

RURAL ROAD DEVELOPMENT IN INDIA: DISTRIBUTION OF PMGSY BENEFITS

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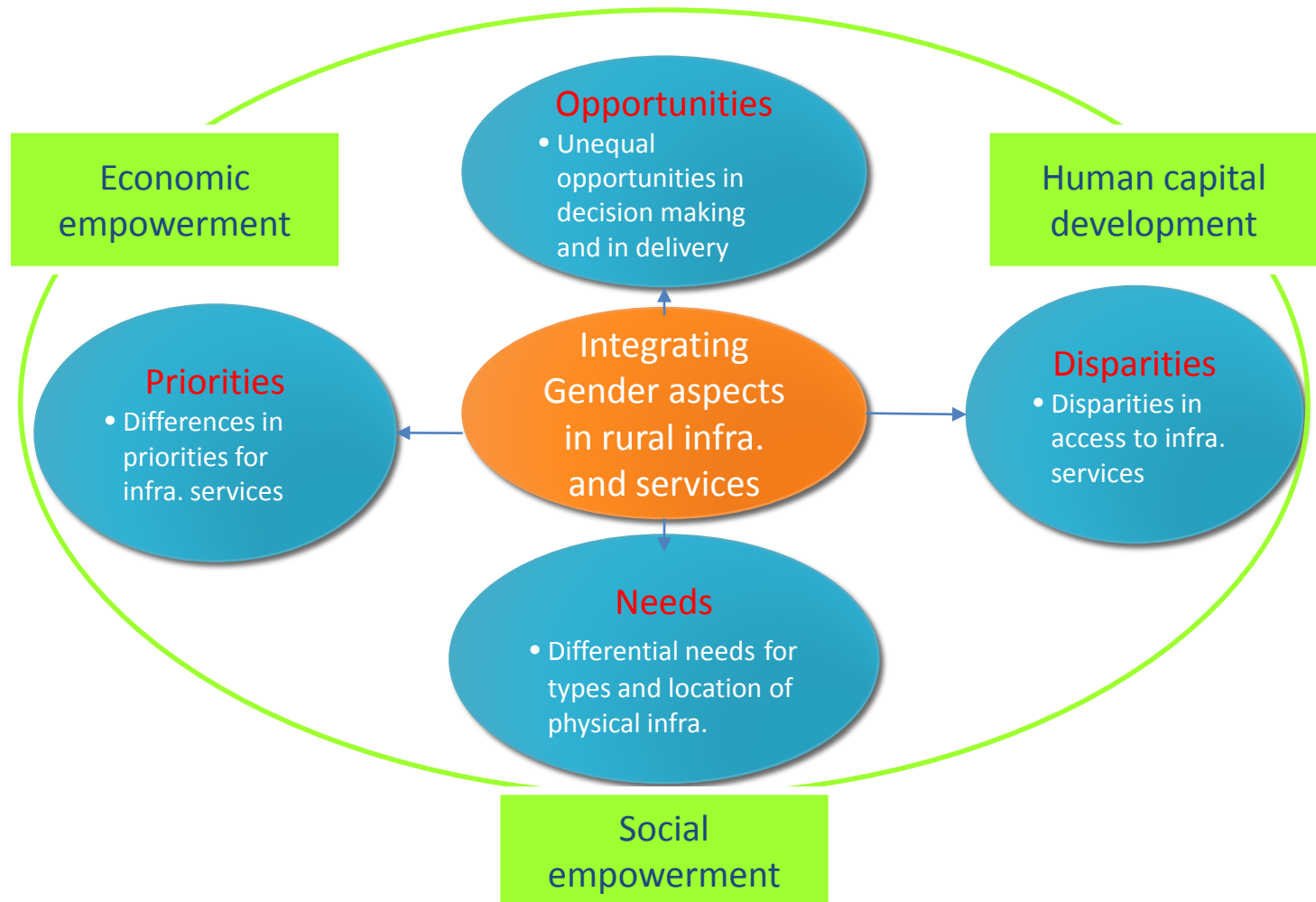
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June 2016





Gender equity in rural infrastructure and services



PMGSY: The program aims to draw all of India's villages into the mainstream with focus on “sustainable and inclusive growth”.

improving
connections to
markets

**Improving Access
to timely
Treatment**

**Reducing the time
spent travelling to
and from Work
and School**

1. What are PMGSY's effects on villagers' employment and occupational choices?
2. To what extent do these shifts yield higher or more regular income?
3. Do these shifts vary across groups (women, youth, SC, ST and 'others')?
4. What are the main obstacles that prevent weaker groups from exploiting the more attractive possibilities and sharing more fully in the benefits?
5. What are the more promising policy and programmatic alternatives that could shift the distribution of benefits in favor of these groups?
6. How are these changes in policy to be achieved in practice?



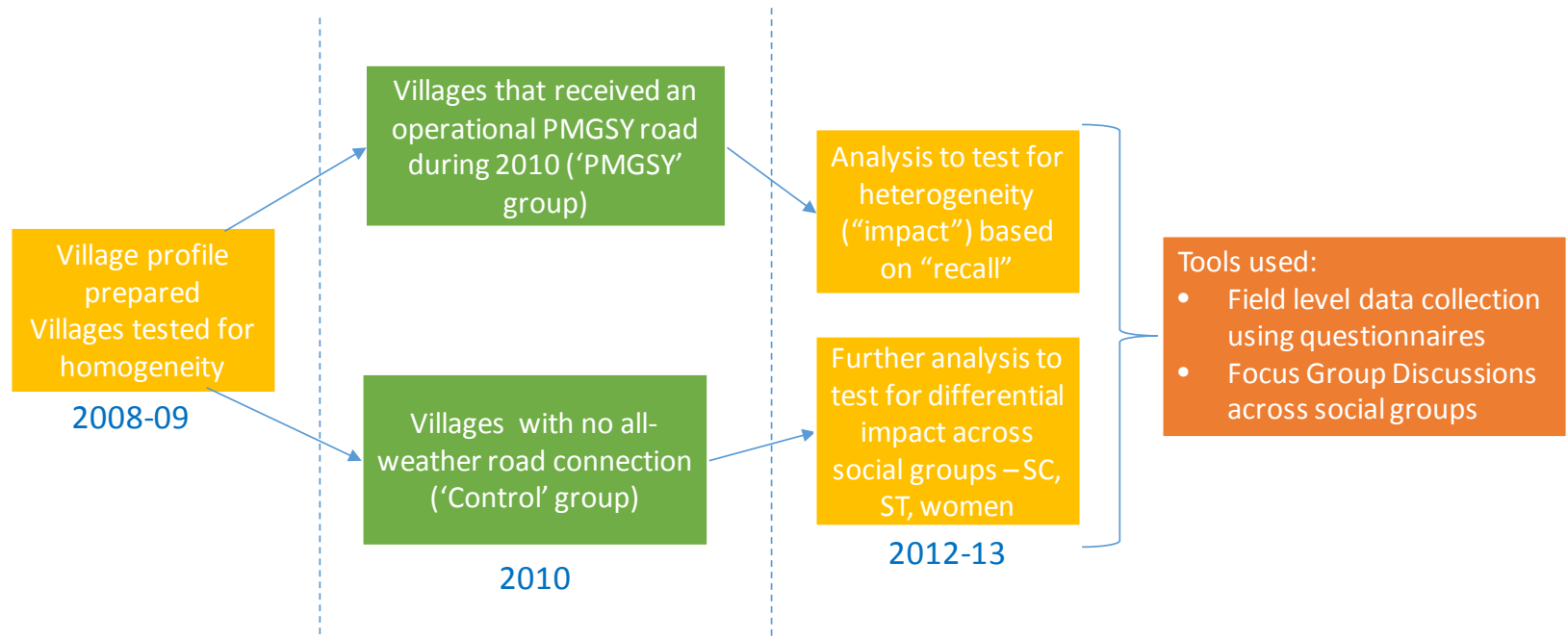
Probing benefits at three levels

1. Whether anyone in the village had benefited and how;
2. If they had benefited themselves and how; and if not why;
3. Whether they had participated.

- These questions were put to both men and women, and differentiated between male- and female-headed households.
- This helped differentiate between responses of those who said there were improved opportunities and they benefited and those who said there were improved opportunities, but they themselves could not benefit.
- **The latter group is important and the obstacles faced by this group were drawn out by the study.**
- Similar queries were made to respondents in the 'control' villages for the two reference periods by slightly tweaking the questions.



Overall Methodology



Sample size and selection of villages & habitations

S. No.	Sample type	Habitation	Village information	Household head interview*	Supplementary household information (women)	FGD
Jharkhand						
1	PMGSY	16	16	256	256	64
2	Control	6	6	96	96	24
3	Total	22	22	352	352	88
Rajasthan						
1	PMGSY	16	16	256	255	58
2	Control	6	6	96	96	24
3	Total	22	22	352	351	82
Himachal Pradesh						
1	PMGSY	16	16	251	248	63
2	Control	6	6	95	81	24
3	Total	22	22	346	329	87
	G. Total	66	66	1050	1032	257



Key Findings of PSIA Study

PMGSY Rural Roads Project

PMGSY's effects on villagers'..Travel Time

- **Easier travel** the most reported category in terms of main benefits by type.
- The new road has enabled villagers to save time in performing their tasks: **94 % of the household heads and 96 percent of women replied in the affirmative** uniformly across the three states. **The commercial sphere dominated ranking 1**, with getting to work and the market being the foremost. Getting to school and hospital lagged behind in that order.

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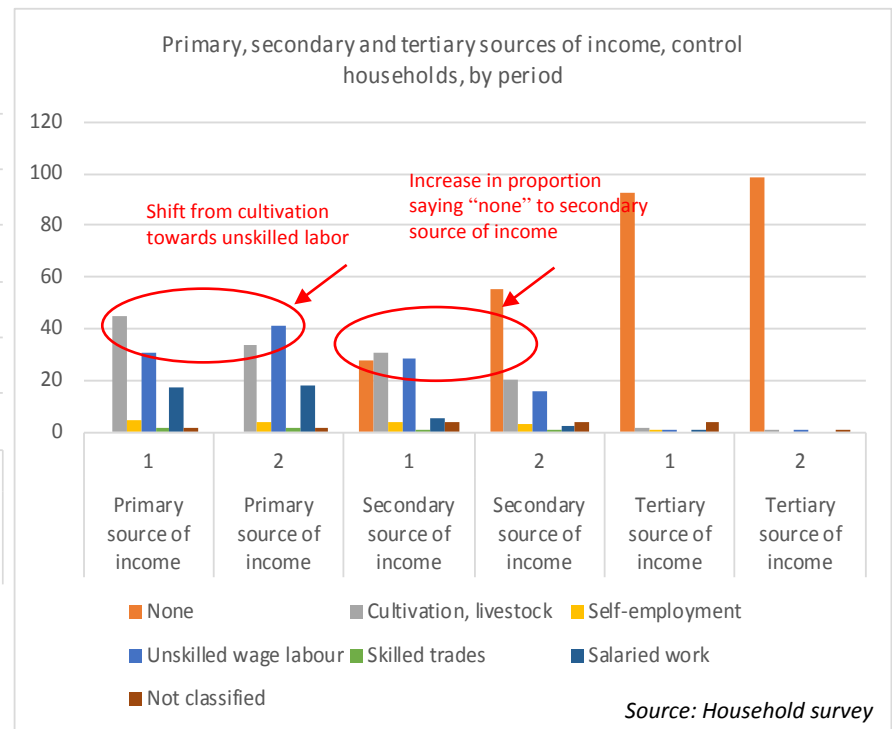
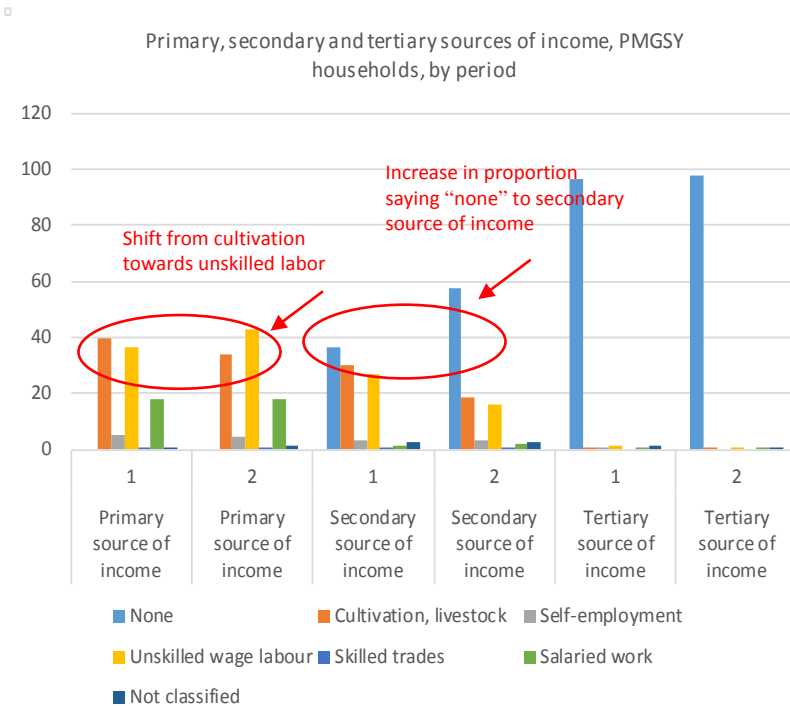
PMGSY's effects on villagers' employment opportunities and occupational choices? ...Yes

- Yes PMGSY is generating new and additional employment and business opportunities. **Two-thirds** of all HH surveyed in PMGSY villages compared to only **one quarter** of their counterparts in the control villages felt any such developments. (only one-third in Rajasthan PMGSY villages).
- However, only **half** of the women in the HH surveyed said yes.



PMGSY's effects on villagers occupational choices'

Source of Income



- However, it cannot be concluded that the 'PMGSY-effect' had a statistically significant effect on the rankings of the sources of income.
- This needs to be seen in context of overall change in the rural labor market and withdrawal from agriculture at the national level.



PMGSY's effect.. Cropping Pattern,

- PMGSY roads influenced the cropping patterns **to shift towards commercial crops in Jharkhand and Himachal Pradesh**. In Rajasthan, no conclusion could be drawn.
- **In Jharkhand**, the total cropped area in the control villages was only slightly lower in 2012-13 than in 2008-09; but it was 16 percent lower in the PMGSY villages. Thus the PMGSY-effect involved a **reduction in cultivation area**.
- In the PMGSY villages of Rajasthan, the gross cropped area was 13 (%) lower in 2012-13 than in the reference year, In the control villages, however, the decline was 25 percent. Although in HP about 8% increase was observed both in Control and PMGSY villages.



PMGSY's effect.. participation

- **Transect Walk:** Barely 30 % of the household heads were aware that the event had occurred.
- **Awareness of transect walk: female responses were similar**
- 50% of all HH heads who were aware participated in it. At 72 percent, the proportion of participants was much higher in Jharkhand than the other two states
- **Women participation was reported to be nil, nor was it expected of them.**
- Poorer HHs (with poor social standing) usually do not take part in such activities; explaining their lack of participation
- After the transect walk had taken place, the road was built and almost 90 percent of household heads in Jharkhand, 86 percent in Rajasthan and 79 percent in Himachal Pradesh were very *happy with the alignment*. However, villagers in Jharkhand expressed that link roads and provision of culverts would have made a difference.



PMGSY's effect – direct employment

- **Employment in Road Works:** Fewer than **one-in-five** of all households was employed in the construction, with fewer than one-in-16 in Himachal Pradesh. The answers given by women were similar: the participation rate was 20 percent overall; it was highest in Jharkhand again.
- In response to the query on participation in building roads in the neighborhood, the results were not encouraging either (8%).
- About 9 percent of the household heads reported that one or more members of their families had been involved in **road maintenance**. The proportion was higher in Rajasthan (12.5%) and Himachal Pradesh (11%) as rains damaged the roads there more. The women's responses were essentially similar. The share of women respondents was higher in absolute numbers.



Answer to Key Question 2: Forms and Extent to which these shifts yield higher or more regular income?

Income effect ranked 1, declared PMGSY beneficiaries, by state, %

	Jharkhand	Rajasthan	Himachal Pradesh	Total
Higher	69.4	76.4	73.9	71.6
More regular	29.9	23.6	26.1	28.0
Both	0.7	0	0	0.4
Total	100.0	100.0	100.0	100.0

- **Agricultural activities & unskilled labor followed by business was ranked the most** by PMGSY beneficiaries in terms of improved employment and income opportunities.. What stands out is the importance of business and unskilled labor in the PMGSY villages, as opposed to cultivation and livestock in the control villages.
- Agricultural activities and unskilled labor dominated in Jharkhand, unskilled labor and business in Rajasthan, and business in Himachal Pradesh.
- The chief difference between men and women respondents was in the **relative importance of farming, livestock and forestry versus agricultural and unskilled labor**. The former was heavily cited by the female respondents; the latter by the male household heads.
- A majority in all three states reported higher but not more regular incomes than before.



Income effect

- Opportunities yielded income effects, declared PMGSY beneficiaries
- While mobility was attributed more by men, Villagers believe the environment for commerce in general has improved with road connectivity

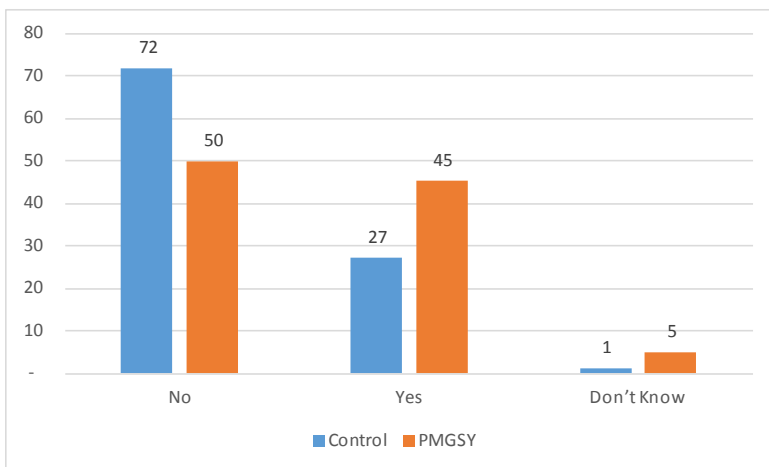
	Jharkhand	Rajasthan	Himachal Pradesh	Total
Direct movement	97/22 65.99%/13.92%	25/0 45.45%/0.00%	8/5 34.78%/11.36%	130/27 57.78%/11.16%
Indirect (demand)	31/60 21.09%/37.97%	19/7 34.55%/17.50%	15/27 65.22%/61.36%	65/94 28.89%/38.84%
Indirect (supply)	17/66 11.56%/41.77%	5/25 9.09%/62.50%	0/4 0.00%/9.09%	22/95 9.78%/39.26%
Other	2/10 1.36%/6.33%	6/8 10.91%/20.00%	0/8 0.00%/18.18%	8/26 3.56%/10.74%
Total	147/158 100%	55/40 100%	23/44 100%	225/242 100%

Source: Household survey

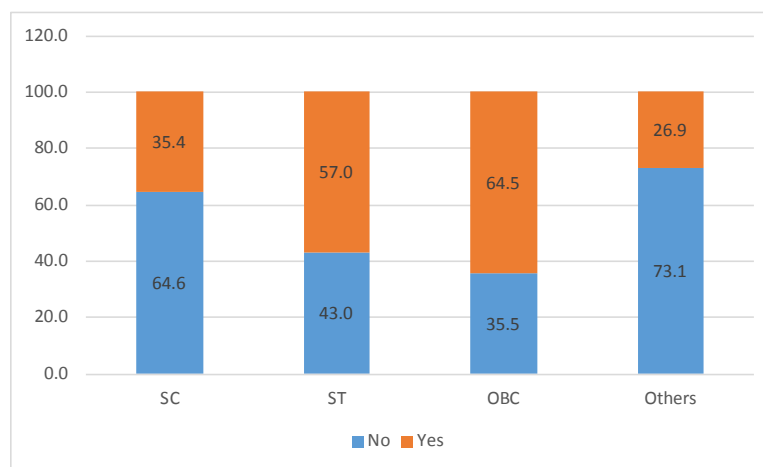


Answer to Key Question 3: Whether these shifts vary across groups (women, SC, ST and 'others')

New opportunities for anyone in the village, all female respondents



New opportunities for PMGSY respondents' households, by caste



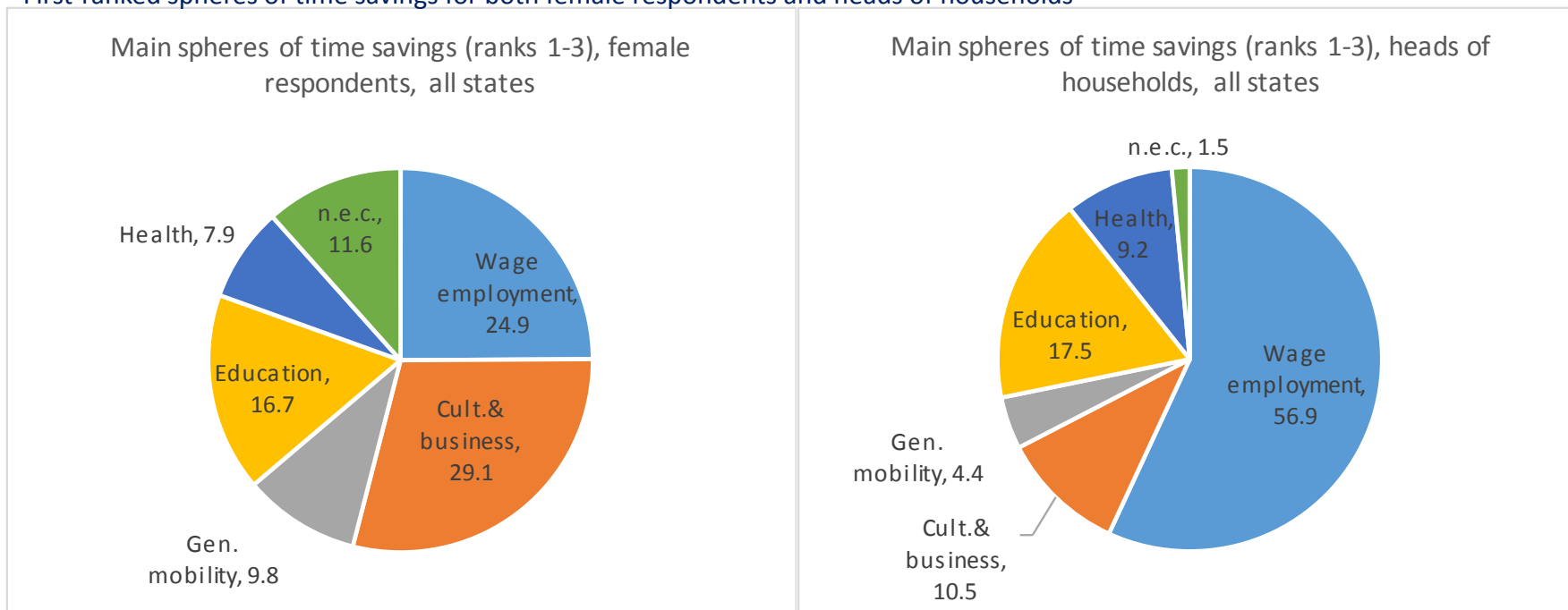
Source: Household survey

- Female respondents had a comparatively dim view of new employment and economic opportunities in PMGSY villages **at about 45 percent**.
- Members of the SC group felt themselves excluded, and the rest concurred with their view.
- FGDs revealed that 'other castes' and 'others' were the chief beneficiaries, and that SCs and STs the main non-beneficiaries.
- The majority of those who were female, members of the SC and 'other' groups or with little schooling claimed not to have benefited themselves.
- Among those who benefited themselves men primarily attributed to direct movement, females attributed complementary investment and local demand for enjoying the benefits.



Answer to Key Question 3 (contd.): The effects on time savings across men and women

First-ranked spheres of time savings for both female respondents and heads of households



Source: Household survey

- Virtual unanimity in PMGSY villages that the new road had enabled them to save time: 94 percent of heads of households and 96 percent of women replied in the affirmative, uniformly across the three states.
- While for heads of households (majority being men), the first-ranked sphere was getting to work and market, for women “farming & business” led indicating heavier engagement in the household enterprise.



Answer to Key Question 4: Main obstacles that prevent weaker groups from exploiting the more attractive possibilities and sharing more fully in the benefits

Female non-beneficiaries' reasons for failure to exploit new opportunities (rankings 1-3)

	Rank 1		Rank 2		Rank 3	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Inadequate endowments	107	42.8	46	27.9	7	18.9
Lack of complementary infrastructure	33	13.2	38	23.0	5	13.5
Lack of complementary intervention	73	29.2	48	29.1	15	40.5
Lack of local demand	1	0.4	2	1.21	0	0
Other	36	14.4	31	18.8	10	27.0
Total	250	100	165	100	37	100

Source: Household survey

- The main reason for failure of non-beneficiaries to benefit from opportunities was the lack of complementary actions. Women put the chief blame on their households' lack of productive endowments, naming especially the awareness and lack of skills.
- The role of direct movement was prominent among OBC and ST groups.



Answer to Key Question 5: The more promising policy and programmatic alternatives that could shift the distribution of benefits in favor of these groups

Type of measure needed to exploit opportunities (rankings 1-3), all PMGSY households

MALE/FEMALE

	Rank 1		Rank 2		Rank 3	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Provision of complementary infrastructure	107/122	14.4/16.29	102/104	39.5/37.14	21/9	51.2/26.4
Provision of complementary intervention	553/548	74.7/73.16	92/102	35.6/36.43	6/11	14.6/32.3
Demand measures	67/60	9.0/8.01	58/54	22.4/19.29	14/11	34.1/32.3
Other	13/19	1.7/2.54	6/20	2.3/7.14	0/3	0/8.82
Total	740/749	100	258/280	100	41/34	100

Source: Household survey

1. 'Complementary intervention' for improving access to credit, training, as well as opening up opportunities close to villages through sectoral policy interventions, which need to be packaged and tailored to the situation of each state, and by gender and caste.
2. Better integration of existing schemes such as NRLM and other rural infrastructure to draw out the synergies between them.
3. Greater community participation and awareness building regarding type of employment and economic opportunities triggered by PMGSY for example better co-ordination between departments.



Answer to Key Question 6: How these programmatic alternatives are to be achieved in practice? - **Suggestions**

- Investing in training programs for skills upgradation/awareness building especially for women to exploit new opportunities within the village, e.g. in preparing semi-finished goods, processing of agricultural outputs, etc.

Supply Side Intervention

- Investing in local and nearest market centers, e.g. small towns, etc

Increasing Local demand

Should be tailored to each state

- to promote the availability of credit/insurance including credit to microenterprises.
- to promote the availability of suitable infrastructure, e.g. infrastructure linked to agriculture equipment, infrastructure for grain storage, irrigation etc.
- to support transport services.

Complimentary Actions



POLICY IMPLICATIONS

PMGSY as a “Connector” of existing RD schemes

- The assessment shows that the overall aim of the PMGSY, which was to draw all of India's villages into the mainstream through a focus on “sustainable and inclusive growth” has only been partially achieved.
 - In order to achieve this aim fully, the study indicates the need for policy and design alternatives to address identified barriers through complementary interventions by both public and private sector.
 - PMGSY is and can lead to increased Gender equitable human capital improvement, social and economic empowerment – all in a growing, positive spiral
-
- Some of these goals have already been achieved by other schemes of MORD (namely NRLM, etc.)
 - Opportunity to use PMGSY as a “connector” to arrive at a more integrated approach to existing schemes of RD which can better address some of the enabling factors identified?
 - Could States and Districts take a leading role in improving co-ordination among the various departments by, e.g. inviting officers of the departments involved to take part in the transect walk?



PMGSY is and can lead to increased Gender equitable development–

Gender equitable human capital improvement

- is achieved with better access to education and health and meeting basic needs of both men and women.

Gender equitable social development

- Can be achieved through improved access to rural infrastructure services, more dignity, better voice, improved mobility within and outside of the community, greater participation in planning, decision making and management processes.

Gender equitable economic empowerment

- is achieved with time saved in repetitive activities and can lead to improved participation in business creation (participation in MSMEs), employment (participation in maintenance), improved incomes, higher productivity, etc.



THANK YOU!
