of toilets. Toilets can also be constructed with funds from MGNREGS or any other dedicated financing source. The incidence of a number of diseases like Cholera, Malaria, and Dengue, etc., which occur due to dirty and unhygienic environment is expected to reduce as a result of the usage of toilets.

iii)   LPG connection is provided at a subsidised rate under PMUY scheme to promote the usage of clean and efficient cooking fuel

iv)   Electricity is a basic necessity for the beneficiary to strengthen them both economically and socially and also improve their standard of living. For this, PMAY-G is converged

with DDUGJY/Saubhagya under which electricity connection is provided to the beneficiaries.

v) The scarcity and poor quality of water in rural areas is a major concern. To address this issue, PMAY-G is converged with NRDWP which provides piped water connection of safe water for drinking and other purposes.

vi) Providing proper draining facilities/waste management (toilet) under SBM scheme

vii) Any other state schemes such as Cash Incentives in Odisha for timely construction, plantation scheme in Madhya Pradesh, etc.

4.8.4. The extent of convergence of PMAY-G with MGNREGS for providing employment in the construction of the PMAY-G houses was found to be good with 67.53 per cent of the beneficiaries were provided employment for construction of their houses (Fig. 4.7). At State level, MGNREGS convergence was found to be the highest in Rajasthan (90% followed by Odisha (82.05%), and the lowest in Assam (53.66%).

Fig. 4.7: Extent of Convergence
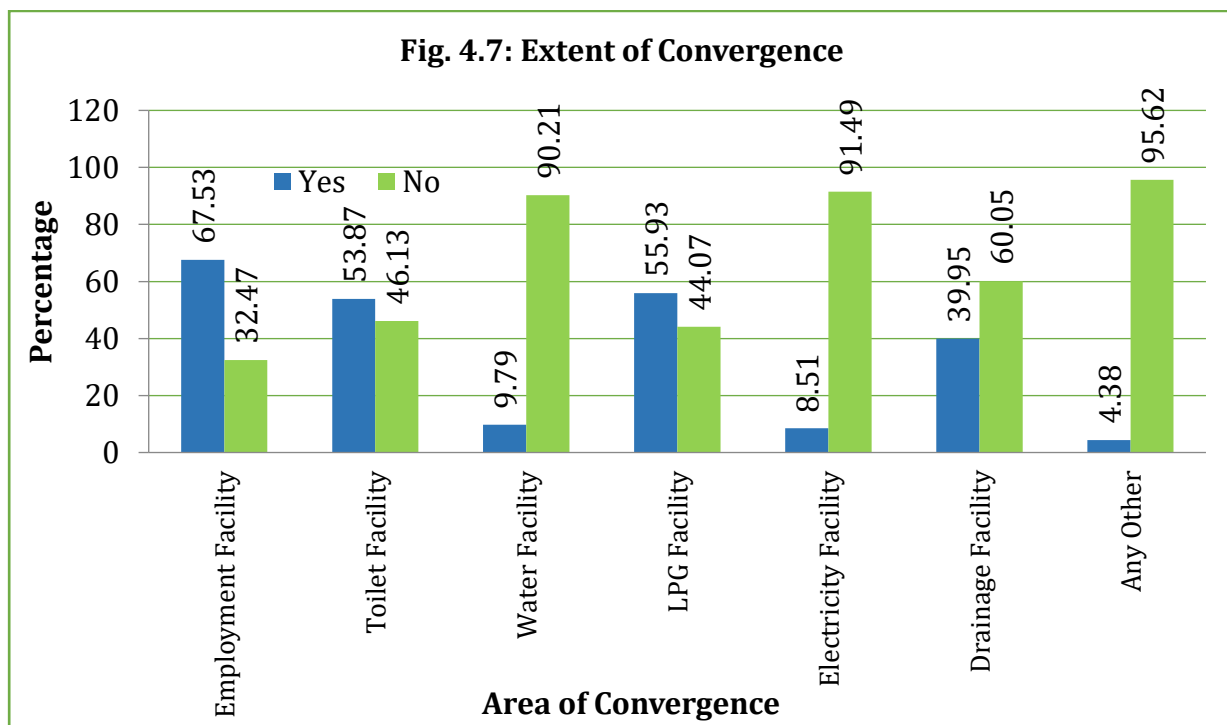
4.8.5. The gap in the MGNREGS convergence in few states was caused primarily due to three reasons. First, the job cards of the few beneficiaries (10.42%) did not match with the one they uploaded in the AwaasApp/AwaasSoft (Annexure 4.d). Secondly, many of the beneficiaries have applied for a separate/new job card, and they are yet to get those card. Thirdly, in few cases the GRS could not prepare the muster roll against the PMAY-G houses.

4.8.6. Similarly, convergence with SBM for construction of toilets (Photo 4.8) was found among 53.87 per cent of the beneficiaries (Fig. 4.7). At the state level, the highest proportion of PMAY-G households with SBM toilet is found in Madhya Pradesh (79.38%) followed by Odisha (57.69%) and the lowest in Uttar Pradesh (33.04%) (Table 4.4). The gap in SBM convergence was mainly due to fund issues. Non-matching of village mapping under PMAY-G and SBM was one major reason due to which a few PMAY-G households were not provided a toilet under SBM scheme till now. SBM-G is guided by the Base Line Survey (BLS) following the Census 2011 while PMAY-G by PWL following the SECC 2011-12. PMAY-G beneficiaries, appearing in the BLS only would get a toilet under SBM while for others the toilets were proposed to get constructed under MGNREGS. Many states also reported lack of funds under SBM and opted for building toilet under MGNREGS program. In such cases, the mandated material-labour ratio (40:60) hindered the completion.

Fig. 4.8: SBM convergence and Use of Toilet by the PMAY-G Households
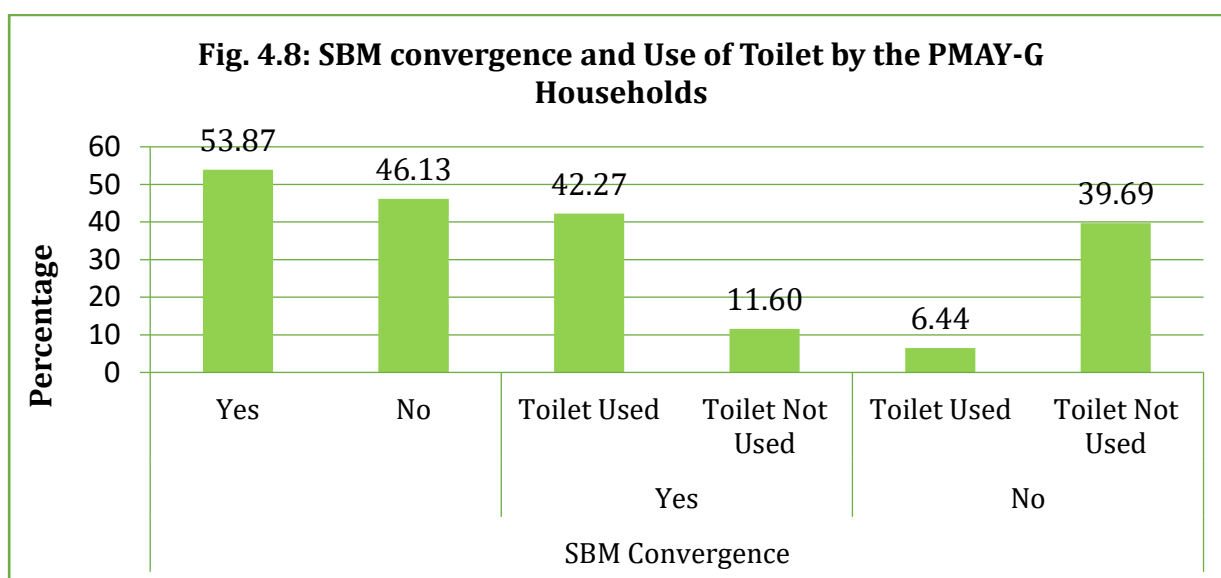
Note: Figures are the percentages of total 388.

Photo 4.7: Convergence with Swachh Bharat Mission

| PMAY-G convergence with SBM for construction of toilets in Nagaur District, Rajasthan | Construction of Toilet and tank under SBM in Vidisha District of Madhya Pradesh |

Source: Photos were taken during Primary Survey

Table 4.4: Convergence of PMAY-G Houses with Different Schemes[13]

Convergence	Employment Facility	Toilet Facility	Water Facility	LPG Facility	Electricity Facility	Drainage Facility	Any Other
All (388)	67.53 (262)	53.87 (209)	9.79 (38)	55.93 (217)	8.51 (33)	39.95 (155)	4.38 (17)
Assam (41)	53.66 (22)	41.46 (17)	2.44 (1)	46.34 (19)	14.63 (6)	14.63 (6)	0.00 (0)
Madhya Pradesh (97)	56.70 (55)	79.38 (77)	25.77 (25)	61.86 (60)	1.03 (1)	74.23 (72)	0.00 (0)
Odisha (78)	82.05 (64)	57.69 (45)	1.28 (1)	42.31 (33)	19.23 (15)	24.36 (19)	21.79 (17)
Rajasthan (60)	90.00 (54)	55.00 (33)	6.67 (4)	50.00 (30)	10.00 (6)	38.33 (23)	0.00 (0)
Uttar Pradesh (112)	59.82 (67)	33.04 (37)	6.25 (7)	66.96 (75)	4.46 (5)	31.25 (35)	0.00 (0)

Note: Figures in the parentheses represent sample size. The activities under these schemes for Non-PMAY-G households are undertaken independently. However, the PMAY-G beneficiaries have been given preferences in availing the facilities. PMAY-G certainly has increased the man-days generation for both skilled and unskilled non-PMAY-G households.

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[13] As per the data available at macro level as on 31 March 2018,

4.8.7. Although efforts have been made towards making villages open defecation free by constructing more toilets, it is found that 11.60 per cent of the PMAY-G households are not using toilet despite getting a toilet constructed. While a few of them are not using because of a water crisis, a few others are not using because of not having a habit. The areas are often declared as draught prone areas, and the situation has not changed over the last couple of years. On the other hand, 6.44 per cent of PMAY-G households have been using toilet in pre-existing toilet or community toilet. The cases of open defecation were found to be high in both Rajasthan and Uttar Pradesh.

4.8.8. In terms of convergence of Pradhan Mantri Ujjwala Yojana (PMUY), 52.32 per cent of the PMAY-G households have been provided subsidized LPG connections (Fig. 4.9). About 9.02 per cent of households were found with an existing LPG connection. Many households have been already mapped for the LPG connection, and their papers are in process. However, it was found that few of them are unable to pay the subsidized fee, and therefore, LPG connection is not yet provided.

4.8.9. As per the data received from NIC, the about 70.21 per cent of the PMAY-G households were converged with the MGNREGS scheme as on 31st March 2018, with a varying range number of man-days for the Households. However, there are some data issues as many of the households are shown with a no of man-days exceeding the 90/95 days of employment. For many households, the number of man-days generated is shown over 150 days also. While a significant proportion of PMAY-G households (22.42%) in the current sample of 388 were found with invalid/cancelled/mismatched MGNREGS job card. Similarly, 85.33 per cent of the PMAY-G households were provided LPG connected as on 31st March 2018.

Fig. 4.9: PMUY Convergence and Its Usage Among the PMAY-G Households
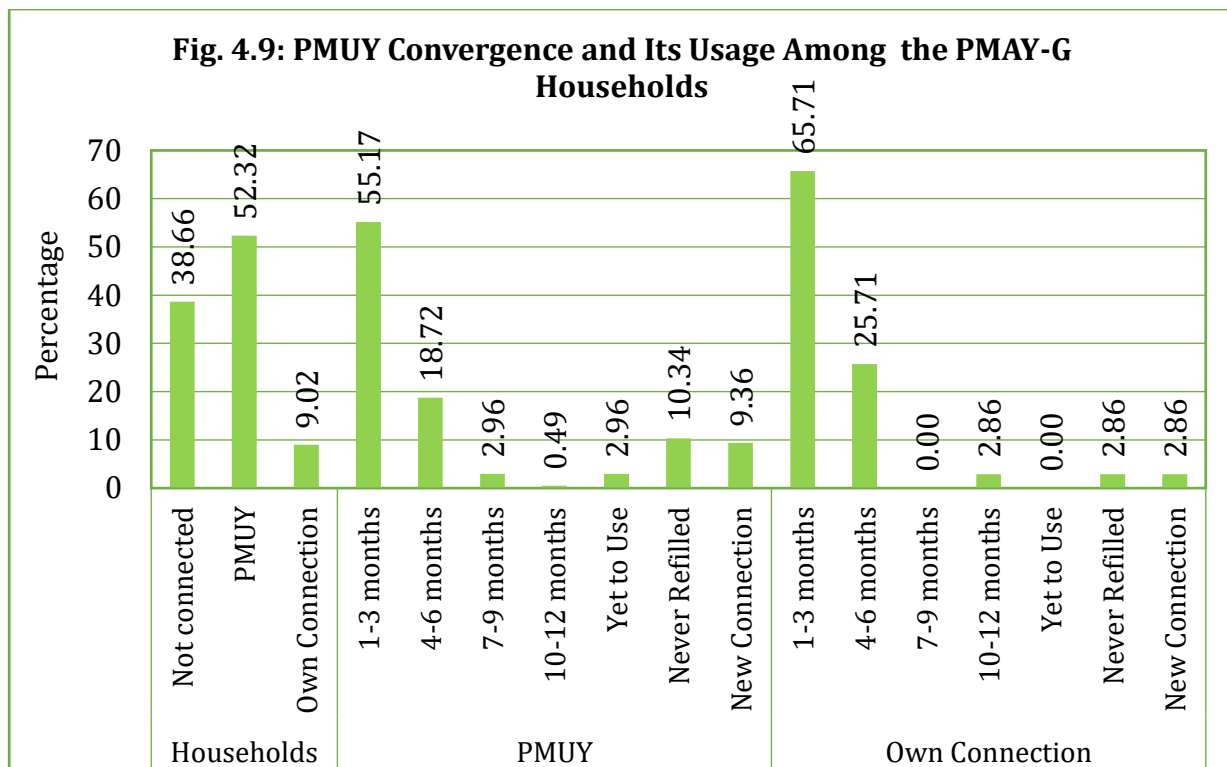
Note: First three figures are percentages of 388. Remaining are percentage of 238 (total LPG connection)

4.8.10. However, the sustainability of using green fuel by the rural poor despite the tremendous campaign faces certain challenges. The usage of LPG as primary cooking fuel and the frequency of refilling the cylinder is not much. About 55.16 per cent of the households having LPG connection under PMUY have been refilling at an interval of 3 months, and 34.50 per cent have refilled within 3 months to 12 months, and about 10.34 per cent have opted for no refilling. The prime reason as reported was the monetary issue as well as the lack of access to refilling station/agency. Among the PMAY-G households who have own connection, about 90 per cent have been refilling at an interval of 6 months.

4.8.11. The convergence with NRDWP for water facility (9.79%) and DDUGJY/Saubhagya (8.51%) for electricity connection (Photo 4.9) was found to be low (Fig. 4.6). In the case of electricity connection, there is a gap in communication between the line departments. It is also observed during the survey that there was no electricity grid nearby in case of a few PMAY-G households.

4.8.12. The activities under these schemes for Non-PMAY-G households are undertaken independently. However, the PMAY-G beneficiaries have been given preferences in availing the facilities. PMAY-G certainly has increased the man-days generation for both skilled and unskilled non-PMAY-G households.

Photo 4.8: Convergence with PMUY for the LPG Connection

Source: Photo was taken during the primary survey

Photo 4.9: Convergence with DDUJGY for Electricity Connection

Source: Photo was taken during the primary survey

5. Financial Inclusion

5.1. Introduction

5.1.1. The introduction of Direct Benefit Transfers (DBT) in the rural housing program is expected to enhance the financial inclusion of rural poor. Simultaneously, it is expected to raise the financial literacy and improved level of formal financial transactions including digital transactions such as the use of ATM card.

5.1.2. In the present study, various parameters such as holding of bank accounts, usage of ATM cards, availing loans from formal sources, making deposits, availing other banking facilities, etc., are referred to see the financial inclusiveness of the rural poor. A comparison is made regarding the financial inclusion between PMAY-G beneficiaries and the non-PMAY-G beneficiaries (control group) and within PMAY-G (pre/post-PMAY-G construction period) beneficiaries as well.

5.2. Possession of Bank Account and ATM Card

5.2.1. It is found from the sample survey that about 86.60 per cent of the PMAY-G beneficiaries had bank accounts prior to the construction of their PMAY-G houses, which has increased to 100 per cent during/post construction period (Fig. 5.1 and Table 5.1). This is a minimum requirement as the instalments of the unit assistants are directly transferred to beneficiaries' bank accounts. As compared to this, the proportion of non-PMAY-G beneficiaries (consisting IAY and Permanent Wait List (PWL) beneficiaries) having a bank account is found to be slightly lower at 97.37 per cent indicating a few PMAY-G waitlisted are yet to get a bank account.

5.2.2. Despite the fact that all the PMAY-G beneficiaries have at least one bank account, only a small percentage of the sample households have ATM cards, and it has marginally increased during/post construction period (Fig. 5.1 and Table 5.2). Only 22.42 per cent of the beneficiaries had ATM cards prior to the construction of the house, which rose to 30.41 per cent post-PMAY-G house. The percentage was even lesser for non-PMAY-G beneficiaries. Such a lower percentage of ATM card holding can be attributed to two major reasons observed during the visit. First, the account holders have not applied for a card in the banks where the facility is available. Such a large number of non-applicant may be explained by their low level of financial literacy/awareness. Second, the holders have accounts in a bank/branch where the ATM card facility is not available and are also due to biometric enabled kiosk (banking correspondents).

Fig. 5.1: Distribution of the Households Having a Bank Account and ATM Card
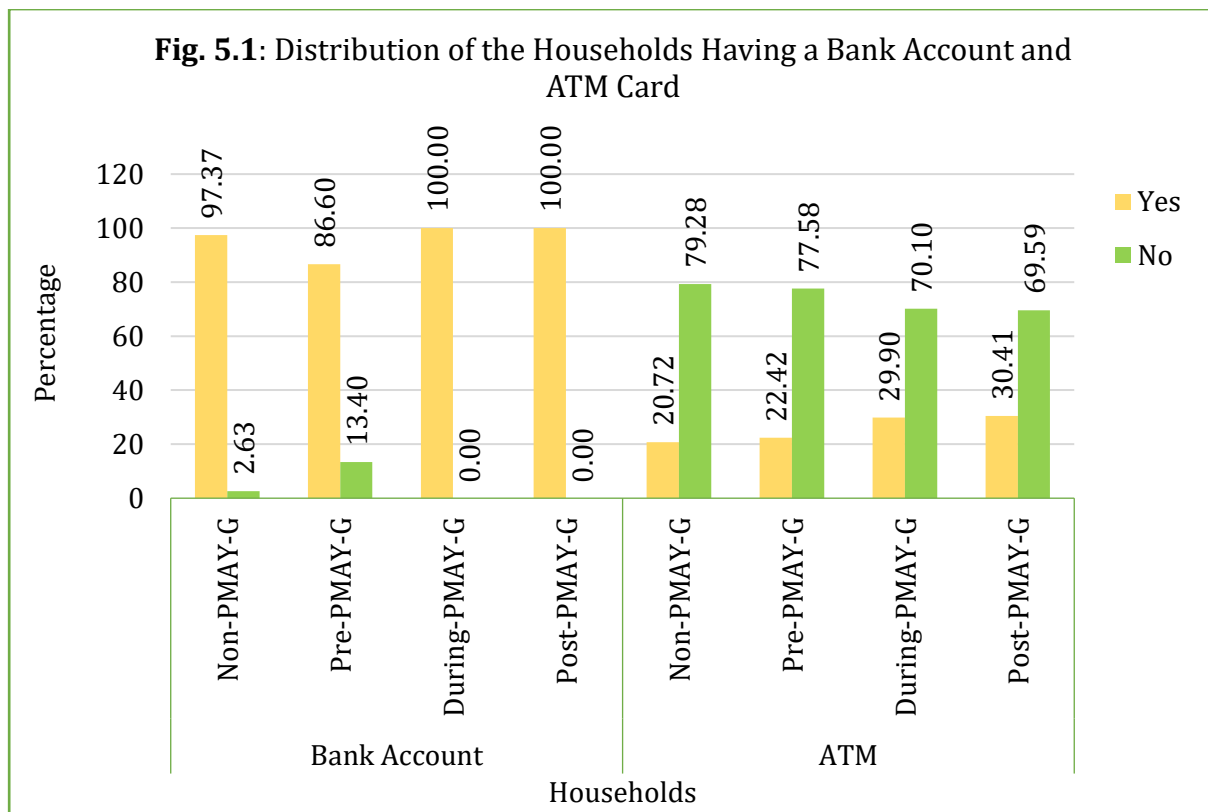
Note: During PMAY-G refers to "during construction of PMAY-G house"

Table 5.1: Distribution of the Households Having a Bank Account across States

Bank Account	Pre-PMAY-G	Post-PMAY-G	Non-PMAY	Chi2 value[#]	
				Pre Vs Post	Non-PMAY Vs PMAY
Total {388/114}	336 (86.60)	388 (100.00)	111 (97.37)	52.00***	10.27***
Assam {41/14}	28 (68.29)	41 (100.00)	13 (92.86)	13.00***	2.98*
Madhya Pradesh {97/27}	80 (82.47)	97 (100.00)	26 (96.30)	17.00***	3.62*
Odisha {78/24}	66 (84.62)	78 (100.00)	24 (100.00)	12.00***	--
Rajasthan {60/17}	55 (91.67)	60 (100.00)	17 (100.00)	5.00**	--
Uttar Pradesh {112/32}	107 (95.54)	112 (100.00)	31 (96.88)	5.00**	3.52*

Note: i. The first number and second number in second bracket are the sample sizes of PMAY-G and Non-PMAY-G Households.

ii. [#]For testing the frequency distribution, McNemar's Chi^2 is used for Pre PMAY-g and Post-PMAY-g and Pearson's Chi^2 is used for Non-PMAY-G and PMAY-G

iii. There no change in the bank account holding status between during and Post PMAY-G time period.

iv. *, **, and *** stand for significant at 10%, 5% and 1% respectively i.e., two groups are different with respect to holding bank account.

Table 5.2: Distribution of the Households Having an ATM Card across States

Bank Account	Pre-PMAY-G	Post-PMAY-G	Non-PMAY	Chi2 value[#]	
				Pre Vs. Post	Non-PMAY Vs. PMAY
Total {388/111}	87 (22.42)	118 (30.41)	23 (20.72)	31.00***	4.00**
Assam {41/13}	9 (21.95)	18 (43.90)	3 (23.08)	9.00***	1.80
Madhya Pradesh {97/26}	23 (23.71)	29 (29.90)	3 (11.54)	6.00**	3.59*
Odisha {78/24}	19 (24.36)	25 (32.05)	7 (29.17)	6.00**	0.07
Rajasthan {60/17}	26 (43.33)	34 (56.67)	8 (47.06)	8.00***	0.48
Uttar Pradesh {112/31}	10 (8.93)	12 (10.71)	2 (6.45)	2.00	0.49

Note: i. The first number and second number in the second bracket are the sample sizes of PMAY-G and Non-PMAY-G Households.

ii. [#]For testing the frequency distribution, McNemar's Chi^2 is used for Pre PMAY-g, and Post-PMAY-g and Pearson's Chi^2 is used for Non-PMAY-G and PMAY-G

iii. There no change in the bank account holding status between during and Post PMAY-G period.

iv. *, **, and *** stand for significant at 10%, 5% and 1% respectively i.e., two groups are different with respect to holding ATM Card.

5.3. Means of Withdrawal Instruments

5.3.1. The widely used instrument for withdrawal of money from the bank was found to be withdrawal slips for both PMAY-G (89.69%) and non-PMAY-G (85.45%) beneficiaries (Fig. 5.2). Most households find it as the easiest way, despite a few of them have to travel to a distant place for the transaction.

5.3.2. The usage of ATM cards for withdrawal by the PMAY-G beneficiaries has been increased during (24.23%) and post (24.74%) construction period as compared to pre-PMAY-G period (18.04%). The usage of ATM cards among the non-PMAY- G is also found to be low at 14.41 per cent. Considering the sample of households with ATM card only, the proportion of households using ATM is found to be 81.36 per cent among the PMAY-G as compared to the 69.57 per cent of the non-PMAY-G households (Fig. 5.2).

Fig. 5.2: Disrtibution of Households by the Means of Withdrawal Instruments

	Non-PMAY-G	Pre-PMAY-G	During-PMAY-G	Post-PMAY-G
ATM	14.41	18.04	24.23	24.74
Kiosk Centre	11.71	24.48	31.70	27.32
Withdrawal-Slip	85.45	77.32	90.21	89.69
Cheque	0.00	1.03	1.29	1.29
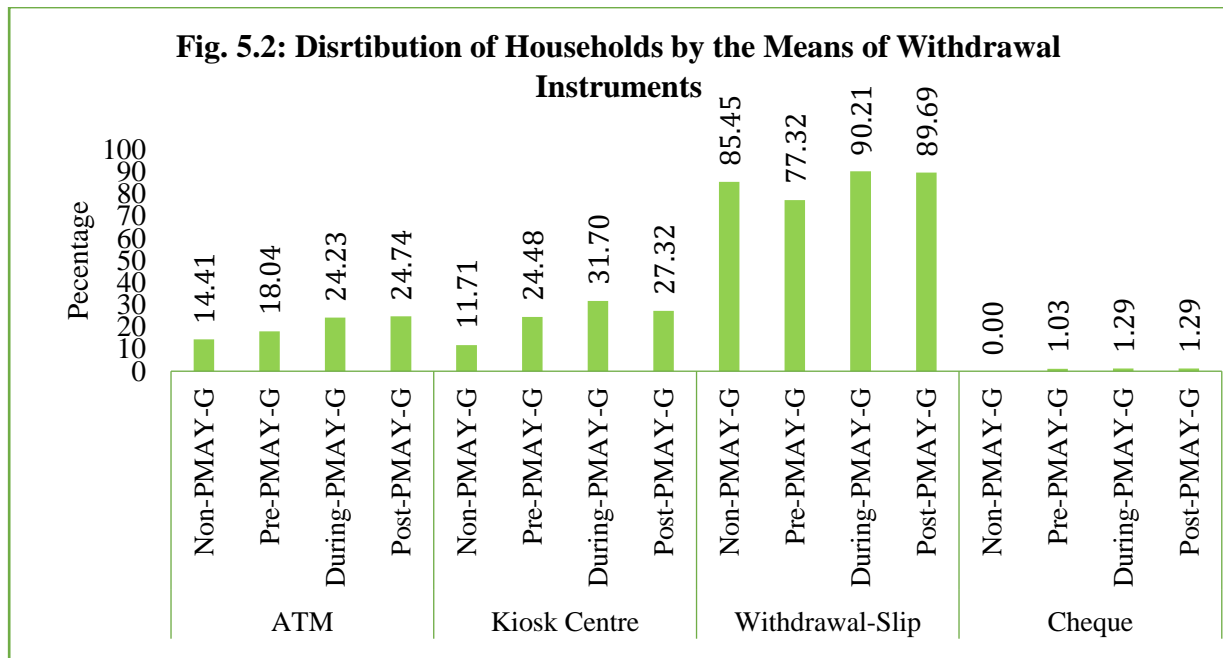
5.3.3. The trends for usage of kiosks is quite impressive. There have been efforts from the government to establish Kiosk points especially by the SBI for banking transactions by the people in the remote areas (Photo 5.1). Accordingly, people using the services of Kiosk points has increased from 24.48 per cent in the pre-PMAY-G stage to 31.70 per cent during PMAY-G construction period.

Photo 5.1: People Withdrawing Money from Kiosk Centre (Left) and Waiting in a Kiosk Centre (Right)

5.3.4. However, there has been a dip post-PMAY-G period (27.32%) which is because of the lack of transaction habits with the formal institutions among the account holders. Given the economic background, many households are still unable to manage the basic necessity appropriately and thus, do not feel like saving money and whatever they earn they spend for a living. Many households, on the other hand, save a small proportion of their earning in the informal way, i.e., save in cash or save in society, SHGs, etc. As expected, the usage of cheques was found to be negligible.

5.4. Source of Information Regarding Credit of Installment Amount

5.4.1. It is found that the proportion of PMAY-G beneficiaries with SMS activation for banking transactions is very low (28.87%) (Fig. 5.3). Among the beneficiary who have registered their mobile, some of them did not receive the messages and others could not understand due to illiteracy the messages of instalment credit to their account. As it can be seen from Fig. 3 that only 23.97 per cent of the PMAY-G households reported being aware of SMS of instalment credit. While most of the beneficiaries enquired with the bank (46.39%) regarding the credit of instalments, GP officials appear to be the source of information regarding the same for 27.32 per cent of the PMAY-G households.

Fig. 5.3.a: Distribution of Households with Mobile Number Registered in Bank

Fig. 5.3.b: Distribution of Source of Information Regarding Credit of Installment Amount in Bank Account
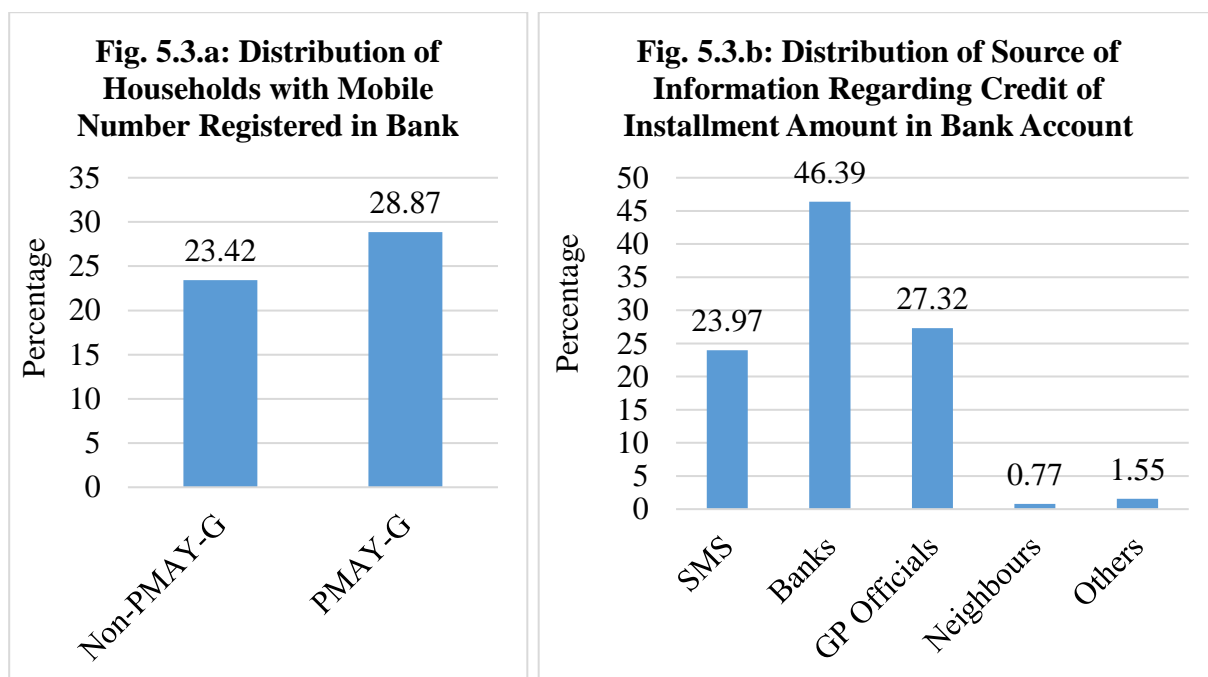
5.5. Mobilisation of Financial Resources

5.5.1. Although the unit assistance is sufficient enough to build a house as per the prescribed design (suggestive), one often tends to invest the additional amount to build comparatively a better house. It is found that 63.40 % of PMAY-G households had made additional investment ranging from Rs. 1000 to Rs 5.5 lakh. The distribution of households with additional investment is found to be similar across the sample states with more than 60 % in each state (Table 5.2).

5.5.2. On an average, the beneficiaries invested Rs. 43,498 from their own savings for the construction of houses. At the state level, the own average investment is found to be highest in Rajasthan followed by Madhya Pradesh and Uttar Pradesh (Table 5.3).

5.5.3. The average amount of loan availed by beneficiary was found to be around Rs 31,778 and Rs 45,825 from the formal sources and informal sources like money lenders, neighbours, or relatives respectively (Table 5.4).

5.5.4. As an attempt to address the financial requirement of the rural poor, the PMAY-G guidelines have made provisions to facilitate the PMAY-G households to avail loans up to Rs. 70000 from the formal credit institutions. However, the proportion of PMAY-G households who availed a loan is negligible (6.96%) in the sample, and almost all of them utilised the loan availed for other purposes (especially agriculture loan) (Fig. 5.4).

Table 5.3: Distribution of PMAY-G Households in terms of Own Investment in Housing

State	Yes	No	Mean	SD	Min	Max
All(388)	63.40 (246)	36.60 (142)	43498	62269	1000	550000
Assam (41)	53.66 (22)	46.34 (19)	23864	34066	5000	170000
Madhya Pradesh(97)	68.04 (66)	31.96 (31)	45500	57442	2500	275000
Odisha(78)	64.10 (50)	35.90 (28)	28170	17674	2000	70000
Rajasthan(60)	66.67 (40)	33.33 (20)	69050	98211	1000	550000
Uttar Pradesh(112)	60.71 (68)	39.29 (44)	44147	63833	3000	500000

Note: The figures in the parentheses represents the sample sizes of PMAY-G households. SD represents standard deviation.

Table 5.4: Average Amount Invested for the Construction of PMAY-G House across States

State	Own			Formal loan			Informal Loan		
	HHs	Mean	SD	HHs	Mean	SD	HHs	Mean	SD
All	246	43498	62269	27	31778	20920	126	45825	63300
Assam	22	23864	34066	1	10000	--	2	7500	3536
Madhya Pradesh	66	45500	57442	8	37375	18890	33	41667	55593
Odisha	50	28170	17674	7	22000	21040	18	24167	13017
Rajasthan	40	69050	98211	6	32333	25033	25	109720	102373
Uttar Pradesh	68	44147	63833	5	40200	18308	48	25125	16603

Note: HHs stands for PMAY-G households. SD represents standard deviation

5.5.5. Despite the provision, the dependency on informal sources was found to be high even though they attract a high rate of interest. A significant percentage of the beneficiaries opted for loans from informal sources (86.30%) as compared to formal sources (around 18.49%).

5.5.6. At the state level, the proportion of households availing loans from the informal sources is found to be highest in Uttar Pradesh (94.12%) followed by Madhya Pradesh (89.19%) and Rajasthan (83.33%) (Table 5.5).

5.5.7. Beneficiaries relied on informal source primarily due to less paper work (48.41%) as it becomes a deterrent for illiterate beneficiaries to apply for loans in banks and also the easy repayment options available in informal sources (34.92%). The unwillingness of formal sources in granting the loans (48.41%) appears as one of the major reasons for beneficiaries for preferring the informal sources.

Fig. 5.4: Distribution of PMAY-G Households by the Sources of Mobilisation of Financial Resources
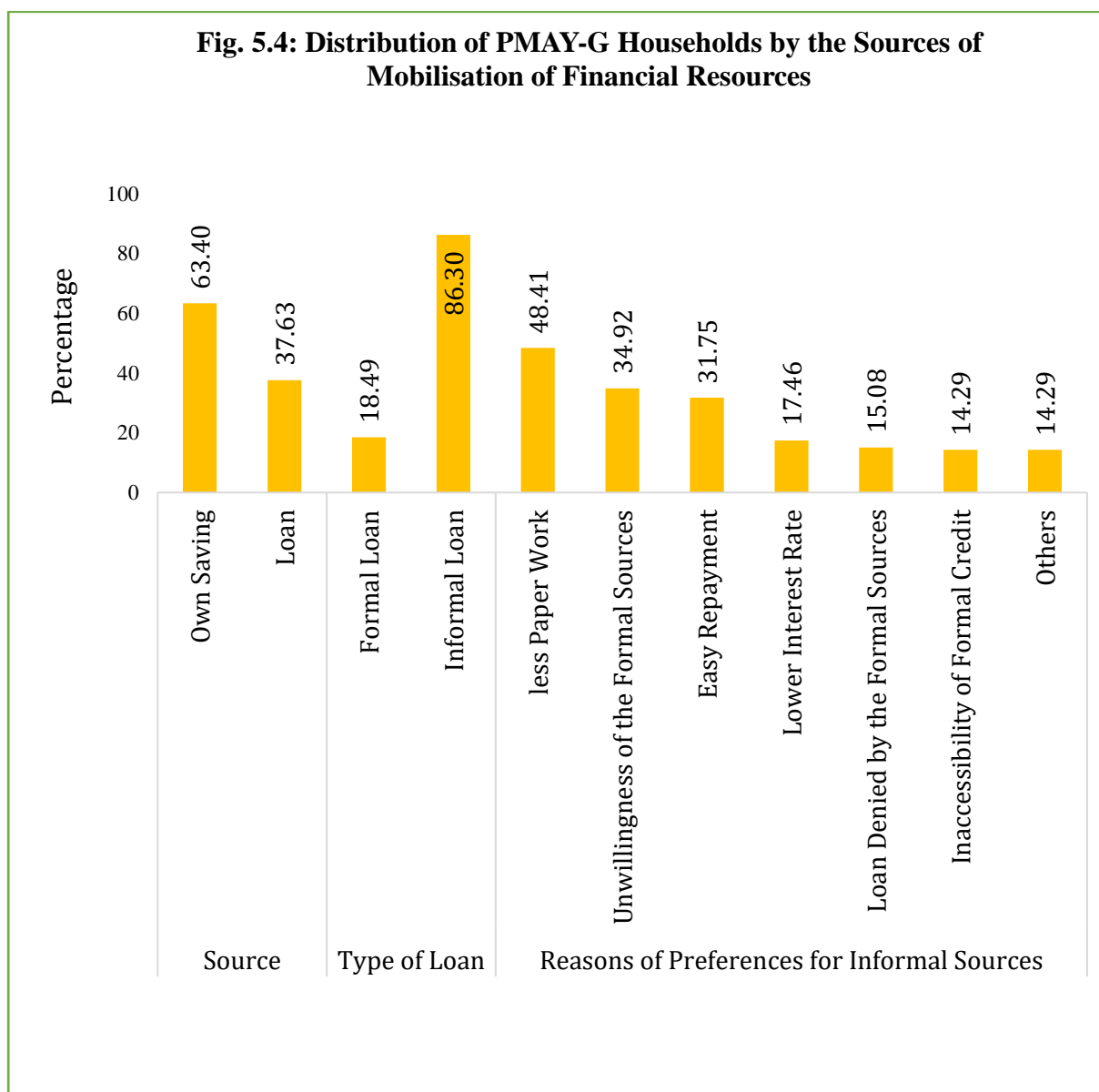
Table 5.5: Distribution of PMAY-G Households by Sources of Mobilisation of Financial Resources

State	Own Investment	Loan	Formal	Informal
All	63.40 (246)	37.63 (146)	18.62 (27)	86.30 (126)
Assam	53.66 (22)	7.32 (3)	33.33 (1)	66.67 (2)
Madhya Pradesh	68.04 (66)	38.14 (37)	21.62 (8)	89.19 (33)
Odisha	64.10 (50)	32.05 (25)	28.00 (7)	72.00 (18)
Rajasthan	66.67 (40)	50.00 (30)	20.69 (6)	83.33 (25)
Uttar Pradesh	60.71 (68)	45.54 (51)	9.80 (5)	94.12 (48)

Note: The figures in the parentheses represents the sample sizes of PMAY-G households.

5.5.8. The perception about individuals' accessibility to the banking system plays an important role in determining the extent of financial inclusion. The previous experience of non-response from the formal financial institutions in granting a loan by an individual may have a detrimental impact (negative externality) on the people to approach for a formal loan. Out of the PMAY-G households (126) who have availed credit from the informal sector, about 15.08 per cent PMAY-G beneficiaries who approached banks for loans were denied because of several reasons. Firstly, they do not have a stable income flow for which the banks do not have confidence in the repayment capacity of the households. Secondly, they often fail to produce the required documents, and the segment of people often find it a cumbersome procedure. Thirdly, the low level of financial/banking knowledge comes as an impediment in getting a loan from the formal sources.

5.5.9. It is expected that having a pucca house would enhance an individual's confidence to approach for a loan from the formal sources, and banks especially would consider it as collateral to avail formal loans. Hence, the perception of the PMAY-G beneficiaries about getting the loans from formal sources post the construction of their houses was assessed. It is found that only 27.58 per cent of the beneficiaries were positive about getting the loans from banks and 25.26 per cent have a negative response for the same. On the other hand, about 47.16 per cent are still uncertain about whether they would get a loan from the bank while having a pucca house.

Fig. 5.5: Perception about Getting a Formal Loan Post PMAY-G

Yes 27.58%
No 25.26%
Uncertain 47.16%

■ Yes ■ No ■ Uncertain
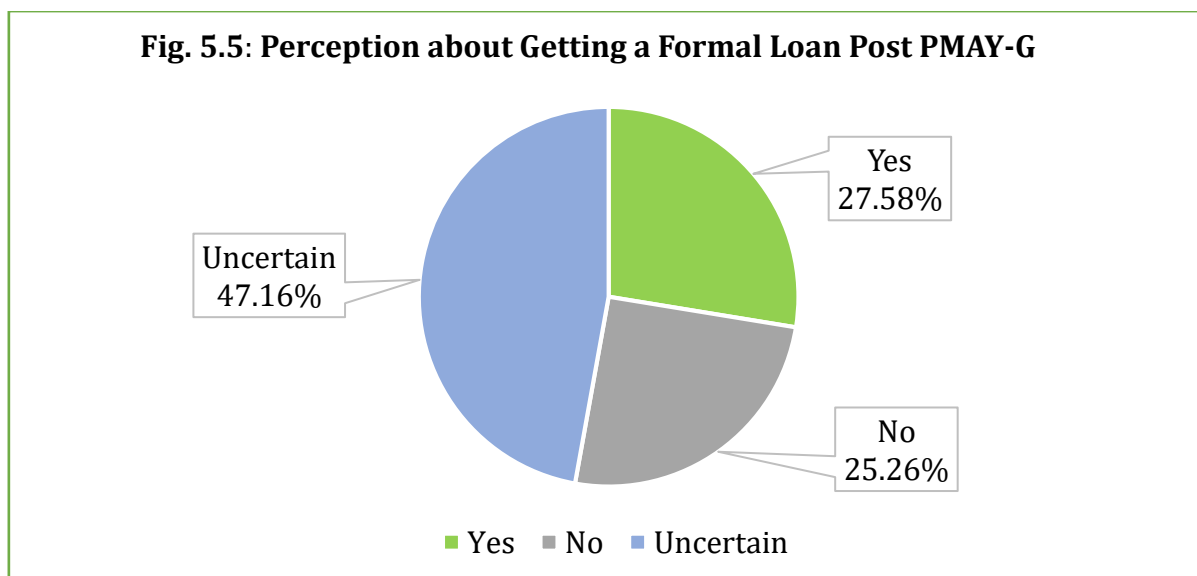
5.5.10. Table 5.6 shows that at the State level, individuals from Odisha reveal the highest proportion of positive responses (51.28%), followed by Rajasthan (30.00%) and Madhya Pradesh (26.80%). Similarly, the highest proportion of individuals are found with an in-conclusive response in Assam (65.85%) followed by Uttar Pradesh (50.89%) and Madhya Pradesh (48.45%).

Table 5.6: **Distribution of PMAY-G Households with a Perception of Securing a Formal Loan Post PMAY-G Period**

State	Yes	No	Uncertain
All	27.58	25.26	47.16
(388)	(107)	(99)	(182)
Assam	4.88	29.27	65.85
(41)	(2)	(12)	(27)
Madhya Pradesh	26.80	24.74	48.45
(97)	(26)	(24)	(47)
Odisha	51.28	19.23	29.49
(78)	(40)	(15)	(23)
Rajasthan	30.00	21.67	47.16
(60)	(18)	(14)	(28)
Uttar Pradesh	18.75	30.36	50.89
(112)	(21)	(34)	(57)

Note: Figures in the parentheses represent the sample size

6. PMAY-G Flow of Information, Awareness, and Sensitization: A Beneficiary Level Perspective

6.1. Background

6.1.1. The success of a welfare programme heavily depends on its implementation process. A significant aspect of the process is the dissemination of information and sensitizing about the scheme at the ground level. Especially in the rural development programmes, the creation of awareness is critical towards achieving a high success rate in terms of implementation and thereon the accrual of benefits out of it. The local level officials at Block and Gram Panchayats, as well as the elected representatives, have a crucial role in generating awareness and disseminating the information to the public.

6.1.2. Accordingly, the MoRD programs like PMAY-G often entrusted duties to be performed by the various stakeholders at different levels of government like at Centre, State, District, Block, and Panchayat level. Some of the crucial activities entrusted with them include orientating the beneficiaries about the scheme and sensitizing them at different levels of construction of houses, identifying land availability for landless beneficiaries, facilitating beneficiaries in availing benefits of other schemes of the Centre and State Governments through convergence, ensure timely completion of the construction of houses, grievance redressal, etc. Further, every PMAY-G house is to be tagged to a village level functionary to monitor the progress of the house from time to time.

6.2. Information/Awareness on the PMAY-G Scheme

6.2.1. The general information about the PMAY-G scheme is known to the beneficiary mostly from the Gram Sabha (64.43%) and PR Officials (43.01%). The dissemination of information through print and electronic media was found to be negligible (1.03%) (Fig. 6.1).

6.2.2. At State level, Madhya Pradesh (85.57%) has the highest number of beneficiaries who reported that the information regarding this scheme is known through Gram Sabha meetings followed by Rajasthan (73.33%) and Uttar Pradesh (62.50%) (Table 6.1).
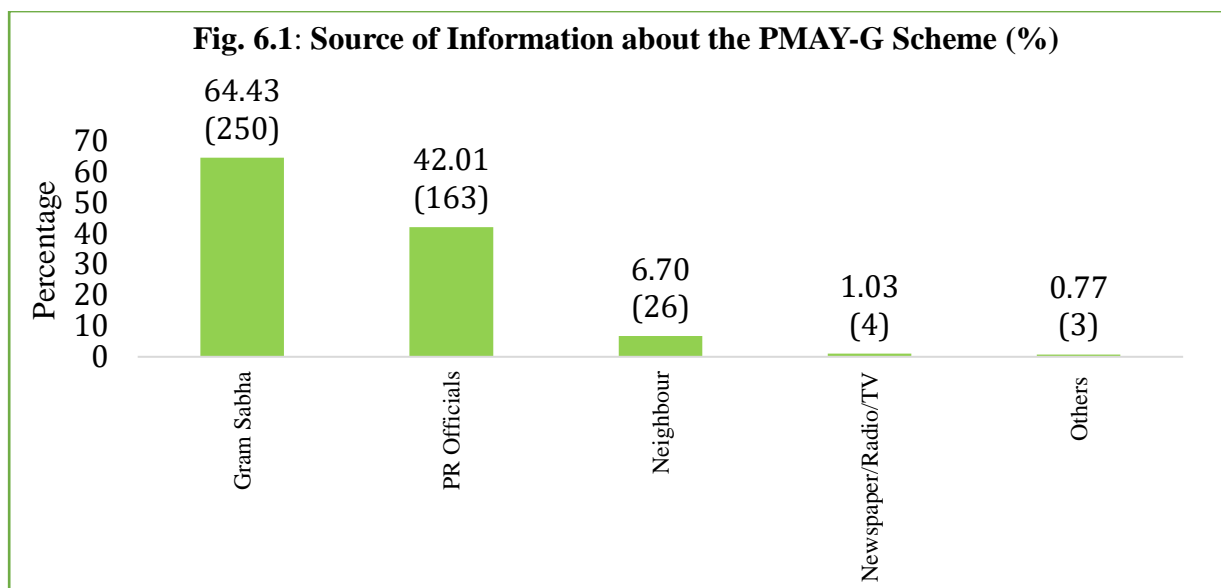
Fig. 6.1: **Source of Information about the PMAY-G Scheme (%)**

Note: i. Percentage add up crosses 100 as there are multiple answers
ii. Figure in the parentheses are the responses out of 388

Table 6.1: Source of information about PMAY-G scheme for the Beneficiaries across States (%)

State	Gram Sabha	PR officials	Newspaper/ Radio/TV	Neighbour	Others
Assam (41)	36.59	65.85	2.44	2.44	0.00
Madhya Pradesh (97)	85.57	20.62	2.06	2.06	0.00
Odisha (78)	48.72	82.05	0.00	16.67	2.56
Rajasthan (60)	73.33	30.00	0.00	8.33	0.00
Uttar Pradesh (112)	62.50	30.36	0.89	4.46	0.89
Total (388)	64.43	42.01	1.03	6.70	0.77
Chi-Square	43.44	88.91	3.26	18.07	4.82
P-Value	0.000	0.000	0.514	0.001	0.306

Note: Numbers in the bracket shows the sample size of the State

6.2.3. Similarly, Odisha (82.05%) has the highest number of beneficiaries who reported that the information regarding this scheme is through *Gram Sabha* meetings followed by Assam (65.85%) and Uttar Pradesh (30.36%). Although meager, the presence of print/electronic media in disseminating information about the scheme is higher among the PMAY-G beneficiaries in Assam (2.44%) as compared to other states (Table 6.1).

6.2.4. To bring fairness and transparency in the selection of the beneficiaries, the GP is supposed to undertake three major activities viz., verification of the Priority List, deletion of

ineligible households, and listing out the households not included in the system generated priority list, but otherwise found eligible. These issues are discussed in *Gram Sabhas* and often the allotment of the house in a financial year is announced in Gram Sabha. Thus, it appears as the prime source of selection of a beneficiary. It is found that about 60.82 per cent of the PMAY-G households came to know about their sanctioned house through Gram Sabha (Fig. 6.2).

6.2.5. Similarly, 47.42 per cent of the beneficiaries were informed about their selection by the PR Officials, 6.44 per cent were come to know through Wall Painting and 4.38 per cent through other means.

6.2.6. While the painting of the priority list on walls of *panchayat ghar* is mandatory, the same was not found in many blocks during the survey.
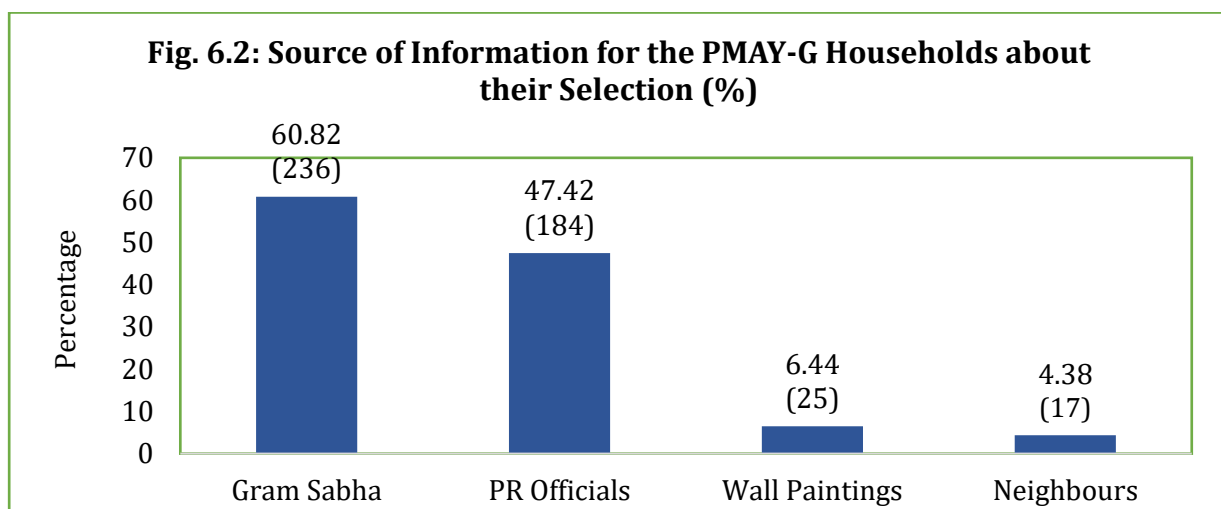
Fig. 6.2: Source of Information for the PMAY-G Households about their Selection (%)

Note: i. Percentage add up crosses 100 as there are multiple answers
ii. Figure in the parentheses are the responses out of 388

Table 6.2: Source of Knowledge about selection under PMAY-G scheme for the Beneficiaries across States (%)

Know about Selection	Neighbours	Gram Sabha	PR Officials	Wall Paintings
Assam (41)	4.88	24.39	73.17	0.00
Madhya Pradesh (97)	1.03	82.47	21.65	1.03
Odisha (78)	11.54	42.31	88.46	20.51
Rajasthan (60)	3.33	65.00	38.33	6.67
Uttar Pradesh (112)	2.68	66.07	36.61	3.57
Total (388)	4.38	60.82	47.42	6.44
Chi-Square	13.09	54.88	96.67	34.69
P-Value	0.011	0.000	0.000	0.000

Note: Figure in the parentheses are the responses out of 388

6.2.7. The awareness about the scheme was assessed through four aspects - the eligibility criteria, permanent waiting list (PWL), amount of unit assistance, and facilitation of loan amount up to Rs. 70,000 from the formal credit source. It can be seen from Fig. 6.3 that only 40.72 per cent of the PMAY-G households in the sample were aware of the eligibility criteria leaving majority to be unaware of the same.

6.2.8. Similarly, about 43.30 per cent of the PMAY-G households were aware that the GP does possess a permanent waiting list and one can have an idea about when s/he is going to get a sanction of the house. In terms of unit assistance, about 86.86 per cent were aware while a meagre 5.41 per cent were aware of the provision to get up to Rs 70,000 from the institutional credit.

6.2.9. Thus, it can be concluded that the awareness regarding various aspects like eligibility criteria, permanent waiting list, and loan facility was found to be low.

Fig. 6.3: Awareness about Different Scheme Aspects (%)
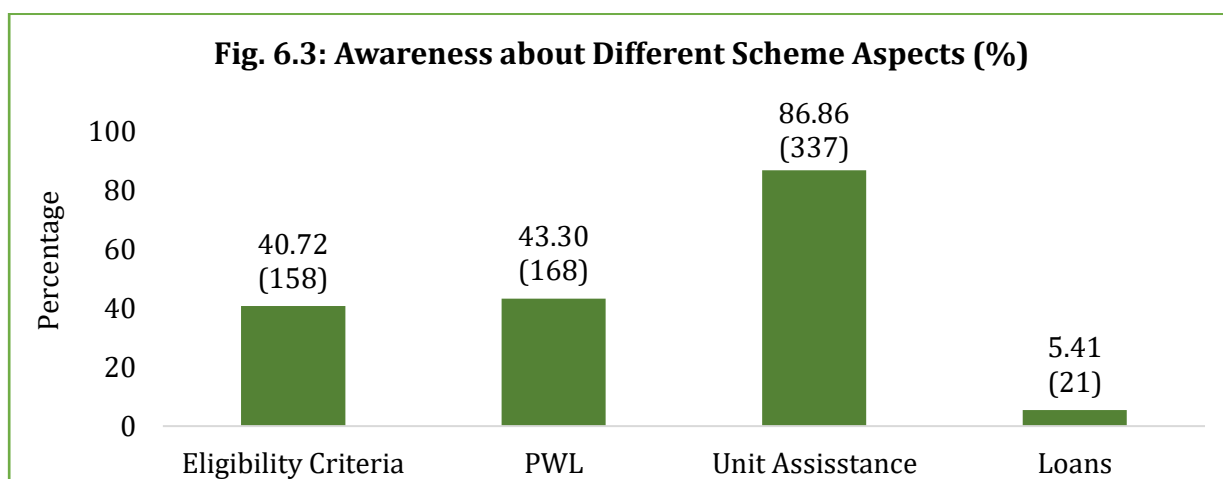
Note: Figures in the parentheses are the sample size

6.2.10. It can be seen from Table 6.3 that at the State level, the awareness about eligibility criteria is found to be highest in Madhya Pradesh (70.51%) and lowest in Rajasthan (21.67%). Similarly, the awareness about PWL is found to be highest in Madhya Pradesh (78.21%) and lowest in Rajasthan (21.67%). Similarly, the awareness about unit assistance is found to be highest in Assam (100%) and lowest in Madhya Pradesh (74.23%).

6.2.11. The awareness about the provision of institutional credit facility is found to be highest in Assam (9.76%) and lowest in Odisha (2.56). Given that a section of the beneficiaries invested money mobilizing through the informal credit sources and at a much higher interest rate, the dissemination of information about the credit facility could have helped the beneficiaries enormously.

Table 6.3: Awareness of Different Scheme Aspects across States (%)

Awareness	Eligibility Criteria	PWL	Unit Assistance	Loans
Assam (41)	36.59	39.02	100.00	9.76
Madhya Pradesh (97)	34.02	35.05	74.23	8.25
Odisha (78)	70.51	78.21	97.44	2.56
Rajasthan (60)	21.67	31.67	81.67	6.67
Uttar Pradesh (112)	37.50	33.93	88.39	2.68
Total (388)	40.72	43.30	86.86	5.41
Chi-Square	40.28	49,02	29.05	6.09
P-Value	0.000	0.000	0.000	0.193

Note: Figures in the parentheses are the sample size

6.3.   Sensitization of Different Activities under PMAY-G

6.3.1. The PMAY-G households should be sensitized by the functionaries for different activities in the construction period, starting from providing housing design to the procurement of inputs as well as addressing their grievances.

6.3.2. It is found that only 32.73 per cent PMAY-G households were sensitized in different activities such as providing suggestive housing design, helping out in the procurement of construction materials and trained mason, checking out the quality of construction materials, etc. (Fig. 6.4). Most of them were sensitized for housing design (96.93%) followed by material procurement (32.56%), material requirement (22.98%), and hiring trained mason (21.83%).

6.3.3. In case of housing design, apart from providing the suggestive designs, Junior Engineer at the block level and other PR officials physically instructed the PMAY-G households (and Masons) about the housing design before starting the construction activities. However, the awareness regarding the quality of construction material, hiring a trained mason, and whom to approach in case of grievances was found to be low.

6.3.4. It is observed during field survey that because of bulk sanction of PMAY-G houses, there have been shortages of Masons as well as an excess demand for construction materials, which has led to a surge in the price of inputs. In many villages, the GP functionaries were found to be involved in mobilizing the construction inputs to enhance the speed of construction.

Fig. 6.4: Details of Sensitization during Construction of Houses
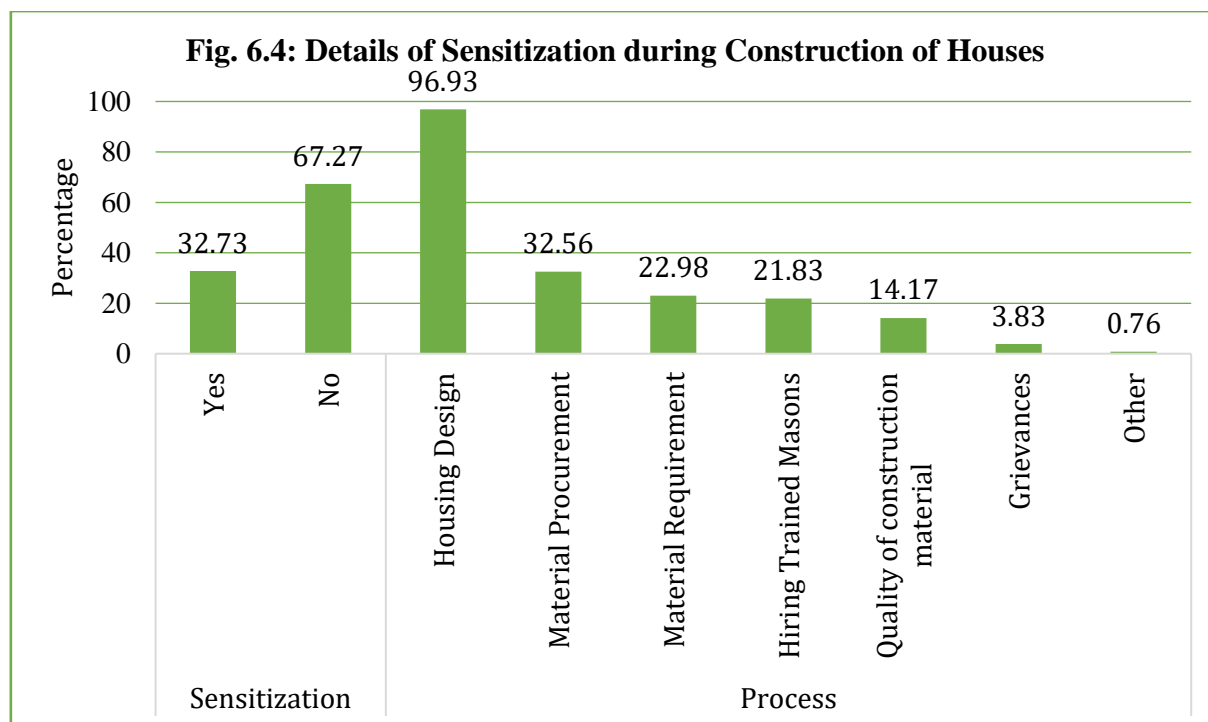
Table 6.4: Sensitization of PMAY-G Beneficiaries about the process of Construction across States (%)

State	Construction Process	Housing Design	Material Procurement	Hiring Trained Masons	Material Requirement	Quality of Construction Material	Grievances	Other
Assam (41)	56.10	100.0	17.39	13.04	4.35	13.04	8.70	4.35
Madhya Pradesh (97)	73.20	94.4	28.17	18.31	16.90	14.08	0.00	0.00
Odisha (78)	97.44	98.7	39.47	31.58	42.11	18.42	0.00	0.00
Rajasthan (60)	60.00	100.0	50.00	36.11	19.44	22.22	19.44	0.00
Uttar Pradesh (112)	49.11	94.5	23.64	7.27	14.55	3.64	1.82	1.81
Total (388)	67.27	96.93	32.56	21.83	22.98	14.17	3.83	0.76
Chi-Square	54.33	53.19	25.37	31.38	51.61	15.50	26.50	4.49
Pr-Value	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.344

Note: Figures in the parentheses represent sample sizes

6.3.5. At the state level, there have been significant differences in sensitizing the PMAY-G households for different process/activities (Table 6.4).

6.3.6. Sensitization was highest in Odisha (97.44%) followed by Madhya Pradesh (73.20). On the contrary, it was found to be lowest in Uttar Pradesh (49.11%) and Assam (56.10%).

6.3.7. Sensitization regarding hiring trained mason was highest in Rajasthan (36.11%) followed by Odisha and lowest in Uttar Pradesh (7.27%).

6.4. Monitoring and Geo-Tagging

6.4.1. The PMAY-G guidelines entrusted the local PR officials and elected representatives for regular monitoring of PMAY-G physical construction activities. Accordingly, in many states such as Odisha and Madhya Pradesh, each PMAY-G house is tagged with one of the functionaries who will undertake the physical monitoring of the construction activities and provide necessary guidance to the households.

6.4.2. Almost all houses were inspected by the PMAY-G functionaries (97.68%) to inspect the physical progress of the house except for 9 houses in the present sample. At the state level, few cases in Madhya Pradesh (2 houses), Odisha (4 houses), and Rajasthan (3 houses) were reported to be not monitored during construction. It is informed by the individuals in those cases that although geo-tagging was done, there were no questions asked regarding the progress of the construction activities. In a few cases, the geo-tagging was done without the presence of the household members.

6.4.3. Among the monitored houses, 37.47 per cent were monitored weekly by the GP officials including Gram Rozgar Sevak (GRS) and the GP Pradhan (Sarpanch)/ward members. About 34.37 per cent were monitored once in two weeks, and 28.35 per cent were monitored at the time of geotagging only (Fig. 6.7).[14]

6.4.4. Such a significant percentage of monitoring at the time of geo-tagging only was caused by the increased work load of the tagged functionaries. For example, the GRS is often engaged in geo-tagging activities and generating the muster roll for MGNREGS convergence. Thus, GRS is left with much less time to monitor the houses frequently. Also, in most cases, the concerned officials were attached with a large number of houses. In some cases, it was found that the PMAY-G households were situated in a remote place with limited connectivity.

6.4.5. Weekly monitoring of PMAY-G houses is found to be highest in Madhya Pradesh (44.33%) followed by Odisha (42.31%) and Uttar Pradesh (36.61%). On the other hand, the same is found to be lowest in Assam (26.83%) followed by Rajasthan (28.81%) (Table 6.5).

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14 It also includes the 9 cases of the section 6.4.2

Table 6.5: Extent of Monitoring of PMAY-G Construction across States (%)

	Frequency of Monitoring		
	Every Week	Every 2 weeks	At the time of Geo-tagging
Total (388)	37.47 (145)	34.37 (133)	28.35 (110)
Assam (41)	26.83 (11)	36.59 (15)	36.59 (15)
Madhya Pradesh (97)	44.33 (43)	38.14 (37)	17.53 (17)
Odisha (78)	42.31 (33)	30.77 (24)	26.92 (21)
Rajasthan (59)	28.81 (17)	32.20 (19)	38.98 (23)
Uttar Pradesh (112)	36.61 (41)	33.93 (38)	29.46 (33)

Note: Figure in the parentheses represents the sample size/ frequency.

6.4.6. The centralized helpline facility at the state level exists only in Madhya Pradesh and Rajasthan among the sample states. However, in the sample households, the use of such facility is meagre in both states. In general, the PMAY-G households approach the local level PR officials to resolve most of the issues that they faced during the construction of the houses.

6.4.7. In the sample, 59.54 per cent of the PMAY-G households approached different stakeholders to raise their grievances and solutions. Most of the issues were addressed by the Sarpanch (58.01%) followed by PR Officials (GP and Block; 56.71%) and Gram Sabha. The issues of about 10.82 per cent of households were addressed through Jan *Sunvai*/Jan Sabha.

Fig. 6.5: Approaching Contacts for Any Grievances
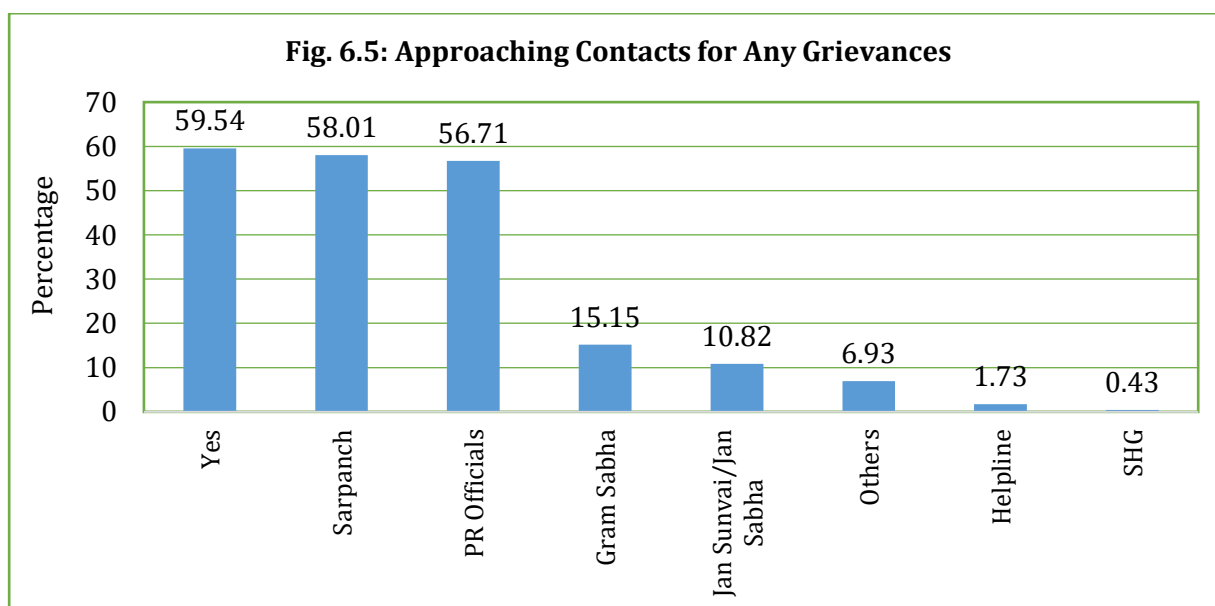
7.   Benefits Realization at Households Level

7.1.   Background

7.1.1. In this section, an attempt is made to analyse the kind of benefits that accrue from being living in a pucca house to the rural poor. The major areas of thrust here are health, hygiene, education, social inclusion, and income (expenditure).

7.2.   Hygienic Living

7.2.1. It is found that the overall usage of toilets by the PMAY-G households is increased post the construction of the PMAY-G house (48.71%) as compared to the pre-PMAY-G period (29.64%) (Fig. 7.1). This is further reflected by data as there is a decline in the extent of open defecation from 70.36 per cent to 51.29 per cent post-PMAY-G. Similarly, the usage of the toilet by the PMAY-G households is found to be relatively higher as compared to the non-PMAY-G households (33.33%). This significant increase in usage of toilets is a result of the Swacch Bharat Mission campaign with a mandatory convergence of the mission with the PMAY-G program.

7.2.2. However, it is also observed that many houses are yet to get the toilets (46.13%) and also some of the PMAY-G households (21.53%) are still going for open defecation despite having a SBM toilet. At the State level, there are gaps in SBM convergence and the usage of toilets by the PMAY-G households which is discussed in Section 9. Some of the reasons for such open defecation are water issues, a cultural habit of not using adjunct toilets, and not having a habit of using a toilet. Thus, there is a need for more awareness especially at the local level towards dispensation of open defecation.

Fig. 7.1: Propotion of Households use of toilet and cleaning materials

	Pre-PMAY-G	Post-PMAY-G	Non-PMAY-G
Personal Toilet	29.64	48.71	33.34
Open Defecation	70.36	51.29	66.67
Toilet Cleaners	18.3	32.73	12.28
Floor Cleaners	14.43	18.81	6.14
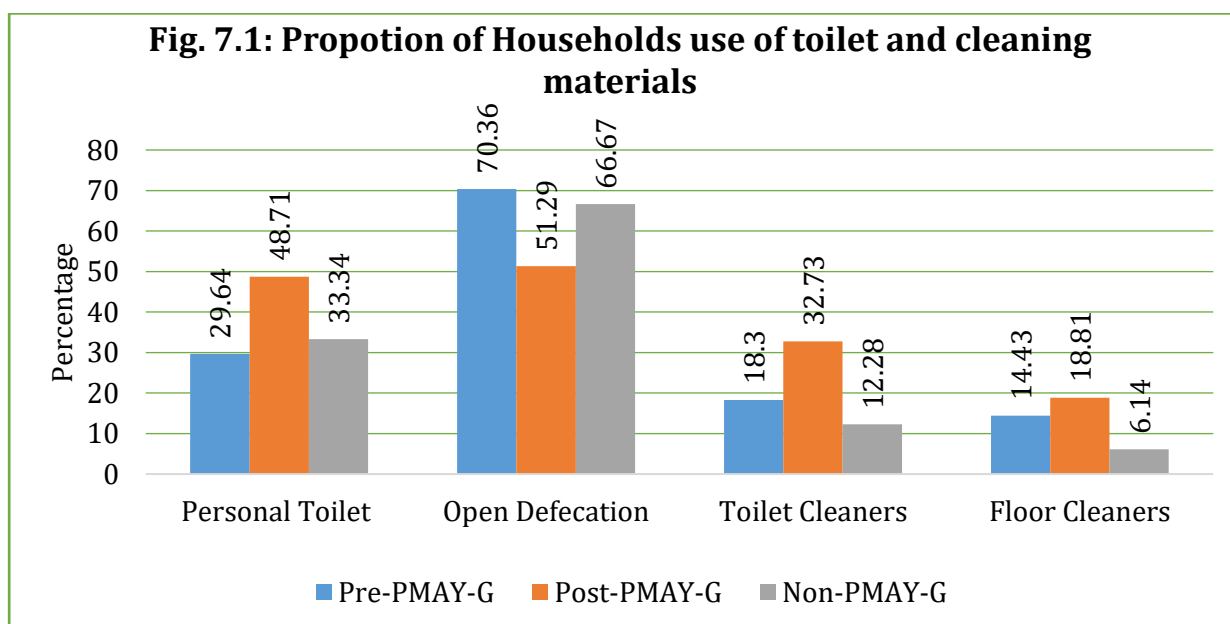
Photo 7.1: Non-Usage of toilets in Nagaur District, Rajasthan	Photo 7.2: Community Toilet in Vidisha District, Madhya Pradesh
The cases of non-usage of toilets and the practice of open defecation are high.	Construction of Community Toilets to reduce the open defecation in Madhya Pardesh

Note: Photos were taken during Primary Survey

7.2.3. At the State level, usage of the toilet is found to be highest in Madhya Pradesh (72.16%) followed by Assam (63.41%) and the lowest in Uttar Pradesh (23.68%). The increase of toilet usage in Madhya Pradesh found a significant jump by about 60 per cent among the PMAY-G households, which is highest among the sample States (Table 7.1).

7.2.4. With the increase of toilet use and increased awareness towards hygiene, PMAY-G households have also started using the toilet cleaners. The percentage of households using toilet cleaners has increased from 18.30 per cent in the pre-PMAY-G period to 32.73 per cent in the post-PMAY-G period. The PMAY-G households are also found with a greater extent of toilet cleaner use as compared to the non-PMAY-G households. Similarly, the usage of floor cleaner is also found to be higher among the PMAY-G households than non-PMAY-G households (Table 7.1).

Table 7.1: Status of Hygienic Living

States	Households	Use of Personal Toilet	Open Defecation	Use of Toilet Cleaners	Use of Floor Cleaners
ALL	Pre-PMAY-G	29.64 (115)	70.36 (273)	18.3 (71)	14.43 (56)
	Post-PMAY-G	48.71 (189)	51.29 (199)	32.73 (127)	18.81 (73)
	Non-PMAY-G	33.33 (38)	66.67 (76)	12.28 (14)	6.14 (7)
Assam	Pre-PMAY-G	51.22 (21)	48.78 (20)	28.57 (6)	19.05 (4)
	Post-PMAY-G	63.41 (26)	36.59 (15)	50.00 (13)	26.92 (7)
	Non-PMAY-G	71.43 (10)	28.57 (4)	10.00 (1)	20.00 (2)
Madhya Pradesh	Pre-PMAY-G	44.33 (43)	55.67 (54)	69.77 (30)	44.19 (19)
	Post-PMAY-G	72.16 (70)	27.84 (27)	77.14 (54)	31.43 (22)
	Non-PMAY-G	59.26 (16)	40.74 (11)	43.75 (7)	0.00 (0)
Odisha	Pre-PMAY-G	29.49 (23)	70.51 (55)	52.17 (12)	86.96 (20)
	Post-PMAY-G	51.28 (40)	48.72 (38)	40.00 (16)	57.50 (23)
	Non-PMAY-G	16.67 (4)	83.33 (20)	75.00 (3)	50.00 (2)
Rajasthan	Pre-PMAY-G	16.667 (10)	83.333 (50)	70.00 (7)	50.00 (5)
	Post-PMAY-G	36.67 (22)	63.33 (38)	68.18 (15)	31.82 (7)
	Non-PMAY-G	17.65 (3)	82.35 (14)	33.33 (1)	33.33 (1)
Uttar Pradesh	Pre-PMAY-G	16.07 (18)	83.93 (94)	88.89 (16)	44.44 (8)
	Post-PMAY-G	27.67 (31)	72.32 (81)	93.55 (29)	45.16 (14)
	Non-PMAY-G	15.63 (5)	84.38 (27)	40.00 (2)	40.00 (2)

Note: Figures in the parentheses are sample size

7.3. Health

7.3.1. Living in a permanent and pucca house with basic amenities would result in intangible benefits in terms of improvement in health status. In order to assess the health status of the households, frequency of occurrence of five common illness i.e. viral fever, cough

and cold, skin allergies and diarrhoea considered[15] and compared between pre-PMAY-G and post-PMAY-G period as well as PMAY-G and non-PMAY-G households[16].

7.3.2. Overall, the frequency of falling ill seems to be reduced for all the common illness after shifting to the new pucca house (with the provision of basic amenities). Although this does not come from a strict causality analysis, the descriptive statistics reveals that the percentage of households with an occurrence of viral fever was found to be decreased from 77.06 per cent in pre-PMAY-G period to 61.85 per cent in post-PMAY-G period (Annexure 7.a). Similarly, the extent of decline in the occurrence of a cough and cold, skin allergies, and diarrhoea is about 16.50 per cent, 11.31 per cent, and 12.52 per cent respectively during in post-PMAY-G period as compared to pre-PMAY-G period (Fig. 7.2).

7.3.3. The drop in the frequency may be attributed to clean and hygienic conditions in the pucca house as compared to the kutcha one, usage of toilets, clean flooring, and pucca roofing which provides safety in all weathers. Similar health status is also found in all the sample states (Gupta & Mitra, 2002; Firdaus & Ahmad, 2013; Gopalan & Venkataraman, 2015). The group discussions and key person interviews also revealed similar expectations.

Fig. 7.2: Percentage Distribution of Falling Ill in commom diseases

	Pre-PMAY-G	Post PMAY-G
Viral Fever	77.06	61.85
Cough and Cold	58.76	42.26
Skin Allergies	27.83	17.52
Diarrhoea	31.07	18.55
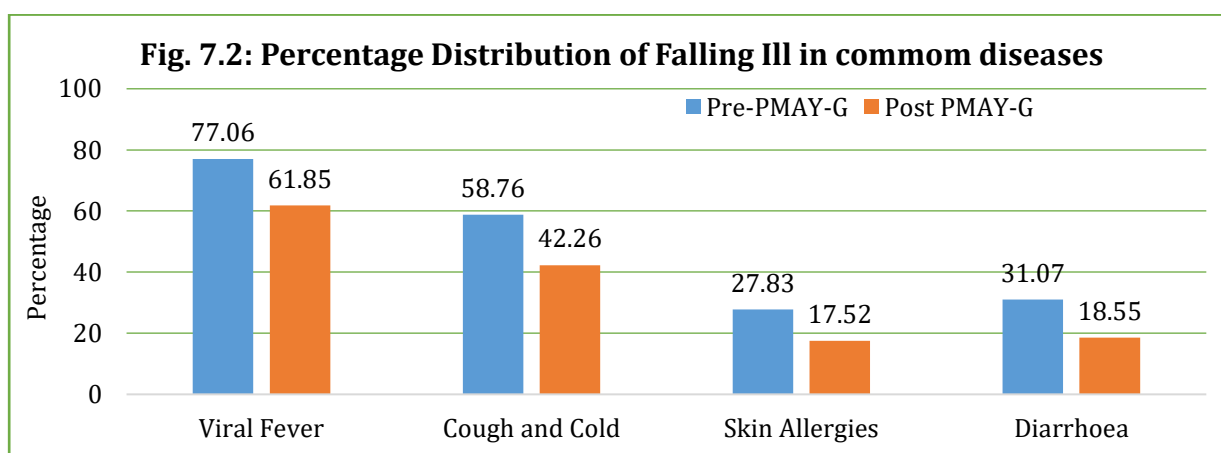
7.3.4. The average number of visits made to doctor after the shifting to the new pucca house has decreased to 0.87 times from 1.53 times for viral fever, 0.54 times from 1.09 times for a cough and cold, 0.19 times from 0.52 times for skin allergies, and 0.16 times from 0.45 times for diarrhoea in a year among the PMAY-G households. The average no of diseases among the PMAY-G households is found to be much lesser than the Non-PMAY-G

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[15] These diseases are commonly occurred due to staying in an unhygienic and poor housing conditions (Bonnefoy, 2007; Prüss-Ustün et al., 2016).

[16] While the recall period for pre-PMAY-G period for beneficiary was before construction, the reference period for non-beneficiary was one year prior to data collection period.

households (1.23 times for viral fever, 1.04 times for a cough and cold, 0.45 times for skin allergies, and 0.70 times for diarrhoea in a year).

7.3.5. The overall preference of beneficiaries for visiting a doctor for consultation and remedial measures did not show any major change in pre and post-PMAY-G construction of the house, but the visits by ASHA workers got increased post the PMAY-G houses especially in Uttar Pradesh. There has also been a higher proportion of PMAY-houses reporting increased visits by the Asha Workers as compared to Non-PMAY-G households. This might be because more accessibility of PMAY-G households due to better housing condition, increased children attendance in school, increased school enrolment, and reduced migration. Also, the visits of ASHA workers in non-PMAY-G houses were found to be less than PMAY-G houses (Table 7.3).

Table 7.2: Average Visits Made to Doctor for Some Common Diseases

States	Households	Viral Fever		Cough and Cold		Skin Allergies		Diarrhoea		Any Other	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
All	Pre-PMAY-G	1.53	1.63	1.09	1.48	0.52	1.39	0.45	0.86	0.13	0.46
	Post-PMAY-G	0.87	1.02	0.54	0.89	0.19	0.63	0.16	0.40	0.10	0.33
	Non-PMAY-G	1.23	1.06	1.04	1.22	0.45	0.89	-	-	0.17	0.52
Assam	Pre-PMAY-G	1.02	0.52	0.95	0.44	0.44	0.74	0.39	0.67	0.10	0.30
	Post-PMAY-G	0.85	0.42	0.71	0.46	0.27	0.50	0.17	0.38	0.12	0.33
	Non-PMAY-G	1.15	0.55	1.00	0.58	0.31	0.63	-	-	0.08	0.28
Madhya Pradesh	Pre-PMAY-G	1.22	1.10	0.99	1.25	0.57	1.41	0.57	1.03	0.09	0.29
	Post-PMAY-G	0.50	0.66	0.23	0.47	0.08	0.31	0.15	0.36	0.06	0.23
	Non-PMAY-G	1.08	1.08	0.64	1.29	0.24	0.60	-	-	0.16	0.37
Odisha	Pre-PMAY-G	2.36	2.51	1.97	2.35	1.19	2.38	0.59	1.01	0.17	0.69
	Post-PMAY-G	1.32	1.27	1.05	1.43	0.47	1.14	0.31	0.54	0.13	0.44
	Non-PMAY-G	1.79	1.25	1.71	1.37	0.88	1.30	-	-	0.33	0.87
Rajasthan	Pre-PMAY-G	0.87	1.13	0.50	1.00	0.07	0.25	0.12	0.32	0.10	0.30
	Post-PMAY-G	0.60	0.79	0.38	0.76	0.03	0.18	0.08	0.28	0.10	0.30
	Non-PMAY-G	0.82	0.81	0.41	0.62	0.29	0.59	-	-	0.18	0.53
Uttar Pradesh	Pre-PMAY-G	1.74	1.41	0.92	0.96	0.26	0.54	0.45	0.83	0.18	0.49
	Post-PMAY-G	1.00	1.17	0.44	0.63	0.14	0.40	0.11	0.35	0.09	0.32
	Non-PMAY-G	1.17	1.04	1.21	1.26	0.45	0.87	-	-	0.07	0.26

Note: Figures in the parentheses are sample size. A low standard deviation means that most of the numbers are close to the average. A high standard deviation means that the numbers are more spread out.

Table 7.3: Preference for visiting PHCs and Visits of ASHA workers in Non PMAY-G and PMAY-G Houses

	Prefer Visiting PHCs/Doctors			ASHA Workers Visit		
	Pre PMAY-G	Post PMAY-G	Non PMAY-G	Pre PMAY-G	Post PMAY-G	N on PMAY-G
Total	12.89 (50)	12.37 (48)	14.04 (16)	26.80 (104)	33.25 (129)	29.82 (34)
Assam	4.88 (2)	4.88 (2)	21.43 (3)	34.15 (14)	36.59 (15)	7.14 (1)
Madhya Pradesh	16.49 (16)	17.53 (17)	14.81 (4)	36.08 (35)	38.14 (37)	22.22 (6)
Odisha	16.67 (13)	14.10 (11)	20.83 (5)	39.74 (31)	41.03 (32)	37.50 (9)
Rajasthan	25.00 (15)	25.00 (15)	11.76 (2)	28.33 (17)	30.00 (18)	64.71 (11)
Uttar Pradesh	3.57 (4)	2.68 (3)	6.25 (2)	6.25 (7)	24.11 (27)	21.88 (7)

Note: Figures in the parentheses are sample size

Photo 7.3: Vaccination in School by ASHA Workers in Assam

Note: Photos were taken during Primary Survey

7.4. Access to Safe Water

7.4.1. The main source of water used for drinking and cooking purpose prior to PMAY-G houses was found to be tube well or hand pumps or tankers for both PMAY-G households (73.20% and 73.97%) and non-PMAY-G households (69.30%). However, post PMAY-G houses there has been a marginal increase in the use of pipe water as compared to pre-PMAY-G period. Similarly, the use of the well for drinking water has come down by 3 percentage point (Fig. 7.3). Still, the availability of piped water connection was despairingly low both prior to and post the construction of the house (6.70% and 8.25% respectively). The Limited convergence with NRDWP led beneficiaries to use unhygienic sources of water (Photo 7.4). State-Wise distribution of different types of access to water sources is presented in Annexure 7.b).

7.4.2. Around 16 per cent of the PMAY-G households reported the non-availability of water throughout the year (Table 7.4). The situation was similar for both pre and post construction of the PMAY-G house as well as non-PMAY-G Households. This clearly indicates the need for speedy implementation of NRDWP for access to safe drinking water, especially in rural areas.

Fig. 7.3: Percentage Distribution of sources of water for Drinking and Cooking
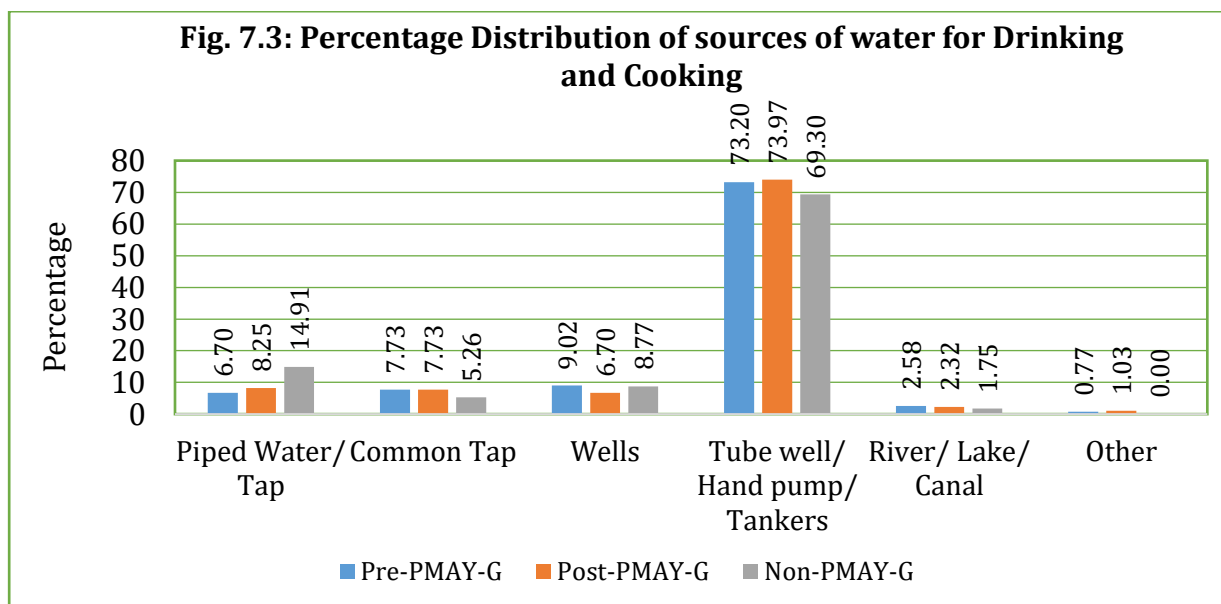
Table 7.4: Percentage distribution of Availability of water throughout the year

Water Availability throughout the year	Pre-PMAY-G	Post-PMAY-G
Assam	75.61 (31)	78.05 (32)
Madhya Pradesh	82.47 (80)	82.47 (80)
Odisha	87.18 (68)	88.46 (69)
Rajasthan	81.67 (49)	81.67 (49)
Uttar Pradesh	86.61 (97)	86.61 (97)
Total	83.76 (325)	84.28 (327)

Note: Figures in the parentheses represent sample size

Photo 7.4: Limited convergence with NRDWP led beneficiaries to use unhygienic sources of water
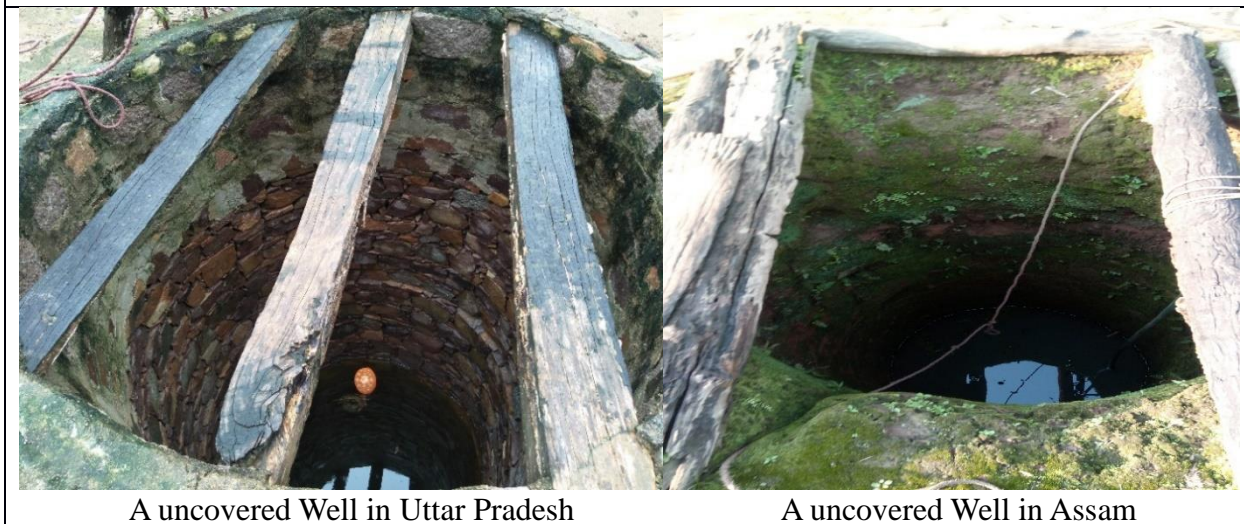
| A uncovered Well in Uttar Pradesh | A uncovered Well in Assam |

Note: Photos were taken during Primary Survey

7.5.   Access to Clean Fuel

7.5.1.   Access to clean fuel such as LPG would tend to enhance the health of rural women, and thereby the quality of life, as well as air quality indicating it as a social investment. It is considered as one of the clean and efficient cooking fuel. The traditional forms of cooking fuel such as fire-wood and thrash would lead to indoor pollution affecting the health of the members of the household and thereby lowering their productivity. State-Wise distribution of households by the types of LPG connection is presented in Annexure 7.c.

Fig. 7.4: Main Source of Fuel for Cooking
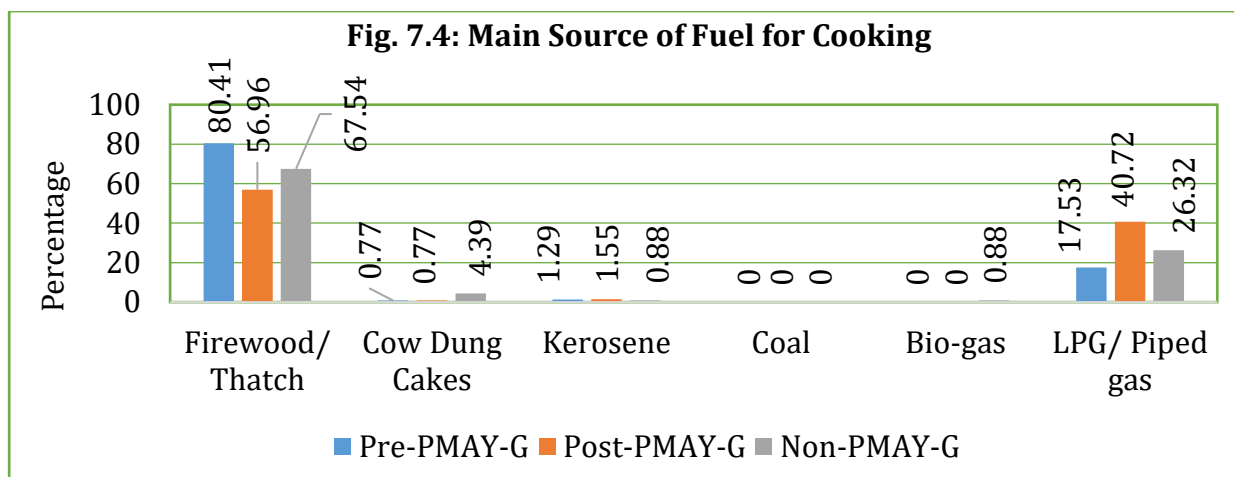
7.5.2. It is found that about most of the PMAY-G households still use firewood as the main fuel of cooking. However, the dip in using of firewood is significant following the government's approach towards promoting LPG as the clean fuel through PMUY. The distribution of households by means of access to cooking fuel is presented in Annexure 7.d. The usage of LPG as main fuel has gone up significantly from 17.53 per cent in the pre-PMAY-G period to 40.72 per cent in the post-PMAY-G period. Similarly, the overall usage of the LPG (main + Secondary) is also higher as compared to the non-PMAY-G households (Fig. 7.4). The Chi^2 test statistics reveal that there has been significant increase in the use of LPG among the PMAY-G households as compared to pre-PMAY-G period and non-PMAY-G households as well.

Table 7.5: Usage of LPG by Pre and Post PMAY-G and Non- PMAY-G Beneficiaries

Usage of LPG	Pre-PMAY-G	Post-PMAY-G	Non-PMAY-G
Yes	24.74 (96)	53.87 (209)	46.49 (53)
No	75.26 (292)	46.13 (179)	53.51 (61)
Total	100.00 (388)	100.00 (388)	100.00 (114)
McNemar Chi- Square	113.00		9.26*
Pr- Value	0.000		0.000

Note: Figures in the parentheses represent the sample size. * Refers Pearson Chi^2 test

Fig. 7.5: Difficulty in LPG Re-fill
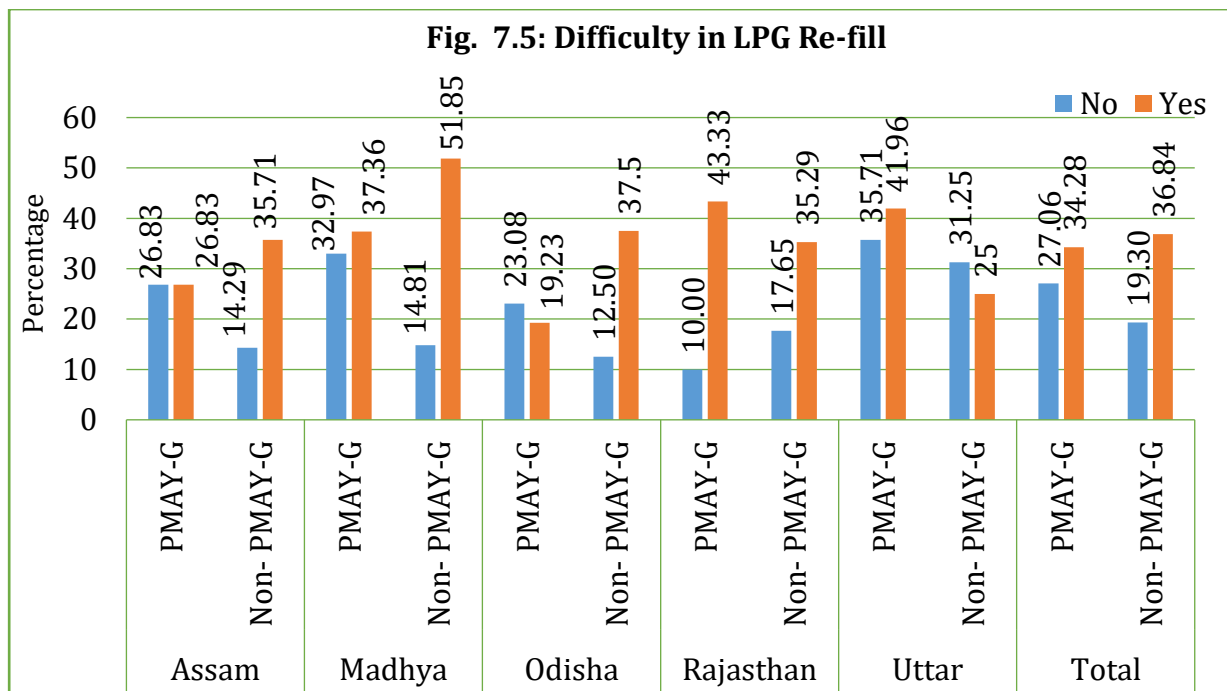
7.5.3. As mentioned earlier, despite the increase in LPG connections, the frequency of refills as well as the dropouts is a matter of concern. 9.24% of the PMAY-G beneficiaries and 28.57% of the non-PMAY-G beneficiaries who have LPG connection have never refilled the gas cylinder. A significant percentage of both PMAY-G beneficiaries (34.28%) and non-PMAY-G (36.84%) beneficiaries faced difficulties in refilling LPG in terms of affordability (Fig. 7.5). Also, the less number of refilling stations and that too at far off places is another factor restricting the use of LPG cylinders and compelling them to resort to other sources of fuel like wood, kerosene, etc. State-Wise distribution of households in terms of affordability is presented in Annexure 7.e.

7.5.4. Given the poor economic condition and thereby affordability of LPG as a cooking fuel appears to be an issue, the awareness and campaign of the negative impact of indoor pollution, as well as the benefits of using of clean energy like LPG, would increase the usage of LPG.

7.6. Education

7.6.1. Living in a *pucca* house can withstand all weather is also expected to have a positive impact on the performance of children in school (Goux & Maurin, 2005; Planning Commission, 2013). Also, due to electricity connection too, the children now should be able to study in after-school time. Here, the improvement in education is assessed through

two indicators: (i) change in the enrolment of children in schools, and (ii) improvement in the results/ studies.

7.6.2. There has been a marginal increase in the enrolment in school among the PMAY-G households from 91.42 per cent in the pre-PMAY-G period to 93.66 per cent post-PMAY-G period (Photo 7.6). School enrolment is found to be the highest in Assam (100%) followed by Odisha (98.08%), and the lowest in Madhya Pradesh (87.69%) (Table 7.6).

Table 7.6: Beneficiaries sending Children to School Pre and Post PMAY-G house

Children go to school		Applicable Beneficiaries	Pre-PMAY-G	Post-PMAY-G
All (388)	No	268	8.58 (23)	6.34 (17)
	Yes	268	91.42 (245)	93.66 (251)
Assam (41)	No	30	0.00 (0)	0.00 (0)
	Yes	30	100.00 (30)	100.00 (30)
Madhya Pradesh (97)	No	65	16.92 (11)	12.31 (8)
	Yes	65	83.08 (54)	87.69 (57)
Odisha (78)	No	52	3.85 (2)	1.92 (1)
	Yes	52	96.15 (50)	98.08 (51)
Rajasthan (60)	No	48	4.17 (2)	2.08 (1)
	Yes	48	95.83 (46)	97.92 (47)
Uttar Pradesh (112)	No	73	10.96 (8)	9.59 (7)
	Yes	73	89.04 (65)	90.41 (66)

Note: Figures in the parentheses represent sample size.

Photo 7.5: Access to Primary Education

A Primary School in Assam   A Primary School in Madhya Pradesh

7.6.3. The parents from the PMAY-G households were also asked about their perception about the performance of their children at school as they now have a permanent and pucca house which can withstand all weathers with many houses connected to electricity. It is found that about 80 per cent of the PMAY-G households reported a better performance by the children at school because their children now could study longer hours at home (Fig 7.6).

Fig. 7.6: Parents' Perception about Their Chldrens' Performace at School

- Improved
- Not Improved
- Uncertain

80% 3% 17%
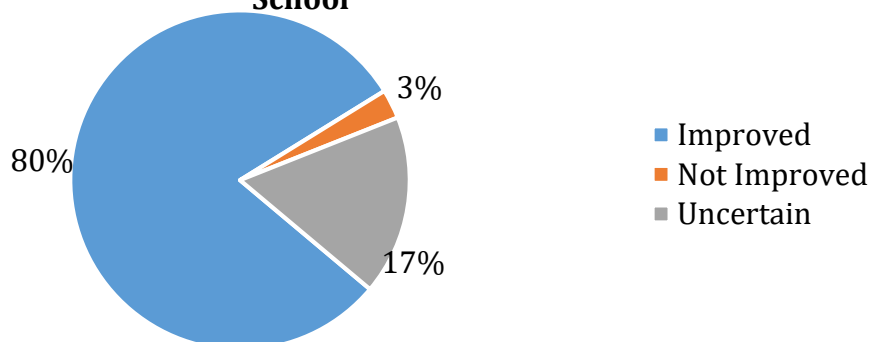
7.6.4. The parents were also asked about whether they would send their children to school after class VIII, and it is found that the PMAY-G beneficiaries as compared to non-PMAY-G beneficiaries are more likely to send their children to school (difference of around 6% from 60.53% to 66.24%). All the sample States showed similar results except for Odisha. In Odisha, more non-PMAY-G beneficiaries showed their preference of sending their kids to go to school after class VIII (Table 7.7).

7.6.5. Apart from the poor economic condition and lack of infrastructure, no-interest of parents towards schooling appears to be the prime reasons for not sending their children to school after class VIII. Instead, they want their children to engage in economic activities to support family expenditure (Table 7.8).

Table 7.7: Preference for Sending Child to School after Class VIII

State	Households	Yes	No	Not Applicable
Total	**PMAY-G**	66.24 (257)	11.86 (46)	21.91 (85)
	Non-PMAY-G	60.53 (69)	19.30 (22)	20.18 (23)
Assam	**PMAY-G**	65.85 (27)	7.32 (3)	26.83 (11)
	Non-PMAY-G	57.14 (8)	7.14 (1)	35.71 (5)
Madhya Pradesh	**PMAY-G**	61.86 (60)	16.49 (16)	21.65 (21)
	Non-PMAY-G	59.26 (16)	25.93 (7)	14.81 (4)
Odisha	**PMAY-G**	65.38 (51)	2.56 (2)	32.05 (25)
	Non-PMAY-G	79.17 (19)	8.33 (2)	12.50 (3)
Rajasthan	**PMAY-G**	83.33 (50)	6.67 (4)	10.00 (6)
	Non-PMAY-G	70.59 (12)	23.53 (4)	5.88 (1)
Uttar Pradesh	**PMAY-G**	61.61 (69)	18.75 (21)	19.64 (22)
	Non-PMAY-G	43.75 (14)	25.00 (8)	31.25 (10)

Note: Figures in the parentheses represent sample size.

Table 7.8: Reason for not sending children to school after class VIII

States	Households	Cannot Afford	No Mode of Transportation	Involving in Economic Activity	Not Interested
All	Non-PMAY-G	9.65 (11)	2.63 (3)	5.26 (6)	8.77 (10)
	PMAY-G	4.12 (16)	1.03 (4)	5.15 (20)	5.15 (20)
Assam	Non-PMAY-G	0.00 (0)	0.00 (0)	7.14 (1)	0.00 (0)
	PMAY-G	2.44 (1)	4.88 (2)	7.32 (3)	0.00 (0)
Madhya Pradesh	Non-PMAY-G	22.22 (6)	7.41 (2)	0.00 (0)	3.70 (1)
	PMAY-G	3.09 (3)	1.03 (1)	6.19 (6)	10.31 (10)
Odisha	Non-PMAY-G	4.17 (1)	0.00 (0)	0.00 (0)	4.17 (1)
	PMAY-G	1.28 (1)	0.00 (0)	2.56 (2)	0.00 (0)
Rajasthan	Non-PMAY-G	11.76 (2)	0.00 (0)	5.88 (1)	5.88 (1)
	PMAY-G	0.00 (0)	0.00 (0)	1.67 (1)	3.33 (2)
Uttar Pradesh	Non-PMAY-G	6.25 (2)	3.13 (1)	12.50 (4)	21.88 (7)
	PMAY-G	9.82 (11)	0.89 (1)	7.14 (8)	7.14 (8)

Note: The row total percentage would not add up to 100% as a respondent opted for multiple responses.
Note: Figures in the parentheses represent sample size.

7.7. Access to Electricity

7.7.1. The access to electricity by the rural people have manifold benefits starting from improving healthcare due to clean energy, education, and increased economic activities in the rural areas. Although theoretically unclear, there is a general expectation that access to electricity could increase the educational attainment/performance of children. For example, better lighting helps the student to study (reading, homework, etc.) for long hours as compared to off-grid households that go dark in the early evening. In short, access to electricity can facilitate infrastructure for both improved quantity and quality of studying.

7.7.2. Similarly, bringing the off-grid population to electrification is essential in terms of reduction of energy cost (especially on kerosene) (Mainali & Silveira, 2011; Glemarec, 2012). It also gives people more time to invest in productive activities such as handicraft, handloom, and other micro-business in rural areas, thereby increasing employment and income opportunities.

Table 7.9: Percentage Distribution for Source of Lighting

Source of Lighting	Main Source			Secondary Source		
	Pre-PMAY-G	Post-PMAY-G	Non-PMAY-G	Pre-PMAY-G	Post-PMAY-G	Non-PMAY-G
Electricity	38.14 (148)	45.88 (178)	43.86 (50)	7.73 (30)	9.79 (38)	7.89 (9)
Solar	8.76 (34)	8.25 (32)	7.89 (9)	8.51 (33)	8.51 (33)	9.65 (11)
Kerosene	37.63 (146)	27.58 (107)	31.58 (36)	71.91 (279)	69.07 (268)	73.68 (84)
Other Oil	0.00 (0)	0.00 (0)	0.00 (0)	2.84 (11)	2.84 (11)	1.75 (2)
No Lighting	3.35 (13)	3.09 (12)	1.75 (2)	3.61 (14)	3.09 (12)	1.75 (2)
Unauthorised Connection	11.08 (43)	14.18 (55)	14.91 (17)	2.32 (9)	3.35 (13)	5.26 (6)
Any Other	1.03 (4)	1.03 (4)	0.00 (0)	3.09 (12)	3.35 (13)	0.00 (0)

Note: Figures in the parentheses represent sample size.

7.7.3. Keeping in view of these benefits, the Government of India has asked for convergence of DDUGJY/Saubhagya scheme for electricity connection with the rural housing program. It is found that the percentage of PMAY-G households who have access to electricity as the main source of lighting has gone up from 38.14 per cent in pre-PMAY-G Period to 45.88 per cent in post-PMAY-G period. The other sources of the main lighting appear to be Kerosene (27.58%) and Solar (8.25%). Access to electricity among the non-PMAY-G households also found to be similar as of the PMAY-G households (Table 7.9).

7.7.4. There is a significant proportion of households who have unauthorized electricity connection due to several issues starting from financial issue to lack of communication from the line departments. This issue needs some policy intervention in order to increase rural electrification.

7.8. Social Inclusion

7.8.1. One of the intangible benefits aimed by the government through PMAY-G is to enhance the social inclusiveness of the poor in the rural areas. It is expected that an affordable house with basic amenities would tend to give security, dignity, and economic power to the rural poor. This is more so among the marginalized section of especially the lower caste and among the women, and the living in a better housing may uplift the social inclusion of these groups.

7.8.2. The extent of social inclusion due to the construction of a pucca house was assessed taking into consideration various parameters like dignity and safety, interaction and integration with other communities, etc. Overall, a positive perception of PMAY-G on social inclusiveness is observed from the sample analysis. All the PMAY-G households perceived that the PMAY-G house had given them a sense of dignity and safety.

Table 7.10: Perception of the PMAY-G Households on Social Inclusion

The extent of Social Inclusion	All	Assam	Madhya Pradesh	Odisha	Rajasthan	Uttar Pradesh
Improved	62.63 (243)	82.93 (34)	44.33 (43)	71.79 (56)	56.67 (34)	67.86 (76)
Moderately Improved	30.15 (117)	17.07 (7)	44.33 (43)	25.64 (20)	25.00 (15)	28.57 (32)
Not Improved	7.22 (28)	0.00 (0)	11.34 (11)	2.56 (2)	18.33 (11)	3.57 (4)

Note: Figures in the parentheses represent sample size.

7.8.3. Majority of PMAY-G beneficiaries reported that there had been a significant improvement in terms of social inclusion of the marginalized group of people in wider cohort after being started living in their new PMAY-G house (62.63%). However, a small percentage of beneficiaries (7.22%) still think that there has been no significant improvement in terms of social inclusion but expect that the scenario will improve in coming years (Table 7.10). Similarly, Table 7.11 reveals the perception of PMAY-G households about their enhanced social acceptability through different aspects.

Table 7.11: Perception of the PMAY-G Households about Social Inclusion on Different Aspects

Aspects	All	Assam	Madhya Pradesh	Odisha	Rajasthan	Uttar Pradesh
Pucca House gives Dignity	100.00 (388)	100.00 (41)	100.00 (97)	100.00 (78)	100.00 (60)	100.00 (112)
Neighbour from Other Community	68.30 (265)	58.54 (24)	51.55 (50)	87.18 (68)	56.67 (34)	79.46 (89)
Attend Functions of Other Community	88.66 (344)	100.00 (41)	86.60 (84)	93.59 (73)	81.67 (49)	86.61 (97)
Invite people from other Community	85.31 (331)	100.00 (41)	78.35 (76)	93.59 (73)	80.00 (48)	83.04 (93)
Children play with kids from other community	50.52 (196)	51.22 (21)	38.14 (37)	60.26 (47)	55.00 (33)	51.79 (58)

Note: Figures in the parentheses represent sample size.

7.9. Employment and Income Opportunities

7.9.1. An attempt was made to understand whether there has been any improvement in the employment and income opportunities for the members of the PMAY-G household during and post-PMAY-G period as compared to pre-PMAY-G period. The responses coded in three-point scale reveals that there is undoubtedly an improvement in the employment and income opportunities (37.11%).[17] Similarly, while 37.63 per cent of the households feel that there is a moderate improvement, about 25.26 per cent reported no change in employment and income opportunities (Fig. 7.7).

7.9.2. In the construction sector itself, a significant proportion of the members of the household (36%) found that there has been an increased employment opportunity within the village due to PMAY-G as well as other construction related activities. Similarly, there has been a substantial increase of such works in the nearby villages as well as in semi-urban areas.

Fig. 7.7: Perception of PMAY-G Households about Employment and Income Opportunities

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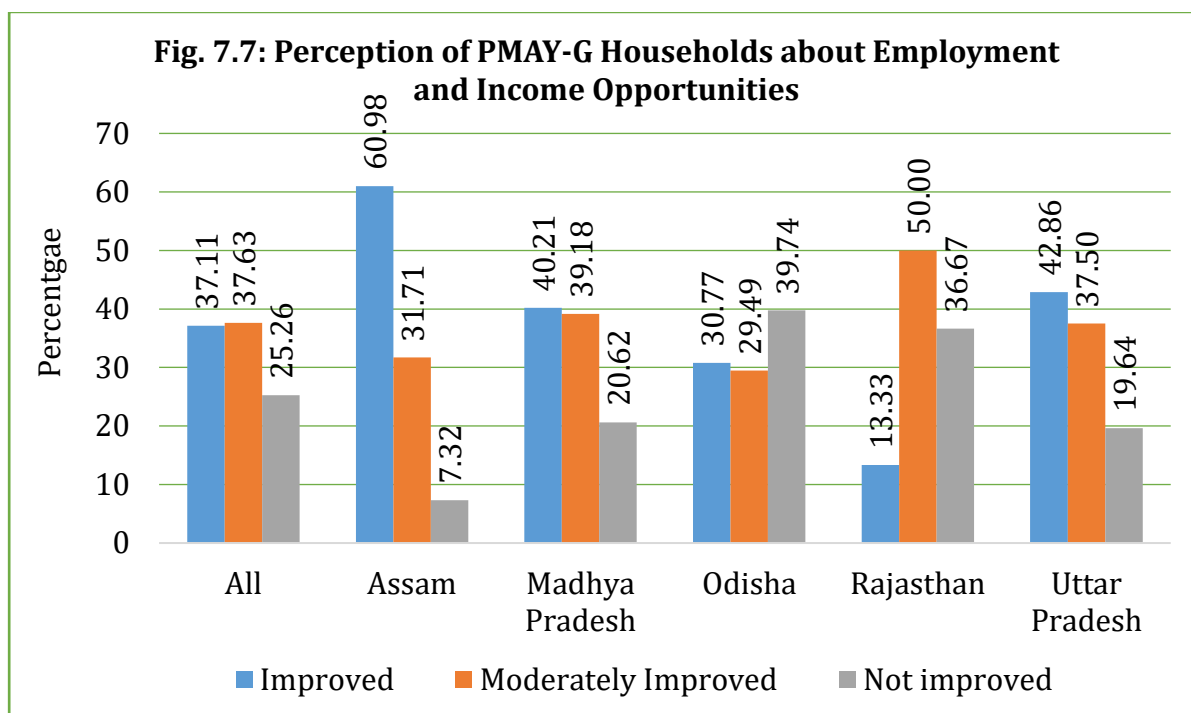
[17] Data on employment opportunities were restricted only for the PMAY-G sample.

Fig. 7.8: Percepection about the Employment Opportunities in the Construction Sector/casual Works

- Yes, Within Village — 36%
- Yes, Outside Village — 39%
- No — 10%
- Can not Say — 15%
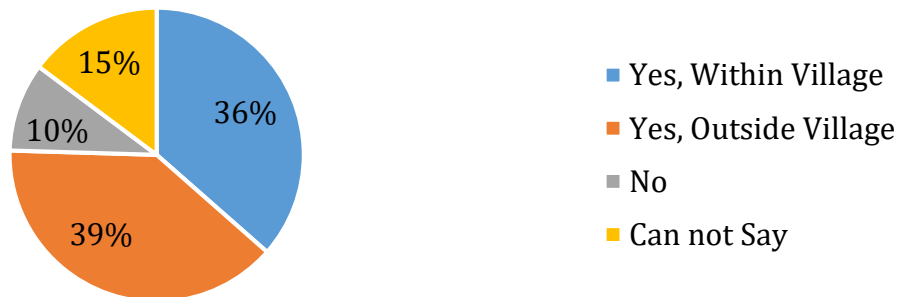
Fig. 7.9: Seek Employment Opportunites Outside the Village

Seek Outside Opportunities:
- No — 32.08
- Yes — 67.92

Yes:
- Lack of Opportunitie in Village — 51.39
- Better Outside Wages — 47.69
- Others — 0.93
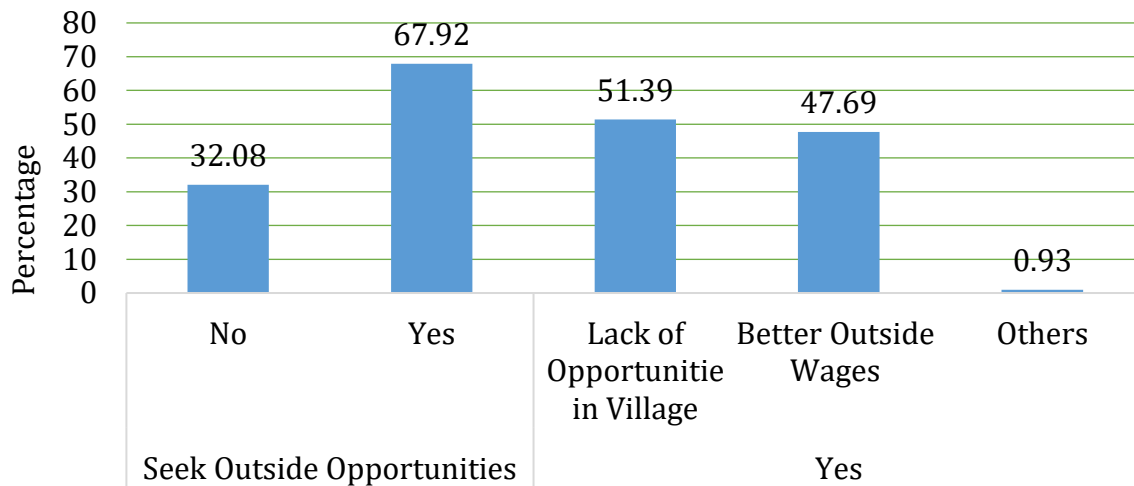
7.9.3. Given the increased employment/income opportunities within the village or nearby villages, a perception based question was asked to those who often go out for casual work whether they still feel that they have to go to town/cities for employment (temporary/seasonal migration). About 68 per cent of PMAY-G households report in favour of going out to earn a living. While 51.39 per cent of them reported to not enough employment opportunities for them has been available within the village, about 47.69 per cent feel that the wage rate in the towns/cities are more attractive and they can earn relatively higher income from working outside. In a sense, the impact of PMAY-G houses on migration appears to be negligible.

7.10.   Expenditure profile

7.10.1. To understand the impact on incomes, the survey, indirectly, tries to capture the expenditure patterns on the assumption that an increase in expenditures should indicate an increase in incomes. There has been a significant increase in the average total expenditure post the construction of a house in both food and non-food expenditure and a slight dip in the average monthly savings of the beneficiaries post PMAY-G house as compared to Pre-PMAY-G house. This could be due to multiple reasons like financial contribution in the construction of the house, availing of facilities like LPG connection or/and electricity, etc.

7.10.2. While the expenditure on non-food items does not reveal any significant difference between the PMAY-G households and Non-PMAY-G households, the PMAY-G households spend significantly more money on food items as well as in aggregate expenditure and also are able to save more on a monthly basis (Table 7.12).

Table 7.12: Expenditure profile of Beneficiaries of the Sample Households

Head	Pre-PMAY-G		Post-PMAY-G		Non-PMAY-G		Pre Vs Post	PMAY-G Vs Non PMAY-G
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	t-test	t-test
Monthly Non Food Expenditure	1445.85	1027.55	1539.54	1111.49	1469.57	991.36	6.06 0.000	0.60 0.545
Monthly Food Expenditure	2349.29	1185.81	2549.24	1245.29	1993.51	1038.30	17.27 0.000	4.34 0.000
Total Expenditure	3795.13	1941.70	4088.78	2089.12	3463.08	1679.64	14.01 0.000	2.93 0.004
Monthly Savings	429.85	1611.59	556.62	1538.80	235.28	443.09	3.59 0.000	2.20 0.028

Source: NIPFP, Field Study, 2018

8. Challenges/ Issues in the Implementation of PMAY-G

8.1. With the purpose of providing 'Housing to all' and thereby launching PMAY-G program, massive efforts have been undertaken to provide every rural poor with a house accompanied by basic amenities. The scheme published the 'PMAY-G Guidelines' for its key stakeholders to ensure that the program is implemented smoothly. This section elucidates various issues involved in implementation that hampers the pace and success of PMAY-G. The issues of implementation arise at different stages and are faced by different stakeholders.

8.2. Selection of Beneficiaries

8.2.1. Selection of PMAY-G beneficiaries is based on SECC-2011. A few stakeholders expressed their concern regarding the exclusion error as the responsible enumerator could have done some entry error resulting in both the inclusion and exclusion errors (Photo 8.1.1).

8.2.2. Also, due to the time lapse, some beneficiaries have acquired a pucca house and/or some assets post the SECC survey which made them no longer eligible under the housing scheme. Annexure – I to The Framework for Implementation of PMAY-G mentions 13 parameters based on which beneficiaries are subject to automatic exclusion. However, many cases are found where the ineligible beneficiaries were not excluded from the list by the Gram Panchayat during the verification, which results in inclusion error (Photo 8.1).

Photo 8.1: Example of Exclusion Error (Left) and Inclusion Error (Right)	
An exclusion error from Madhya Pradesh	An inclusion error in Assam
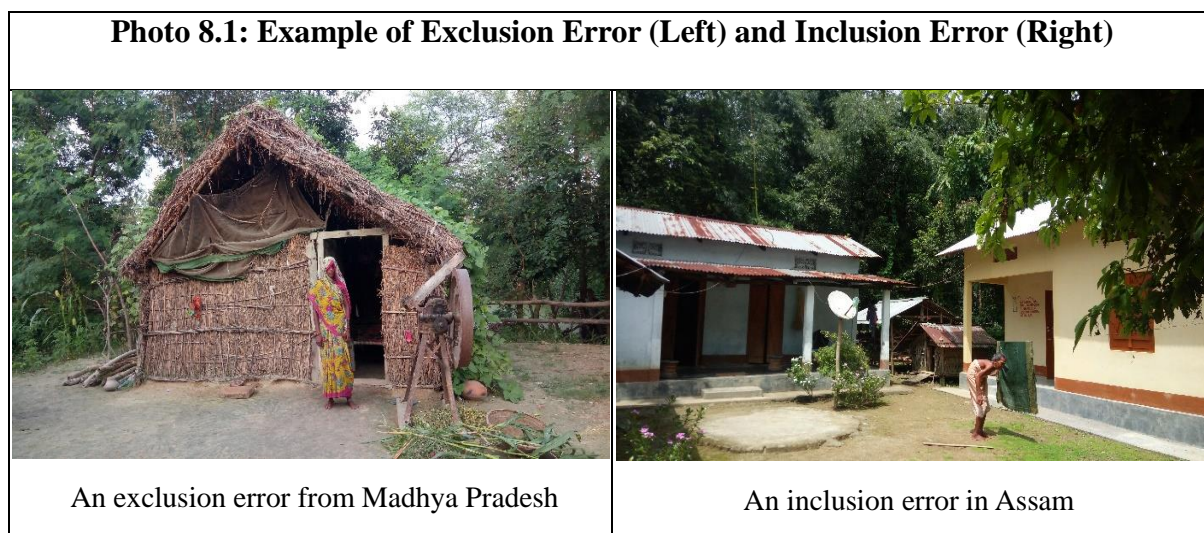
Source: Photos were taken during Primary Survey

8.2.3. A new drive has also been launched to identify additional beneficiaries who though eligible for assistance under PMAY-G but are not included in the Permanent Wait List

(PWL) of PMAY-G. An app 'Awaas+' developed by MoRD is being used to upload details of such households. For this, the list is to be prepared by the Gram Panchayat which is to be approved by the State. Some of the local officials do express their concern over both inclusion and exclusion error if there is no proper verification of the list so prepared.

8.3. Sensitization

8.3.1. Sensitization of beneficiaries about a scheme related activities has been made part of the beneficiary support services in terms of helping the beneficiaries about housing designs, material procurement, the hiring of trained masons, checking the quality of construction material, grievance redressal, etc., apart from the initial administrative works. However, the majority of them were not sensitized with regard to material procurement, materials required at different stages, hiring of trained masons, checking the quality of construction materials, and grievance redressal, etc. (Fig. 4.7). This indicates that the beneficiaries are not given proper information and are mostly unaware of different aspects of the construction process.

8.3.2. The magnitude of sensitization is low due to multiple reasons such as shortage of staff, lack of information with the staff, etc. Many times, the beneficiaries were not given proper information and also, the beneficiaries were misled causing a delay in implementing the scheme. Lack of information about the convergence of different schemes has resulted in a low speed of convergence with schemes such as MGNREGS and SBM in specific.

8.3.3. Many block level administration units express their concern over the low ratio of staff and quantum of house sanctioned, which has made monitoring difficult. In many areas, local officials from different level were tagged with a specific house to monitor and sensitize. However, due to workload and infrastructure bottleneck, most of the times these dedicated staff could not deliver their services.

8.4. Lack of Information to the Banks

8.4.1. PMAY-G scheme offers another beneficiary support service by facilitating institutional finance up to Rs. 70,000. From the discussion with the government officials and beneficiary it was felt that the banks do not have much information about the provision of any such facility. Also, the attitude of banks towards lending to the beneficiaries is not very encouraging compelling them to go for informal sources. A few cases were reported during the survey that they were denied a formal loan for PMAY-G housing due to the risk of default. There is a need for proper information flow, and the district level officials

may need to take initiatives to explain features of the scheme to bankers and other formal financial sector stakeholders so that the access to formal credit could be made easy.

8.5. Monitoring and Geo-Tagging

8.5.1. The PMAY-G guidelines have made provision for a robust multi-level monitoring mechanism by multiple agencies with the use of technology. Monitoring of the physical progress of construction is done through geo-tagging by 'AwaasApp' along with ensuring the quality of construction. However, it was found that even though geo-tagging is done regularly, in many cases there was weak monitoring of the quality of construction as the officials responsible visit the construction site mostly for geo-tagging.

8.5.2. The quality of construction is to be monitored by the Technical Assistants (TAs) at the Block level, but there are instances where either there are no TAs or they do not visit the site fully include inside for monitoring. This affects the quality of construction as well as the completion of the houses in such places.

8.5.3. Geo-tagging being done on multiple levels is to monitor from time to time the physical progress of the construction of the house and is linked to the release of first and subsequent instalments. However, to achieve the targets and increase the completion rate, incomplete houses were also tagged as completed. In many houses, logos were painted on a chart paper and geo-tagged as completed even though the houses were not complete (Photo 8.2). Many sample houses during the survey visit were found incomplete although those had been tagged as completed in AwaasApp/AwaasSoft (Table 8.1).

Table 8.1: Time Gap from Date of Completion and Date of Interview for Houses which were found Incomplete during Field Visit.

State	PMAY-G Households	Mean (days)	Std. Dev. (days)	Minimum (days)	Maximum (days)
Assam	3	263	63	194	316
Madhya Pradesh	36	277	60	165	381
Odisha	14	276	84	155	435
Rajasthan	52	210	56	29	387
Uttar Pradesh	97	204	27	172	349
ALL	202	224	57	29	435

Source: Compiled from AwaasSoft and Field data

Photo 8.2: CIB/Logo Painted on Chart Paper for Geo- tagging

Chart paper CIB in Uttar Pradesh

Chart paper CIB in Uttar Pradesh

Source: AwaasSoft

8.5.4. Thus, there is over-reporting with regard to completed houses in order to achieve speedy completion as well as targets to avail incentives/rewards (Photo 4.2 and Photo 4.2.1).

8.6. **Mason-Training Programmes:**

8.6.1. Mason-Training Programme is another facility provided under the beneficiary support services. This is to ensure the availability of skilled masons and therefore, good quality of construction activities. However, the number of mason training programmes being organised are limited. Although Recognition of Prior Learning (RPL) program under rural mason training program is to assess and certify the individuals with prior learning experience, the program may be redesign to impart skill to new people. This would have addressed the shortage of trained masons in many areas, and consequently, resulting a speedy completion as well as better quality of construction.

8.7. **Issues about the implementation of convergence with different schemes**

8.7.1. Separate beneficiary lists for all schemes makes convergence sometimes challenging. For example, while PMAY-G, PMUY, and DDUGJY/Saubhagya beneficiaries are chosen from SECC 2011, and beneficiaries for SBM and NRDWP schemes are selected based on base line survey following 2011 Census. The PMAY-G beneficiaries may either be missing from the list of other schemes, or there might be a discrepancy in the name and other details. In the case of PMUY, the house must be registered in the name of women, which is not always the case.

8.7.2. The convergence of MGNREGS is also facing challenges as many beneficiaries either do not have a job card with them, or the job cards with which their houses are registered

could have been deleted. Many instances were found where the beneficiary has worked as unskilled labour but has not been provided MGNREGS wages for 90/95 days. There are also issues in many cases in generating the muster-roll sheet, and thereby the proportion of households who have received 90/95 days of employment found to be low.

8.7.3. As far as the construction of toilets is considered, it can be constructed with fund from SBM or MGNREGS. Beneficiaries receive a sum of Rs. 12,000 under SBM but in case the toilets are constructed through a fund from MGNREGS, the beneficiaries have to construct the toilet first, and then the fund for toilets is released to them. Also, the Gram Pradhans are reluctant to construct toilets under MGNREGS as a detailed estimate of the cost of labour and materials is to be made as per the Schedule of Rates, which found to exceed the cost of construction of toilets fixed at Rs.12,000. All these issues make convergence difficult. There also some mapping issues under different schemes posing challenges for convergence.

8.8. Leakage

8.8.1. Introduction of DBT system should have eliminated the involvement of stakeholders at different levels, which could have reduced misuse of funds. During the survey, it was observed in a few cases that despite DBT, there has been leakage of funds at the lower level even after crediting funds into beneficiary's account. It was found that a few beneficiaries had to pay some amount of money to local officials during geo-tagging, painting, creating muster rolls as well as during use of banking services.

8.8.2. The guidelines also allow the involvement of GP in constructing a house whenever the beneficiary (old/disabled) is unable to do/supervise their construction activities. During the field survey, a mix of experience was observed where in most cases GP officials found to have worked genuinely whereas, in few areas, some compromise with respect to the quality of construction is observed.

8.8.3. In few cases, wherever there is involvement of contractor i.e., unofficially assigned by the local officials in order to achieve speedy completion, and avoid divergence of money by the beneficiary households, the speed of construction was high, which makes beneficiary eligible for incentives from the state government.[18] It was found that the beneficiary needs to pay back these incentives to the contractors

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[18]A beneficiary gets Rs 20,000 if s/he completes within 4 months and Rs 10,000 if s/he completes within 6 months in the State of Odisha. A few contractors were also assigned by the beneficiaries themselves.

Fig. 8.1: MGNREGS Job Card status of PMAY-G Beneficiaries
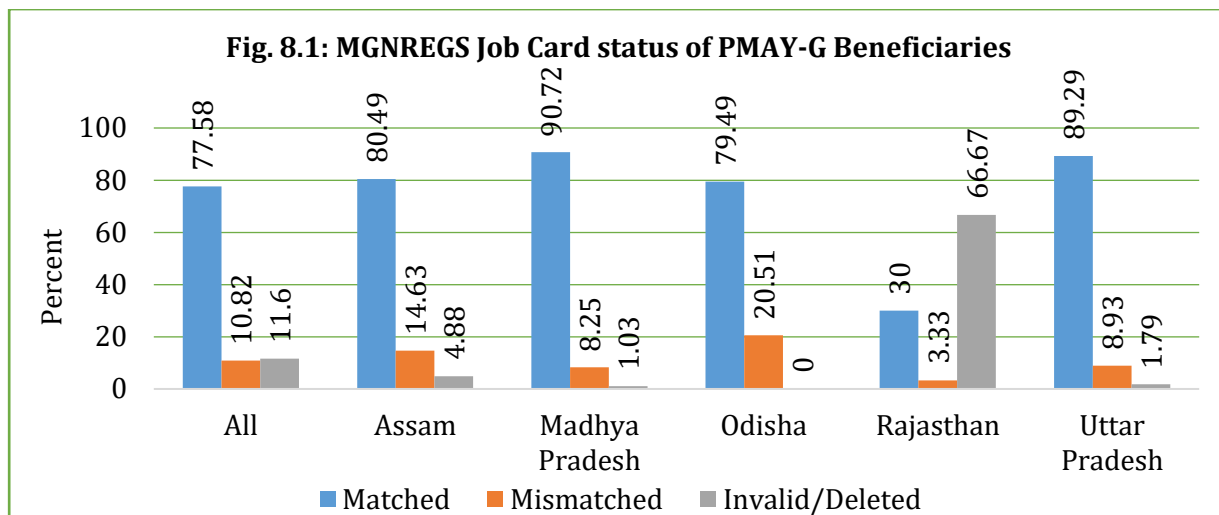
8.8.4. There are few instances where the job cards and the bank passbooks were not found with the beneficiaries, and it was reported that they are with the GP functionaries. This could encourage some fund leakage although it could not be observed. Comparing the job card uploaded in AwaasSoft and Physical Verification, about 10.82 per cent job cards were found as mismatched and 10.31 per cent as invalid (Fig. 8.1).

8.8.5. Similarly, there has been some money paid against the geo-tagging of physical progress of their construction and painting the CIB. About 15.98 per cent of the beneficiaries reported that they made payments for the geo-tagging of their houses, and 45.62 per cent of the beneficiaries paid for the painting of CIB (Fig. 8.2). At the State level, the proportion of households making payments for the geo-tagging is found to be the highest in Odisha (75.64%) followed by Madhya Pradesh (65.98%), and Rajasthan (53.33%)

Fig. 8.2: Payment made by PMAY-G beneficiaries for Geo-Tagging and painting CIB/ Logo
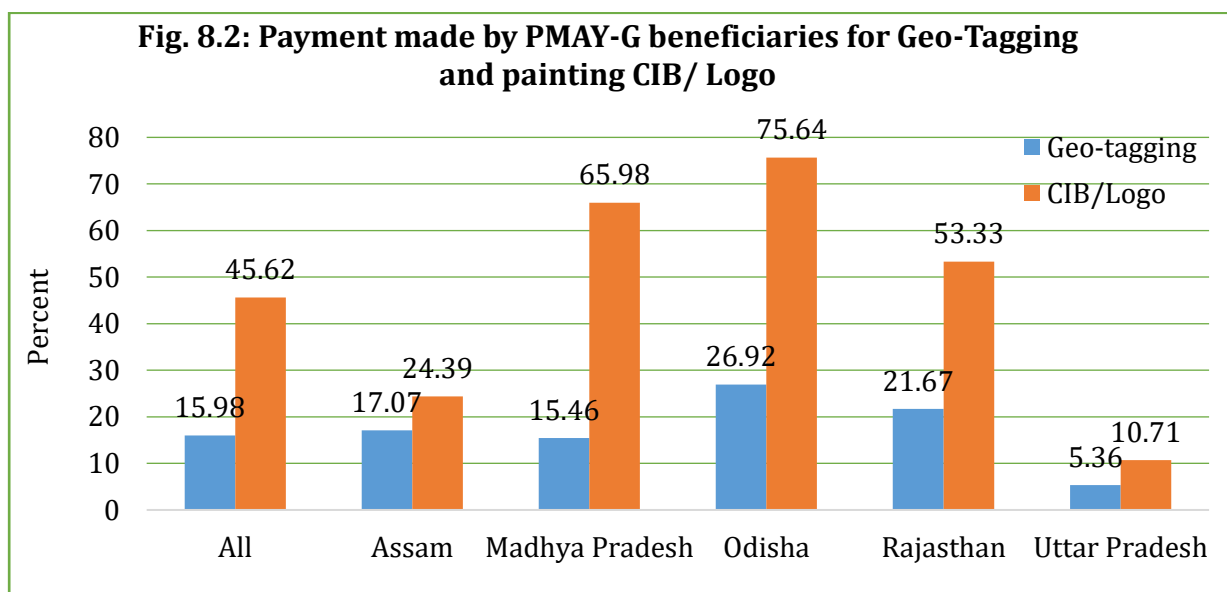
9.   Conclusions and Recommendations

9.1.   Conclusions

9.1.1. In this report, an attempt has been made to understand the micro impacts of implementation of PMAY-G houses on beneficiaries' livelihood. Here the report looks at both tangible as well as intangible benefits that the beneficiaries derived due to the construction of pucca house as well as other basic amenities provided as part of convergence. A survey was conducted in five selected states namely, Assam, Madhya Pradesh, Odisha, Rajasthan, and Uttar Pradesh using a semi-structured interview schedule. With the help of few control households in terms of non-beneficiaries (those include PMAY-G waitlisted and the beneficiaries of IAY) for some parameters and pre-post analysis for other parameters, and the survey comes out with some interesting findings.

9.1.2. It was observed that the quality of PMAY-G houses has certainly improved in all aspects of construction. Most of the PMAY-G households were found to be satisfied with the quantum of unit assistance provided for construction of the house as well as the quality of the house. Introduction of Direct Benefit Transfer (DBT) in the programme appeared to have improved the financial inclusion in rural areas. There has been an increase in the use of banking services among PMAY-G households as compared to non-PMAY-G households.

9.1.3. The pace of convergence with most of the Central and State sponsored schemes found to be better although efforts may be made for rapid convergence of DDUGJY and NRDWP schemes. It was reported that due to construction of toilets, a considerable reduction in open defecation post-PMAY-G house has been observed. This should lead to improved health status of the PMAY-G household members. While the majority of households still use firewood as the main source of fuel for cooking purpose, there has been a significant increase in the use of LPG gas among PMAY-G households. It is also reported that there has been an improvement in the schooling of children of the households post-PMAY-G period in terms of both enrolment and performance at school. It was also observed the scheme had intangible benefits in terms of improvement in dignity and safety that led to significant improvement in terms of social inclusion. However, separate beneficiary lists for all schemes makes convergence sometimes challenging, there should be some mechanism to check this.

9.1.4. Apart from intangible benefits, it was also observed that there is a significant increase in the mean expenditures which is mostly driven by an increased expenditure on food items post- PMAY-G as compared to the pre-PMAY-G house as well as compared to the control group of non-PMAY-G households, indicating an improved living standard.

9.1.5. However, it was observed that there are some discrepancies in terms of completed houses shown in the AwaasSoft and the status of houses at the ground level during the survey. In other words, there seems to be an over-reporting of physical progress. Some of these houses were observed without flooring, plastering, doors, windows, and paint as well. A few houses were also observed with cracks post completion of the PMAY-G construction, suggesting some compromise on the quality of construction by the implementing agencies.

9.2. Recommendations

9.2.1. Awareness regarding the PMAY-G program was spread through various mediums like print and electronic media, gram sabhas, PR officials etc. In order to increase the awareness, it is recommended that the other avenues and ways of information disbursement are explored like use of local language in print and electronic media, setting up of awareness camps and involvement of SHGs and civil society can be explored.

9.2.2. Sensitization of beneficiaries regarding housing designs, hiring of trained masons, checking the quality of materials, loan facilities, etc., was found to be low. It is recommended to organize sensitization programmes regarding the construction process at GP level in local language, and beneficiaries should be may be provided with user manuals either in print or audio forms with special focus on information regarding the good quality construction material.

9.2.3. The amount and number of instalments of unit assistance varied from state to state. It was observed that the higher the amount of first instalment, more the cases of diversion of funds to other uses and incomplete or delay in completion of construction. Also, beneficiaries with a large sum in the 1st instalment construct a larger foundation, but later on, they appear to face difficulties to complete their houses. Hence, it is recommended that the first instalment in some states may be rationalized.

9.2.4. During the Field Study, many houses were found incomplete even though those are shown as complete in the AwaasSoft. Here, it is suggested to devise a robust mechanism (parameters) while accepting and approving the geo-tagged photographs. Periodic visit

to randomly chosen houses may be undertaken by the higher authority to reduce such inconsistencies.

9.2.5. Visits by the Junior Engineer (JE)/Technical Assistants (TAs) may be made compulsory for quality assurance. It would also ensure fulfilling the minimum size of the house as few sample houses were constructed below the 25 sq.m. area, thus violating the guidelines.

9.2.6. In order to ensure the fund to the beneficiaries, states should ensure timely release of states' share and submission of the utilization of fund to the centre. There are also cases of false success (amount shown as credited to bank account at PFMS where in reality this is not the case). The technical loopholes in PFMS and AwaasSoft may be addressed.

9.2.7. The progress in terms of providing training to the rural masons has not been up to mark across the states. The government may focus on expediting rural mason training program as it directly affects the quality of construction and also fills the gap of skilled labour demand and supply.

9.2.8. For better convergence, communication among the line departments is very much required for solving the non-matching of the beneficiary list and other related issues. There are also issues in generation of muster-roll for MGNREGS convergence because of technical issues and this may be addressed for better convergence.

9.2.9. The beneficiary level data regarding the convergence of various schemes such as SBM, PMUY, etc., may be made available on the AwaasSoft (or synchronisation) to assess the implementation of the scheme. Further, it is also recommended to keep provision for accessing data (high-level progress reports) on a specific date for better tracking the progress of the scheme.

9.2.10. It is found that the construction of toilets through MGNREGS suffers from multiple problems like labour-material ratio, high construction cost of toilets, delays in instalments etc. Therefore, here we suggest to relook at the per unit assistance for the PMAY-G house, including the cost of toilet.

9.2.11. A few states such as Odisha is providing incentives for speedy completion of construction activities. The other states may also be encouraged to provide such incentives for the PMAY-G beneficiaries.

9.2.12. It was found during field study that the beneficiary had to pay some amount (transaction/service costs) to the banking correspondents/kiosk centres in some places

while making transactions. Awareness regarding this may be made, and the banks may be advised to avoid such instances.

9.2.13. Banks may be made aware of the provisions made in the PMAY-G guidelines regarding loan up to Rs 70,000 at DRI. The lack of awareness about the provision among banks officials was one of the reasons for less uptake of loans.

9.2.14. A significant proportion of PMAY-G households are still practicing open defecation even after having a personal toilet mostly due to water shortage as well as behavioural habits. Efforts may be made to increase awareness about the demerits of open defecation.

9.2.15. Although not quantified in the report, some amount of leakage occurs at the ground level. While the Framework for Implementation allows involvement of local officials in the construction activities in genuine case (for old and disabled beneficiaries), it is found that there was unnecessary involvement of local officials affecting the quality of construction of normal beneficiaries. A higher level of community awareness on the program provisions is desired in order to avoid such incidents at the ground level. In order to ensure high quality of construction, provision may be made for third party quality inspections.

9.2.16. The grievance redressal aspect of the programme was found to be limited/weak. Madhya Pradesh has been successful by a greater extent through their helpline number managed and monitored at state level. The other states may take up such initiatives for filing complaints and grievance redressal.

9.2.17. Shortage of technical and general manpower puts a lot of burden on the existing staff that hampers the proper execution. One block coordinator and GRS are in-charge of many GPs and villages, which makes it difficult to make frequent visits to the site and supervise the construction process. It is suggested to increase the number of field staff (may be as contractual) for timely supervision as well as completion of the houses.

9.2.18. It is suggested to provide training and comprehensive manuals entailing the process of using the app and the website to the concerned officials. Frequent changes in the applications, i.e., AwaasSoft and AwaasApp, take time to adapt and may slow down the pace of implementation if the officials lack knowledge. Periodic meetings via video conferencing of the technical staff at the district level with the technical expert at NIC may be very useful to keep the officials updated about the new features of AwaasSoft and AwaasApp.

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Annexures

Annexure 2.a: The State-wise Estimated Sampling Distribution

State	PMAY-G house	Proportion of state in the 5 states Total	Equal distribution of half of sample	Proportionate distribution of remaining sample	Total PMAY-G	PMAY-G Proportion of state in sample	Proportionate distribution of Non-PMAY-G	Total
Assam	16408	0.008	39	2	41	0.11	12	53
Madhya Pradesh	605816	0.304	39	58	96	0.25	29	126
Odisha	371862	0.187	39	35	74	0.19	22	97
Rajasthan	225919	0.113	39	22	60	0.16	18	79
Uttar Pradesh	771748	0.387	39	73	112	0.29	34	146
Total	1991753		195	190	**385**		**116**	**500**

Source: NIPFP Field Study, 2018

Annexure 2.b. Distribution of Completed PMAY-G Households across gender and Social Groups

State Name	Year	Completed	Women	Men	Joint (Wife and Husband)	ST	SC	Minorities	PH	Others
Assam	2016-17	161971	27.11	41.79	31.10	37.20	18.94	20.74	0.22	43.85
	2017-18	24780	20.37	39.35	40.27	39.40	11.46	36.93	0.13	49.14
	2018-19	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Madhya Pradesh	2016-17	422491	19.59	56.52	23.87	44.03	22.09	0.91	0.36	33.88
	2017-18	367584	15.27	56.04	28.69	35.33	21.90	1.15	0.47	42.76
	2018-19	527124	11.02	52.36	36.62	38.94	20.07	1.41	0.22	40.98
Odisha	2016-17	352551	30.49	42.62	26.88	34.96	24.59	1.61	0.18	40.45
	2017-18	290601	23.22	41.87	34.92	39.81	19.26	0.77	0.16	40.93
	2018-19	194788	20.97	40.44	38.59	39.96	18.26	0.72	0.13	41.71
Rajasthan	2016-17	241234	59.76	23.24	16.98	44.47	19.65	4.38	0.18	35.88
	2017-18	211529	52.86	28.91	18.22	39.01	22.32	5.67	0.18	38.67
	2018-19	193132	51.50	29.05	19.45	36.21	25.15	5.23	0.11	38.60
Uttar Pradesh	2016-17	559189	32.88	35.47	31.59	1.29	58.07	16.34	0.11	40.64
	2017-18	380251	28.64	37.40	33.95	1.13	40.27	11.94	0.06	58.60
	2018-19	304850	26.55	37.48	35.97	0.40	5.57	6.67	0.03	94.03
All	2016-17	3594841	32.14	34.80	33.05	24.86	31.82	12.37	0.23	43.32
	2017-18	2524129	26.94	37.45	35.60	24.04	26.31	11.66	0.20	49.65
	2018-19	2209284	22.25	35.97	41.78	26.60	24.22	9.40	0.09	49.13
	2016-18	8328254	27.94	35.91	36.14	25.08	28.14	11.37	0.19	46.78

Source: AwaasSoft, as on 22 August 2019.

Annexure 3.a: Age Profile of the Sample Households across States across States (%)

State	Households Group	Age Groups (Years)						ALL	
		Below 30	30-40	40-50	50-60	60-70	70+		
Assam	Non	21.43	14.29	14.29	14.29	28.57	7.14	100	(14)
	PMAYG	0.00	24.39	31.71	19.51	14.63	9.76	100	(41)
Madhya Pradesh	Non	11.11	33.33	29.63	7.41	18.52	0	100	(27)
	PMAYG	17.53	20.62	28.87	19.59	7.22	6.19	100	(97)
Odisha	Non	12.5	29.17	29.17	12.5	12.5	4.17	100	(24)
	PMAYG	11.54	29.49	17.95	15.38	12.82	12.82	100	(78)
Rajasthan	Non	29.41	29.41	11.76	17.65	5.88	5.88	100	(17)
	PMAYG	26.67	31.67	31.67	6.67	1.67	1.67	100	(60)
Uttar Pradesh	Non	3.13	28.13	31.25	15.63	12.5	9.38	100	(32)
	PMAYG	13.39	34.82	25.89	13.39	8.04	4.46	100	(112)
Total	Non	13.16	28.07	25.44	13.16	14.91	5.26	100	(114)
	PMAYG	14.69	28.61	26.55	14.95	8.51	6.70	100	(388)
	All	14.34	28.49	26.29	14.54	9.96	6.37	100	(502)

Note: Figures in the parentheses represent sample size

Source: NIPFP Field Study, 2018

Annexure 3.b: Education Profile of the PMAY-G Beneficiaries and Non-Beneficiaries across States (%)

State	Households Group	Education Group				All	
		Illiterate	Primary	Middle	High school and Above		
Assam	Non	28.57	28.57	35.71	7.14	100	(14)
	PMAYG	51.22	19.51	12.2	17.07	100	(41)
Madhya Pradesh	Non	88.89	0.00	7.41	3.7	100	(27)
	PMAYG	76.29	1.03	19.59	3.09	100	(97)
Odisha	Non	41.67	8.33	29.17	20.83	100	(24)
	PMAYG	58.97	10.26	20.51	10.26	100	(78)
Rajasthan	Non	64.71	0.00	29.41	5.88	100	(17)
	PMAYG	81.67	3.33	11.67	3.33	100	(60)
Uttar Pradesh	Non	84.38	0.00	6.25	9.38	100	(32)
	PMAYG	67.86	5.36	21.43	5.36	100	(112)
Total	Non	66.67	5.26	18.42	9.65	100	(114)
	PMAYG	68.56	6.44	18.3	6.7	100	(388)
	All	68.13	6.18	18.33	7.37	100	(502)

Note: Figures in the parentheses represent sample size

Source: NIPFP Field Study, 2018

Annexure 4.a: Percentage Distribution of types of Roofing in PWL, IAY and PMAY-G Houses

Roofing		CGI Sheet	RCC	Kutcha	Sand Stone	Asbestos	Total	Chi-Square	Pr-Value
Assam	PWL	2	0	10	0	0	12	43.80	0.000
		(16.67)	(0)	(83.33)	(0)	(0)	(100)		
	IAY	2	0	0	0	0	2		
		(100)	(0)	(0)	(0)	(0)	(100)		
	PMAY-G	41	0	0	0	0	41		
		(100)	(0)	(0)	(0)	(0)	(100)		
Madhya Pradesh	PWL	1	0	15	0	2	18	124.00	0.000
		(5.56)	(0)	(83.33)	(0)	(11.11)	(100)		
	IAY	1	5	0	1	2	9		
		(11.11)	(55.55)	(0)	(11.11)	(22.22)	(100)		
	PMAY-G	0	92	0	5	0	97		
		(0)	(94.85)	(0)	(5.15)	(0)	(100)		
Odisha	PWL	3	0	11	0	2	16	122.97	0.000
		(18.75)	(0)	(68.75)	(0)	(12.50)	(100)		
	IAY	3	1	0	1	3	8		
		(37.5)	(12.5)	(0)	(12.50)	(37.50)	(100)		
	PMAY-G	0	78	0	0	0	78		
		(0)	(100)	(0)	(0)	(0)	(100)		
Rajasthan	PWL	0	0	10	0	3	13	72.25	0.000
		(0)	(0)	(76.92)	(0)	(23.08)	(100)		
	IAY	1	0	1	0	2	4		
		(25)	(0)	(25)	(0)	(50)	(100)		
	PMAY-G	17	12	0	17	14	60		
		(28.33)	(20)	(0)	(28.33)	(23.33)	(100)		
Uttar Pradesh	PWL	0	0	18	0	1	19	148.17	0.000
		(0)	(0)	(94.74)	(0)	(5.26)	(100)		
	IAY	1	6	0	0	6	13		
		(7.69)	(46.15)	(0)	(0)	(46.15)	(100)		
	PMAY-G	0	111	0	1	0	112		
		(0)	(99.11)	(0)	(0.89)	(0)	(100)		
Total	PWL	6	0	64	0	8	78	466.55	0.000
		(7.69)	(0.00)	(82.05)	(0)	(10.26)	(100)		
	IAY	8	12	1	2	13	36		
		(22.22)	(33.33)	(2.78)	(5.56)	(36.11)	(100)		
	PMAY-G	58	293	0	23	14	388		
		(14.95)	(75.51)	(0.00)	(5.93)	(3.61)	(100)		

Source: NIPFP Field Study, 2018

Annexure 4.b: Satisfaction of PMAY-G Beneficiaries with Unit Assistance (%)

Satisfaction from Unit Assistance	Assam	Madhya Pradesh	Odisha	Rajasthan	Uttar Pradesh	Total
1	41.46	67.01	74.36	25.00	67.86	59.54
2	58.54	27.84	21.79	61.67	27.68	35.05
3	0.00	5.15	3.85	13.33	4.46	5.41
Total	100.00	100.00	100.00	100.00	109.00	100.00

Source: NIPFP Field Study, 2018

Annexure 4.c: Satisfaction with Quality of Construction of PMAY-G Beneficiaries (%)

Quality of Construction	Assam	Madhya Pradesh	Odisha	Rajasthan	Uttar Pradesh	Total
Very Satisfied	60.98	85.57	65.38	55.00	79.46	72.42
Moderately Satisfied	36.59	13.40	33.33	35.00	19.64	25.00
Dissatisfied	2.44	1.03	1.28	10.00	0.89	2.58
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: NIPFP Field Study, 2018

Annexure 4.d. Mismatch in Job Cards across Sample States

State	Matched	Mismatched	Invalid	Deleted	Total
Assam	80.49	14.63	0	4.88	100
	(33)	(6)	(0)	(2)	(41)
Madhya Pradesh	90.72	8.25	0	1.03	100
	(88)	(8)	(0)	(1)	(97)
Odisha	79.49	20.51	0	0	100
	(62)	(16)	(0)	(0)	(78)
Rajasthan	30	3.33	66.67	0	100
	(18)	(2)	(40)	(0)	(60)
Uttar Pradesh	89.29	8.93	0	1.79	100
	(100)	(10)	(0)	(2)	(112)
Total	77.58	10.82	10.31	1.29	100
	(301)	(42)	(40)	(5)	(388)

Note: Figures in the parentheses represent sample size
Source: NIPFP Field Study, 2018

Annexure 4.e: Convergence of MGNREGS and PMUY with PMAY-G (as on 31 March 2018)

States	Completed House	PMUY (%)	MGNREGS (%)
Assam	16408	84.51	41.91
Madhya Pradesh	605816	78.29	88.81
Odisha	371862	87.20	58.99
Rajasthan	61997	94.16	85.12
Uttar Pradesh	771748	89.27	60.42
ALL	1827831	85.33	70.21

Source: Compiled from the AwaasSoft data received from NIC, Ministry of Rural Development.

Annexure 4.f: Time Taken for Release of Instalment in Each Construction Stage

Year	Adm. Sanctioned to Order Sheet Generation			Order sheet to FTO Generation			Adm. Sanctioned to FTO Generation		
India	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
2015-16	32		27	27		18	59		45
2016-17	24	19	11	14	24	8	38	43	18
2017-18	15	5	4	7	7	6	22	12	10
2018-19	16	5	8	5	10	5	21	15	13
Assam									
2015-16	15		71	19		16	34		87
2016-17	26	44	29	11	4	6	37	48	36
2017-18	7	16	5	5	11	5	12	27	10
2018-19	NA	NA	NA	NA	NA	NA	NA	NA	NA
MP									
2015-16	131		12	28		13	158		26
2016-17	29	5	2	14	10	6	43	15	9
2017-18	10	2	2	9	5	9	19	7	11
2018-19	13	3	1	12	6	4	26	9	6
Odisha									
2015-16	8		6	21		24	29		29
2016-17	9	8	7	17	9	6	26	17	13
2017-18	23	2	6	5	5	4	28	7	10
2018-19	28	12	19	3	5	5	31	16	23
Rajasthan									
2015-16	7	11	24	34	31	45			
2016-17	36	8	10	17	82	6	53	89	17
2017-18	23	3	5	9	4	5	32	7	10
2018-19	20	4	7	4	4	4	24	8	10
UP									
2015-16	4		39	49		9	53		48
2016-17	18	30	4	13	18	13	31	47	17
2017-18	12	3	1	7	9	10	19	12	11
2018-19	3	1	4	2	27	9	5	28	13

Source: Compiled from the data available in Awaassoft.

Annexure 7.a: Percentage Distribution of Falling Ill for Common Diseases

States	Households	Viral Fever	Cough and Cold	Skin Allergies	Diarrhoea
Total	Pre-PMAY-G	77.06 (299)	58.76 (228)	27.83 (108)	31.07 (123)
	Post PMAY-G	61.85 (240)	42.26 (164)	17.52 (68)	18.55 (72)
Assam	Pre-PMAY-G	87.80 (36)	87.80 (36)	34.15 (14)	31.71 (13)
	Post-PMAY-G	82.93 (34)	70.73 (29)	24.39 (10)	17.07 (7)
Madhya Pradesh	Pre-PMAY-G	74.23 (72)	53.61 (52)	30.93 (30)	36.08 (35)
	Post-PMAY-G	47.42 (46)	27.84 (27)	15.46 (15)	22.68 (22)
Odisha	Pre-PMAY-G	84.62 (66)	71.79 (56)	39.74 (31)	39.74 (31)
	Post-PMAY-G	75.64 (59)	60.26 (47)	28.21 (22)	26.92 (21)
Rajasthan	Pre-PMAY-G	48.33 (29)	25.00 (15)	6.67 (4)	11.67 (7)
	Post-PMAY-G	45.00 (27)	25.00 (15)	3.33 (2)	8.33 (5)
Uttar Pradesh	Pre-PMAY-G	85.71 (96)	61.61 (69)	25.89 (29)	33.04 (37)
	Post-PMAY-G	66.07 (74)	41.07 (46)	16.96 (19)	15.18 (17)

Note: The row total percentage would not add up to 100% as a respondent opted for multiple responses.
Source: NIPFP Field Study, 2018

Annexure 7.b: Percentage distribution of Sources of Water used

States	Households	Drinking and Cooking						Other Purpose					
		Piped Water/ Tap	Common Tap	Wells	Tube well/ Hand pump/ Tankers	River/ Lake/ Canal	Other	Piped Water/ Tap	Common Tap	Wells	Tube well/ Hand pump/ Tankers	River/ Lake/ Canal	Other
Assam	Pre-PMAY-G	0.00	14.63	21.95	43.90	14.63	4.88	0.00	12.20	24.39	43.90	14.63	4.88
	Post-PMAY-G	0.00	14.63	19.51	48.78	12.20	4.88	0.00	12.20	21.95	48.78	12.20	4.88
	Non-PMAY-G	0.00	7.14	14.29	64.29	14.29	0.00	0.00	0.00	28.57	57.14	14.29	0.00
Madhya Pradesh	Pre-PMAY-G	14.43	15.46	18.56	51.55	0.00	0.00	10.31	13.40	16.49	58.76	1.03	0.00
	Post-PMAY-G	20.62	14.43	13.40	51.55	0.00	0.00	14.43	12.37	13.40	58.76	1.03	0.00
	Non-PMAY-G	37.04	3.70	25.93	33.33	0.00	0.00	37.04	3.70	29.63	29.63	0.00	0.00
Odisha	Pre-PMAY-G	1.28	0.00	6.41	89.74	2.56	0.00	0.00	0.00	3.85	57.69	35.90	2.56
	Post-PMAY-G	1.28	1.28	3.85	91.03	2.56	0.00	0.00	1.28	2.56	58.97	34.62	2.56
	Non-PMAY-G	0.00	4.17	0.00	95.83	0.00	0.00	0.00	0.00	0.00	33.33	62.50	4.17
Rajasthan	Pre-PMAY-G	5.00	5.00	5.00	80.00	3.33	1.67	6.67	3.33	5.00	80.00	3.33	1.67
	Post-PMAY-G	5.00	5.00	3.33	80.00	3.33	3.33	8.33	3.33	5.00	78.33	3.33	1.67
	Non-PMAY-G	11.76	5.88	0.00	82.35	0.00	0.00	11.76	5.88	0.00	82.35	0.00	0.00
Uttar Pradesh	Pre-PMAY-G	0.89	1.79	0.00	87.50	0.00	0.00	6.25	5.36	0.00	88.39	0.00	0.00
	Post-PMAY-G	7.14	5.36	0.00	87.50	0.00	0.00	6.25	5.36	0.00	88.39	0.00	0.00
	Non-PMAY-G	15.63	6.25	3.13	75.00	0.00	0.00	15.63	6.25	3.13	75.00	0.00	0.00
Total	Pre-PMAY-G	6.70	7.73	9.02	73.20	2.58	0.77	5.41	6.70	8.25	68.81	9.54	1.29
	Post-PMAY-G	8.25	7.73	6.70	73.97	2.32	1.03	4.38	1.03	3.35	15.98	4.38	1.29
	Non-PMAY-G	14.91	5.26	8.77	69.30	1.75	0.00	22.81	22.81	23.68	235.96	30.70	0.88

Source: NIPFP Field Study, 2018

Annexure 7.c: Percentage Distribution of Source of LPG Connection

		No Connection	Provided by Government	Self-Arranged	Chi-Square	Pr-Value
Assam	**Non-PMAY-G**	50.00 (7)	42.86 (6)	7.14 (1)	0.0579	0.971
	PMAY-G	46.34 (19)	46.34 (19)	7.32 (3)		
Madhya Pradesh	**Non-PMAY-G**	33.33 (9)	66.67 (18)	0.00 (0)	1.5108	0.47
	PMAY-G	34.02 (33)	60.82 (59)	5.15 (5)		
Odisha	**Non-PMAY-G**	50.00 (12)	41.67 (10)	8.33 (2)	3.2987	0.192
	PMAY-G	57.69 (45)	41.03 (32)	1.28 (1)		
Rajasthan	**Non-PMAY-G**	47.06 (8)	52.94 (9)	0.00 (0)	1.2423	0.537
	PMAY-G	46.67 (28)	46.67 (28)	6.67 (4)		
Uttar Pradesh	**Non-PMAY-G**	43.75 (14)	46.88 (15)	9.38 (3)	6.2892	0.043
	PMAY-G	22.32 (25)	58.04 (65)	19.64 (22)		
Total	**Non-PMAY-G**	43.86 (50)	50.88 (58)	5.26 (6)	2.1564	0.34
	PMAY-G	38.66 (150)	52.32 (203)	9.02 (35)		

Note: Figures in the parentheses represent sample size
Source: NIPFP Field Study, 2018

Annexure 7.d: Percentage Distribution of Sources of Fuel used by PMAY-G and Non- PMAY-G Beneficiaries

Fuel Type	Cooking Food						Other		
	Main Source			Secondary Source					
	Pre-PMAY-G	Post-PMAY-G	Non-PMAY-G	Pre-PMAY-G	Post-PMAY-G	Non-PMAY-G	Pre-PMAY-G	Post-PMAY-G	Non-PMAY-G
Firewood/ Thatch	80.41 (312)	56.96 (221)	67.54 (77)	69.33 (269)	55.15 (214)	61.40 (70)	82.73 (321)	78.61 (305)	71.93 (82)
Cow Dung Cakes	0.77 (3)	0.77 (3)	4.39 (5)	9.54 (37)	8.25 (32)	7.89 (9)	10.05 (39)	10.05 (39)	11.40 (13)
Kerosene	1.29 (5)	1.55 (6)	0.88 (1)	10.05 (39)	9.54 (37)	3.51 (4)	5.67 (22)	5.15 (20)	3.51 (4)
Coal	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.26 (1)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Bio-gas	0.00 (0)	0.00 (0)	0.88 (1)	0.26 (1)	0.26 (1)	1.75 (2)	0.00 (0)	0.00 (0)	0.00 (0)
LPG/ Piped gas	17.53 (68)	40.72 (158)	26.32 (30)	10.82 (42)	26.55 (103)	25.44 (29)	1.55 (6)	6.19 (24)	13.16 (15)

Note: Figures in the parentheses represent sample size
Source: NIPFP Field Study, 2018

Annexure 7.e: Face Difficulty in LPG Refilling

Face Difficulty	Assam		Madhya Pradesh		Odisha		Rajasthan		Uttar Pradesh		Total	
	PMAY-G	Non-PMAY-G	PMAY-G	Non-PMAY-G	PMAY-G	Non-PMAY-G	PMAY-G	Non-PMAY-G	PMAY-G	Non-PMAY-G	PMAY-G	Non-PMAY-G
Yes	26.83 (11)	35.71 (5)	37.36 (34)	51.85 (14)	19.23 (15)	37.50 (9)	43.33 (26)	35.29 (6)	41.96 (47)	25.00 (8)	34.28 (133)	36.84 (42)
No	26.83 (11)	14.29 (2)	32.97 (30)	14.81 (4)	23.08 (18)	12.50 (3)	10.00 (6)	17.65 (3)	35.71 (40)	31.25 (10)	27.06 (105)	19.30 (22)
Not Applicable	46.34 (19)	50.00 (7)	36.26 (33)	33.33 (9)	57.69 (45)	50.00 (12)	46.67 (28)	47.06 (8)	22.32 (25)	43.75 (14)	38.66 (150)	43.86 (50)

Note: Figures in the parentheses represent sample size
Source: NIPFP Field Study, 2018

Interview Schedule for PMAY-G Beneficiaries

Project: "Evaluation of Governance Parameters of Pradhan Mantri Awaas Yojana – Gramin (PMAY-G)"

(Confidential & for Research Purpose only)

Part A: General Details

BENEFICIARY CODE											

Date	
State	
District	
Block	
GP	
Village/Town	
Interviewer Name	
Interviewer Signature	
Result of the Visit :	Finished/Postponed/Unresponsive

Part B: Identification Details

Name of the respondent	
Name of Beneficiary	
PMAY-G Beneficiary registration number	
Year of Sanction	
Social Category	SC/ ST / OBC / Minority / General
PMAY-G house registered under	Husband/Wife/Joint/Others (……………..)
Contact No.	

Part C: Details of the Households

S.No	Relationship	Age	Gender M = 1 F = 0	Education (in Years)	Occupation	No. of days of employment (in an year)	Annual Income (INR)

Relationship with Beneficiary: Self = 1; Wife = 2; Husband = 3; Father = 4; Mother = 5; Son = 6; Daughter =7; Others = 15

Education: Never been to school= 0; Graduation and above= 13

Occupations: Not Working = 0, Own farm activities = 1; Farm labour = 2; Other wage labour = 3; Petty business/trade/ manufacturing = 4; Mason=5 Construction labour = 6; House wife= 7; School or College = 98; others = 15 please specify………………

To be physically observed by the interviewer:
a) Whether the beneficiary has a job card, ATM card/Rupay Card and a pass book
b) Pass book last updated on……………………………………………………………………………….
c) If job card is available, specify the job card number……………………………………………………...
d) If not, with whom is it and for how long………………………………………………………………….
e) In case of a common job card, did you apply for a new job card after the disintegration of the family?

(Yes = 1; No = 0)

f) Does the house have a Citizen Information Board (CIB) / (logo)? (Yes = 1; No = 0)

Part D: Access to Facilities

Facilities	Distance
Primary School	
Middle School	
Senior Secondary School	
Anganwadi Centre (AWC)	
Primary Health Care (PHC) Centre	
Community Health Centre (CHC) or District Hospital	
Private Doctor	
Quacks/ Hakeem	
Public Distribution System (PDS) Shop	
Bank	
Panchayat office	
Market	
LPG re-filling stations	
Nearest Pucca Road	

Distance: Less than 0.5 km = 1; 0.5-3 km = 2; 3-10 km = 3; More than 10km = 4

Part E: Awareness Regarding the Programme (Note: * Can mark multiple answers)

1. How did you get to know about PMAY-G scheme?*

    a) Newspaper/ Radio/TV
    b) Neighbours
    c) Gram Sabha
    d) PR officials
    e) Others (please specify) …………………………………………………………………………..

2. How did you get to know that you were selected?*

    a) Neighbours
    b) Gram Sabha
    c) PR officials
    d) List displayed on walls
    e) Others (please specify)…………………………………………………………………………..

3. Were you aware about the following:

Awareness	Yes = 1; No = 0
Eligibility criteria for a beneficiary for a PMAY-G house/SECC?	
Permanent Wait List and have you seen that list?	
Unit Assistance (1.20/1.30 lakh)	
Loan up to Rs 70,000/- at Differential Rate of Interest (4 per cent)	

4. Are you satisfied with the unit assistance provided by the government to construct the house of 25 sq.m. keeping in view the cost of material and labour?

   #Code: Very Satisfied=1; Moderately Satisfied-2; Dissatisfied-3

   (If ans. =3, specify the reasons……………………………………………………………………………)

5.1 Did any of the family members get a house under any other housing scheme?   (Yes = 1, No = 0)

5.2 If yes, who amongst the following got the house

   a) Mother/Father
   b) Brother
   c) Sister
   d) Son

5.3 Please specify the scheme ………………………………………………………………………...

6. Where were you living prior to the construction of PMAY-G house?

   a) Homeless
   b) Rented Kutcha house
   c) Own kutcha house
   d) Parents/Relatives/Extended family
   e) Employer provided house
   f) Community Shelter
   g) Others please specify…………………………………………………………………………..

7. Whether the land on which your PMAY-G house is located *(Question No. 8 can be skipped if the response is b)*

   a) Constructed on government issued land
   b) Belongs to you

8. Was there a delay in obtaining a land for the construction of your house?   (Yes = 1; No = 0)

9. Do you think local authorities influenced the selection of beneficiary?   (Yes = 1; No = 0; Can't say = 2)

10.1 Were you sensitized or given any guidance about the whole construction process?   (Yes = 1; No = 0)

10.2 If yes, then for which process?*
   a) Housing designs
   b) Material procurement
   c) Hiring trained masons
   d) Requirement of material at different stages of construction
   e) Checking the quality of the construction material
   f) Grievances
   g) Other, (Please specify)……………………………………………………………………….

Part F: Quality of the house

11. Were you shown/given any housing designs or did you construct the house using your own design?
    a) House design given by Gram Sabha
    b) Own Design

12. What is the approximate area of your house? Please specify …………………………………………………..

13. How many doors, windows & ventilators are there in your house? Door =   ; Window =   ; Ventilators =

14. What materials did you use for the construction of your house?* (with approx. quantities & Expenditure)

Materials	Quantity	Expenditure (Rate)
Cement		
Stone Chips (Aggregate)		
Burnt Bricks/ Fly ash/ Laterite Blocks		
Steel		
Sand/ Mud		
Bamboo		
Sand Stone		
CGI sheet		
Asbestos		
Lime/Distemper/Paint		
Tiles		
Others………………………		
Type of Roof: RCC: CGI sheet:		

15. Who procured the construction material?*

    a) Self
    b) Provided by Gram Panchayat
    c) Through Self Help Groups (SHGs)
    d) Others, please specify…………………………………………………………………………………..

16. Where did you get the construction material from?*

    a) Local/Nearby shops
    b) Provided by Gram Panchayat
    c) Through SHGs
    d) Through MGNREGA, specify the materials……………………………………………………...........
    e) Others, Specify………………………………………………………………………………………….

17. Did you check the quality of the construction material before purchasing the material?

    (Yes = 1; No = 0; Didn't know how to check the quality = 2)

18. Did you check the price of the construction material before purchasing the material?   (Yes = 1; No = 0)

19. How did you hire masons and unskilled labour?

    a) Gram Panchayat
    b) Own
    c) Any other

20. How many workers did you hire?

Labour	Number of Labour	Number Of Days	Cost / Wages (Per day)
Skilled (Masons)			
Unskilled (I) Self/Family members (II) Others			
Carpenter			

21. Who paid the wages to the labour?

        a) Self
        b) GP officials
        c) Others, Specify…………………………………………….

22. What difficulties did you face while hiring masons and unskilled labour?*

        a) Shortage of masons and unskilled labour in the area
        b) High wages
        c) Un-trained mason
        d) Poor attitude towards work
        e) Did not face any problem

23. What was your role in the construction of house? *(Question No. 24 can be skipped if the answer is b, c or d)*

        a) Skilled Labour/ Mason
        b) Unskilled Labour
        c) Supervisor
        d) None

24. If you are a mason, did you receive any prior training on masonry work?   (Yes = 1; No = 0)

25. In which month did you shift to your PMAY-G house? Please specify…………………………………….

26.1 Did you get any incentive for early completion of your house?   (Yes = 1; No = 0)

26.2 If yes, how much? Please specify……………………………………………………………………….

27.1 Since the construction of your PMAY-G house, are there any damages like cracks/ falling cement?

    (Yes = 1; No = 0)

27.2 Did you incur any repairing expenses?   (Yes = 1; No = 0)

28. For what purpose do you use your kutcha house since you have a PMAY-G house now?
        a) Other members are still residing in the kutcha house
        b) As a cattle shed
        c) Storage purpose
        d) For other economic activities
        e) For other household activities
        f) Not using the kutcha house

29. Are you satisfied with the quality of construction of your house?   (Quesi*on no. 30 can be skipped if the answer is 1or 2)*

        Very Satisfied = 1; Moderately Satisfied = 2; Not satisfied = 3

30. If not satisfied, what were your expectations?

....

Part G: Fund Flow and Financial Inclusion

31. Financial Inclusions

		Pre PMAY-G (Yes-1, No-0)	During PMAY-G (Yes-1, No-0)	Post PMAY-G (Yes-1, No-0)
A.1	Account in the Bank			
A.2	No. of Accounts			
B.1	ATM card			
B.2	No. of cards			
C.	Availed Banking Facilities			
(I) Withdrawal:	ATM card			
	Withdrawal Slip			
	Cheque			
(II) Deposit				
(III) Loan				
(IV) Any other banking facilities if availed, please specify				

32. How much amount did you utilize for the foundation…………………………………………………….

33. Who withdrew the instalments? (*Question No. 34 can be skipped if the answer is option a*)

 a) Self
 b) Someone else did on my behalf

34. What are the reasons for not withdrawing the instalments yourself? Please specify

……..

……..

35. Did you pay anyone voluntarily in order to withdraw the instalment money?   (Yes = 1; No = 0)

36. After how long are the first, second, third and fourth (if applicable) instalments issued after geo-tagging? *(to be filled from AwaasSoft)*

Item	Date of issue/credit
Sanctioned	
First Instalment	
Second Instalment	
Third Instalment	
Fourth Instalment	
Completed	

#Code: Within a week after geo tagging-1; within 15 days of geo-tagging-2; 15-30 days of geo-tagging-3; more than a month-4

37. Did you spend any amount of PMAY-G money for any other purpose?   (Yes = 1; No = 0)

38. Do you receive messages on your mobile from the bank with regard to any transactions from your account?

(Yes = 1; No = 0)

39. How did you get to know about that the instalments have been received in your account?

    a) SMS
    b) Checked with the bank
    c) GP officials
    d) Neighbours
    e) Any other, please specify

40.1. Did you face any problem in getting the instalments?   (Yes=1; No=0)

40.2. If yes, what kind of problems?

    a) Transaction cost is high
    b) Reluctance/ non-cooperation by the banking staff
    c) Non-cooperation of the GP or Block officials for geo-tagging
    d) Network issues in banks
    e) Any other, please specify

41. How much money did you invest in the house from your own savings? Rs……………………………………..

42. Did you avail any loan over & above the assistance provided under PMAY-G?   (Yes = 1; No = 0)

43. Give details on any loans?* *(Question No. 44 can be skipped if responses are among formal sources)*

Source of Borrowing	Amount		Rate of Interest (%)
A. **Formal Sources**	**PMAY-G**	**Others**	
i. Banks			
ii. Micro-Credit Organizations/Cooperatives			
iii. Self Help Groups (SHGs)			
B. **Informal Sources**			
i. Money lenders			
ii. Neighbours			
iii. Relatives			

44. Why did you avail loan from informal source?*
    a) Less paper work
    b) Easy repayment
    c) Unwillingness of the banks/formal sources
    d) Loan denied by the banks/formal sources
    e) Lower interest rate
    f) Inaccessibility
    g) Any other

45. Do you think after the construction of your house, is it easier for you to get loans from banks?
        (Yes = 1; No = 0; cannot say = 2)

Part H: Monitoring and Grievance Redressal

46.1 Did anyone come for monitoring while your house was being constructed?   (Yes = 1; No = 0)
46.2 If yes, how often?

    a) Every week
    b) Every 2 weeks
    c) At the time of geo-tagging

47. Did you willingly pay anyone for geo-tagging? (Rs. ……………………..)   (Yes = 1; No = 0)

48. Did you willingly pay anyone to get the CIB/logo painted? (Rs. ……………………..)   (Yes = 1; No = 0)

49. Was there any delay in completing the house?   (Yes = 1; No = 0)

50.1 Did the construction work stop at any point of time?   (Yes = 1; No = 0)

50.2 If yes, why (please specify the reason) …………………………………………………………………...............

51. Are you aware about the helpline number of the State for filing complaints and grievances?

(Yes = 1; No = 0)

52. Did you ever use the helpline number for assistance or filing complaints?   (Yes = 1; No = 0)

53. Whom did you approach to resolve your problems?*
     a) SHGs/ NGOs
     b) Sarpanch
     c) Gram Panchayat officer
     d) Helpline number
     e) Jan Sunvai/Jan Sabha
     f) Gram Sabha
     g) Any other

54. Were your problems resolved? How long did it take?
     a) Yes, 1-2 weeks
     b) Yes, 2-4 weeks
     c) Yes, More than 4 weeks
     d) Not resolved

55.1 Apart from the available assistance provided to you, do you think you needed any other kind of help/guidance at any other stage of the construction process?   (Yes = 1; No = 0)

55.2 If yes, at which stage
     a) Availing loan facility
     b) Checking the quality of the material
     c) Material Procurement
     d) Labour procurement
     e) Wage Subsidy
     f) Filing for complaints/ grievances
     g) Any other

56.1 How frequently do you attend Gram Sabha meetings including meetings for social audit?

Regularly = 1; Sometimes = 2; Never = 3

56.2 If never, why …………………………………………………………………………………………………..

Part I: Convergence and Intangible benefits

57. Which of the facilities are provided to you under PMAY-G Scheme:

Facilities under PMAY-G	Awareness (Yes/No)	Facility Provided (Yes/No)	If not, why*
90/95 days of MGNREGS (specify the no. of days)			
Toilet under SBM/MGNREGS			
Piped water connection under NRDWP			
LPG under PMUY			
Electrification under DDUGVY/Saubhagya			
Proper Drainage (Toilet)			
Any other State Scheme			

*Village not mapped = 1; Non-cooperation of PR officials = 2; Discrepancy in beneficiary list = 3; Don't know = 4; Any other (specify…)

I. Health & Hygiene

58. Health and Sanitation

	Pre PMAY-G	Post PMAY-G
Use of toilets#		
Use of Sanitary Napkins (Yes=1; No=0)		
Expenditure (Specify the amount)		
Toilet cleaners(Yes=1; No=0)		
Expenditure (Specify the amount)		
Floor cleaners (Yes=1; No=0)		
Expenditure (Specify the amount)		

#Code: Personal Toilet- 1; Open defecation- 2; Service/Common Toilets- 3; Any other- 4

59. In case of common toilets, how many households share the toilet? Please specify……………………………………...

60. If you have a toilet and you are not using the it post PMAY-G scheme, state the reason:

    a) Toilet is under is construction
    b) Assistance is not yet provided for the construction
    c) Not in a habit of using toilets
    d) No water connection
    e) No drainage system
    f) Use toilet for storage purpose
    g) Any other

61. Is there a drainage system in your PMAY-G house?

    a) Yes, open = 1
    b) Yes, closed = 2
    c) No = 0

62. Wellness

(Last 30 days for Post PMAY-G)	Pre PMAY-G	Post PMAY-G
Frequency to Visit to Health Care Centre in last 3 months*		

(i)Viral Fever		
(ii) Cough & Cold		
(iii) Skin allergies		
(iv) Diarrhoea		
(v) any other, please specify		
(vi) Do not prefer to visit PHC		
Whether ASHA worker visited your house (Yes=1;No=0) (*in case applicable*)		

63. How do you get the water pre and post PMAY-G house? How far is the water source from your premises?

	Pre- PMAY-G	Post- PMAY-G	Distance ##
Drinking and cooking purpose#			
Other purposes#			
Is the water available throughout the year (Yes=1, No=0)			
No. of Households sharing the same water resource			

Code: Piped water connection/ Tap=1; Common tap=2; Wells=3; Tube wells/ hand pump/ Tankers=4; River/ lake/ canal=5; Any other= 6

##Within premises = 1; Less than 1 km = 2; 1 km or more = 3

64. What kind of fuel do you use?* (*Question No. 65,66, and 67 can be skipped if response is other than 6*)

	Pre- PMAY-G house	Post- PMAY-G house
Cooking food# (i) Main source (ii) Secondary Source		
Other purposes#		

#Code: Firewood/Thatch- 1; Cow dung cakes- 2; Kerosene-3; Coal-4; Bio-gas-5; LPG or piped gas-6; Any other (please specify) - 7

65. How did you get the LPG connection?

     a)   Provided by the government at subsidised rates
     b)   Arranged on your own

66. How frequently do you re-fill the gas cylinder (in months) (Check card)? ………………………………………….

67. Do you find it difficult *(in terms of timely availability and distance)* to re-fill the gas?   (Yes = 1; No = 0)

68. What is the main source of lighting in your PMAY-G house?

	Pre PMAY-G	Post PMAY-G
Source of Lighting (i) Main source (ii) Secondary Source		

#Code: Electricity = 1; Solar = 2; Kerosene = 3; other oil4; No lighting-5; Unauthorised Connection= 6; any other, specify-15

69. If electricity is not the source of lighting, why? Specify the reason ……………………………………………..

II.   Education and Overall Development of the Child

70. Enrolment of children in the school and involvement in economic activities (Yes=1, No=0)

	Pre PMAY-G	Post PMAY-G
Whether children go to school		
Children involved in any economic activity, specify the activity…………..		

71. Now that your children are going to the school and have a proper place to sit and study, has their performance at school improved? (Yes = 1; No = 0; Can't say = 2)

72.1 Will you sending your child to school after class 8th? (Yes = 1, No = 0)

72.2 If no, why*

    a) Cannot afford
    b) High school is not in nearby areas
    c) No mode of transportation
    d) Get them involved in economic activity
    e) Not interested
    f) Any other, please specify

III. Social Inclusion

73.1 Do you think that having your own house gives you a sense of dignity and safety? (Yes = 1; No = 0)

73.2 If no, why……

74. Do any other community people stay in your immediate neighbourhood (lane/village)? (Yes = 1; No = 0)

75.1 Did you attend any festivals/functions like marriage organised by other community? (Yes = 1; No = 0)

75.2 Did you invite the people from other community at your festival/functions like marriage? (Yes = 1; No = 0)

76. Do your children play with the kids belonging to other community? (Yes = 1; No = 0)

77. Overall, how do you feel about the extent to which you could mix up with other communities after shifting to PMAY-G house? ....

IV. Change in the Income, Employment Structure and Rural-Urban Migration

78. Do you find any increase in work opportunities post the construction of your house since you know construction work? *(Question No. 78, 79.1 and 79.2 are only for those beneficiaries who are working as skilled or unskilled labours)*

    a) Yes, in the village itself
    b) Yes, in nearby villages/ cities
    c) No
    d) Can't say

79.1   Do you still have to look for employment activities in other towns/cities? (Yes = 1; No = 0)

79.2 If yes, why?

    a) Lack of opportunities in the village
    b) Better wages in cities or nearby areas
    c) Any other

80. What is your occupation and income pre and post the construction of your PMAY-G house?

	Pre- PMAY-G house	Post- PMAY-G house
Main occupation of Principal earner#		
Secondary occupation/ part time #		

No. of days of employment in an year
  i.   MGNREGS work
 	
  ii. Private work		

Wages per day in i. Private work		
Place of work ##		
Monthly income of the household		

#Code: Own farm activities = 1; Non-farm labour = 2; Farm labour = 3; Petty business/trade/ manufacturing = 4; Mason/ Construction labour =5; Others = 15 please specify

Own Village = 1; Nearby Village = 2; another City = 3

81. Now that you have a pucca house with basic amenities, do you think that your overall standard of living (in terms of health, income, education facilities, safety etc.) has improved?

Standard of Living	Improved= 1; Moderately Improved = 2; Not Improved = 3
Health	
Income and employment opportunities	
Access and performance of children in school	
Safety and comfort	

V. Change in Expenditure and Savings

82. Do you have any of the following:

Type of Asset	Pre PMAY-G (Yes=1; No=0)	Post PMAY-G (Yes=1; No=0)
A. Physical Asset		
T.V		
Refrigerator		
Mobile Phone		
Vehicle (please specify the type)		
Land (in ha)		
(i) Agricultural		
(ii) Non- Agricultural land		
Land holdings (in ha)		
(i) Owned		
(ii) Leased in		
Livestock		
Cow /Bull		
Buffalo		
Goat		
Sheep		
Others(specify)		

Agricultural tools like Tractor		
Any Other, please Specify		
B. Financial Asset & Liabilities (in INR)		
Deposits		
Post Office Savings		
Loan		
Any other		
Monthly savings (not with the banks)		

83. State the monthly expenditure:

	Pre PMAY-G (in Rs.)	Post PMAY-G (in Rs.)
A. **Monthly Expenditure on Non-Food Items**		
Water		
Electricity		
Cooking fuel		
Housing Rent		Not Applicable
Medical expenses		
Mobile expenses		
Commuting (to distant villages for work)		
Education (school fee and other expenses, if any)		
B. **Monthly Expenditure on Food Items**		
Pulses		
Cereals (Rice, wheat, barley, maize etc.)		
Dairy Products		
Vegetables & Fruits		
Meat/ Egg		

Remarks by the Investigator

    a) Whether the house is
        (i)   Complete
        (ii)   Incomplete

………
………
………

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