

Consequences of Social Safety Nets Benefits and Causes for Not Included in the Targeted Programmes – A Multivariate Approach

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Abstract

Social Safety Nets Programmes (SSNPs) is a set of public measures with the intention to protect the people of the society suffers from various types of economic and social hardship. SSNPs are regarded the basis of the country's social protection approach and are the mainstay of the poverty alleviation strategy. This study intends to explore the consequence of SSNP benefits in terms of poverty reduction and identify the major dimensional factors for not being selected in the targeted SSNPs. The study used several statistical tools and techniques including factor analysis to achieve the research objectives. The data for the study has been collected through a research project following cluster sampling methodology and covered 3322 households from 130 rural clusters. The descriptive analysis indicates that the socio-economic profile of the surveyed households is relatively poorer than the profile of other households in Bangladesh. The findings indicate that the beneficiary households have better economic (in terms of income, expenditure and investment) and food security condition than non-beneficiary households, might be due to the effect of SSNP benefits. The comparison of some indicators related to income, food security status and socio-economic condition between 2013 and 2015 indicates that the satisfactory progress of beneficiary households than their

non-beneficiary counterparts. Several causes were identified for not being included in the targeted SSNPs for the eligible non-beneficiary households, of which improper selection, non-cooperation from public delegates of local government, nepotism, and inability to provide bribe are notable. Over half of the respondents mentioned that they were excluded due to improper selection and non-cooperation from public delegates of local government. The factor analysis extracted five factors viz., *poor capacity of implementing authority, corruption and political bias of the local authority, lack of ability, selection bias rather than poor cooperation of local authority, resource scarcity and bureaucratic complication* for not being included in the targeted SSNPs. The study recommends considering the above factors to make the selection process fair and free from bias for inclusion in the safety net programmes for optimum utilization of resources and ensuring maximum benefit for the poor.

Keywords: Social Safety Net Programmes, Impact Study, Targeting error, Factor Analysis.

AMS Classification: 62P25.

1. Introduction

Social Safety Nets Programmes (SSNPs) in Bangladesh is designed as safeguard for the people suffers from various types of hardships, which may occur due to absence of earning member in the family, unemployment, loss of cultivable land, crop failure, chronic disability of any member, widowhood vulnerability, maternity, incapacity to work for old age people, and death of earning household members. In 1972, SSNPs was launched as a short-term protection for the deprived people. The government efforts are continues to bring the destitute people into social inclusion and to alleviate poverty of the country in a broader sense. Though there has been a long struggling to reduce the incidence of poverty and to improve living standards of the people, recently Bangladesh witnessed a very successful history in reducing poverty. The social safety nets programmes played a vital role in reducing poverty. However, about a quarter population of Bangladesh still living below the poverty line (HIES, 2016). The World Bank documented that safety net programmes are the basis of the country's social protection approach and are the mainstay of the poverty alleviation strategy (World Bank. 2006). In a study, Khuda (2011) has documented that the social safety net programmes is implemented with two broad approaches: Protection and Promotion. The World Bank (2008) study has argued that safety nets contribute to the development policies in four ways – redistribution of income to the

vulnerable, supporting poor households to make better investments, assisting the vulnerable households to manage risk, and allowing governments to make choices that support efficiency and growth.

In Bangladesh, several safety net programmes have been executed targeting different groups of the population to cope with adverse effects that are either individualistic or combined in nature. The Household Income and Expenditure Survey 2010 data revealed that about 24.5% of the total population has been brought under social safety net programmes (BBS, 2011). In the national budget of Bangladesh, the total allocated amount in SSNPs was Taka 295,100 crore in the financial year 2015-16, which is 2.19% of GDP. The government of Bangladesh has placed poverty reduction at the forefront of its development strategy with the aim to bring down the poverty rate 15% by 2021. Though the poverty rate in Bangladesh has decreased significantly in recent past, a substantial number of households still persistently poor. The end of poverty and hunger were considered as the first and the second targets among the 17 Sustainable Development Goals (SDGs). Though Bangladesh has made significant progress in terms of achieving MDGs, a large number of people until now live below extreme poverty line. A combined effort is necessary to fight with poverty in order to meet the SDGs and it is evident from literature that social safety nets programmes can play a vital role in achieving the target 1 and 2 of SDGs. Therefore, emphasis should be given to study on different aspects of functioning of social safety net programmes.

Many studies have been conducted on social safety net programmes in Bangladesh focusing on schemes, purposes, visions, outcomes, challenges, leakages, and successiveness (Ahmed, 2007; Ahmed *et al.*, 2009; Barkat *et al.*, 2013; Ismat Ara *et al.*, 2014; Zohir *et al.*, 2010). Majority of these studies were found as descriptive in nature that dealt with the effect of a particular social safety nets programme on life and livelihood of beneficiary households. Some studies reviewed the existing SSNPs and their importance for protection of the poor and poverty reduction (Khuda, 2011; World Bank, 2006; 2008). In a study, Barkat *et al.* (2013) provided a comprehensive review of social safety nets targeting mechanism to explore the errors that will enable government to improve targeting to capture the food insecure and poor. On the perspective of exploring productive outcomes and constraints, Ismat Ara *et al.* (2014) documented that the selected safety net programmes are promising means of protection and generate productive outcomes for the vulnerable groups.

The existing studies have lacking to quantify the consequences of safety nets benefits as well as exploration of major dimensional causes for exclusion from the targeted safety nets programmes, which is very much important for policy point of view. Furthermore, most of the existing studies were found to deal with a single safety nets programme and suffer from inadequacy of sample size for applying inferential statistical technique. Covering a wide range of safety nets programmes, this study intends to explore the consequences of safety nets benefits in terms of poverty reduction and identify the major dimensional factors for not being selected in the targeted SSNPs.

2. Materials and Methodology

The data for the study has been extracted from the data collected through a project "Targeting Effectiveness and Productive Outcomes of the Social Safety Net Programs in Rural Bangladesh: An Evaluation", sponsored by the Ministry of Education, GoB under the Grants for Advanced Research in Education (GARE). The study adopted mainly cluster sampling method where Primary Sampling Units (PSUs) of Bangladesh Bureau of Statistics (BBS) have been considered as clusters. The study gathered the quantitative data from 3322 households from 130 rural clusters covering four domains (old divisions), of which about 62% were found as current beneficiary, about 8% old beneficiary and about 30% eligible non-beneficiary households (Hossain and Uddin, 2017). The study used several statistical tools and techniques including factor analysis to achieve the research objectives. Factor analysis is an ideal method to identify the major dimensional components, which is frequently used in several studies of similar nature (Hossain *et al.*, 2011; Manly, 2004).

3. Result and Discussions

The study has categorically analyzed and discussed the profile of the surveyed households including landholdings and housing condition, consequences of SSNP benefits through comparison of some economic indicators between distinct time points, exploration of causes for mistargeting in beneficiary selection for SSNPs, and identification of major dimensional reasons for exclusion from the targeted safety nets programmes.

3.1. Profile of the surveyed households

The analysis of the characteristics of the household members and household composition are helpful in identifying the socio-economic behavior of the households. The study has duly analyzed the profile of the household population by sex and presented in Appendix Table-1. The age distribution of the household members shows that about one-third percent were children aged below 15 years, about one-quarter were 16-30 years of age and about 12% were old age people (more than 60 years). The findings indicate that age distribution did not vary by sex. Among the household population, two-thirds were married and about 16% were widow/separated/divorced. The education profile of the household members indicates that about half of the adult female population had no schooling; while in the case of male members over three-quarters had no schooling. The analysis of the occupation of household members aged 16-60 years indicates that about 35% of male population was engaged as day-labourer, followed by farming (14.4%). A sizable number of women (about 8%) were also found to engage as day-labourer. Regarding the distribution of earning male members aged 16 years or more, it is found that about 30% were full-time earner and about 42% were part-time earner. The migration status of the male household members aged more than 16 years indicate that 5.9% were internal migrants and about 1.4% were international migrants. The analysis of household composition indicates that about 27% were female-headed households and the dependency ratio is estimated at 74.5%.

Housing condition and landholdings

The housing condition and landholdings of the household by SSNP beneficiary status is shown in Appendix Table-2. It is found that nine-in-ten households have their own living house and about 11% households are homeless. About 15% households have no homestead land at all. They are usually staying in government land or other's land. Over two-fifths of the households reported that they did not have any separate room for kitchen. About four-fifths of the houses were made of tin and about 16% were made of straw. Most of the household members were found to use non-hygienic toilets. About four-fifths of the households have no agricultural land and only about 14% households have some share-cropped land for agriculture.

3.2. Consequences of SSNP benefits: Comparison of some indicators

The comparison of some economic indicators over a specified time-period (two distinct time points) is made to evaluate the impact of SSNP benefits. The comparison is made for all the three categories of households to estimate the net impact of the SSNP benefits through Diff-in-Diff method. The percentage change in food security and socioeconomic status of the households between 2013 and 2015 is shown in Table 1. The findings indicate that the food insecurity status in terms of ‘some periods of hunger during the year’ has decreased for both current beneficiary and old beneficiary households. However, it is clear from the results that this level of food insecurity remains unchanged for eligible non-beneficiary households. In 2013, about 76% current beneficiary households were able to have three meals a day, which is increased to 80.1% in 2015.

Table 1: Percentage of households for different levels of food security and socioeconomic status for the year 2013 and 2015

Indicators	Types of Households (in %)					
	Current Beneficiary		Old Beneficiary		Eligible Non Beneficiary	
	2013	2015	2013	2015	2013	2015
Food Security Status						
Some periods of hunger during the year	5.46	4.43	3.33	1.48	8.4	8.5
Two meals a day throughout year	18.52	15.45	20.37	18.89	31.5	28.6
Three meals a day throughout year	76.02	80.12	76.3	79.63	60.1	62.9
Overall Socio-economic condition						
Very poor	28.31	26.02	20.37	17.41	49.3	50.6
Moderately Poor	34.26	29.78	39.26	37.04	30.7	26.5
Poor	31.14	36.26	34.81	37.41	18.2	21.1
Middle class	5.75	6.97	5.19	7.41	1.8	1.8
Rich	0.54	0.97	0.37	0.74	0	0
Total(n)	2045		275		1002	

The comparison of the self-assessed socioeconomic condition indicate that about 28% current beneficiary, about 20% old beneficiary and about 49% non-beneficiary households were very poor in 2013, while the percentages of very poor were found to decrease for beneficiary households and remains unchanged for non-beneficiary households. The increase of the food security condition and

socio-economic condition of the beneficiary households in comparison to those of eligible non-beneficiary households indicates that SSNP benefits have put net positive impact on the livelihood of beneficiary households.

The comparison of on-farm income, off-farm income, consumption expenditure, and investment expenditure has been made for two time points for both beneficiary and non-beneficiary households to evaluate the consequence of SSNP benefits (Table 2). Both the on-farm and off-farm income was found remarkably higher for beneficiary households than that of non-beneficiary households in both the time points. The percentage change of both on-farm and off-farm income is found higher for old beneficiary households in comparison to non-beneficiary households and current beneficiary households. The findings indicate beneficiary households are expending and investing more in 2015 in comparison to 2013. Similar to income, the consumption and investment was found remarkably higher for beneficiary households than that of eligible non-beneficiary households.

Table 2: Status of main household economic indicator for the time point 2013 and 2015 according to the SSNP beneficiary condition and percentage change over time

Main household economic indicators	Average amount in 2013 (in BDT)	Average amount in 2015 (in BDT)	Percentage change during 2013 to 2015
Household income from on-farm activities (Annual)			
Current Beneficiary	9728.78	11608.67	19.32
Old Beneficiary	11603.7	16815.74	44.92
Eligible Non Beneficiary	6694.23	8749.58	30.70
Household income from off-farm activities (Annual)			
Current Beneficiary	52382.37	62742.66	19.78
Old Beneficiary	51575.26	65381.07	26.77
Eligible Non Beneficiary	40473.95	47557.49	17.50
Consumption (Annual)			
Current Beneficiary	29158.91	33764.8	15.80
Old Beneficiary	4239.59	4745.01	11.92
Eligible Non Beneficiary	11260.39	13100.12	16.34
Investment (Annual)			
Current Beneficiary	17591.22	23256.41	32.20
Old Beneficiary	2563.89	2955.99	15.29
Eligible Non Beneficiary	4877.32	6359.77	30.39

3.3. Causes for mistargeting in beneficiary selection

The village mapping with PRA indicates that a significant number of eligible households were excluded from the targeted safety nets programmes. The respondents of eligible non-beneficiary households were asked the causes for not being included in the expected social safety nets programmes. The percentage of causes based on their responses along with rank of the identified causes is given in Table 3.

Table 3: Respondents' perception on causes for not being included in targeted SSNPs along with rank of the responses

Causes for exclusion	% of Responses	Rank of the responses				Total responses
		1st	%	2nd	%	
Improper selection	56.6	234	23.4	154	15.4	567
Non-cooperation from public delegate of local govt.	55.4	117	11.7	195	19.5	555
Nepotism	44.2	116	11.6	127	12.7	443
No political exposure	27.7	61	6.1	87	8.7	278
Couldn't provide bribe/entry fee	41.4	229	23.0	82	8.2	415
Lack of networking or lobbying	28.7	48	4.8	84	8.4	288
Village too large	24.3	53	5.3	53	5.3	243
Non-cooperation from officials of local govt. office	20.5	18	1.8	41	4.1	205
Political bias	15.9	15	1.5	34	3.4	159
Budget limitation	13.7	33	3.3	32	3.2	137
Don't have any idea about SSNP	7.8	14	1.4	20	2.0	78
System loss (misappropriation of fund)	7.5	13	1.3	13	1.3	75
Bureaucratic complexity	8.8	6	0.6	16	1.6	88
Complexity of NID and actual age	4.2	24	2.4	3	0.3	42
Jealousies	3.7	6	0.6	6	0.6	37
Non-availability of NID	3.4	9	0.9	8	0.8	34
No SSNP in the area	0.9	0	0	1	0.1	9

Several causes were identified for not being included in the targeted social safety nets programmes. Among them improper selection and non-cooperation from public delegate of local government were identified as the main reasons of mistargeting as over half of the respondents mentioned these two causes. The respondents could not explain clearly regarding improper selection, however may be attributed for bias by any means. About 23% respondents ranked improper

selection in 1st position and about 16% put in 2nd position as causes for exclusion from the programme. Nepotism and inability to provide bribe/entry fee were mentioned by more than two-fifths respondents as reasons for not being included the targeted SSNPs. It is to be noted that about 23% respondents ranked inability of providing bribe/entry fee as reasons for exclusion from the SSNPs. A sizable proportion (20-30 percent) of respondents also mentioned 'no political exposure', 'lack of networking or lobbying', 'village is too large' and 'non-cooperation from officials of local government office' as the reasons not being included in targeted SSNPs.

3.4. Exploration of major dimensions of reasons for exclusion

It is difficult to make policy recommendations to reduce the targeting error with the help of the descriptive statistics discussed in the previous section. Hence, a sophisticated multivariate technique is essential for exploring the key dimensional factors. The factor analysis is performed to extract the major dimensional factors of mistargeting using principal component method. The cumulative percentages of variance indicate that 43.8% of the common variance is shared by the 18 variables, which can be explained by the five factors (Table 4). The KMO is obtained as 0.63, indicates a "mediocre" percentage of variance. The extracted five factors can be labelled as follows:

- i) Poor capacity of implementing authority (comprising of the causes - lack of networking or lobbying, political bias, system loss, jealousies, complexity of NID and actual age);
- ii) Corruption and political bias of the local authority (comprising of the causes inability to provide bribe/entry fee, no political exposure, did not have any idea about such programme, and nepotism);
- ii) Lack of ability (comprising of the causes non-availability of NID, and no SSNPs in the area);
- iv) Selection bias rather than poor cooperation of local authority (comprising of the causes wrong selection, non-cooperation from public delegate of local govt., and non-cooperation from officials of local govt. office);
- v) Resource scarcity and bureaucratic complication (comprising of the causes village too large, bureaucratic complexity, and budget limitation).

Table 4: Major dimensional factors for not being included in targeted SSNPs

Reasons	F1	F2	F3	F4	F5
Wrong selection				0.726	
Couldn't provide bribe/entry fee		0.561			
No political exposure		0.603			
Did not have any idea about such programme		0.634			
Nepotism		0.596			
Non-cooperation from public delegate of local govt.				-0.391	
Non-cooperation from officials of local govt. office				-0.476	
Non-availability of NID			0.735		
Lack of networking or lobbying	0.494				
Village too large					0.474
No SSNPs in the area			0.710		
Political bias	0.517				
System loss (misappropriation of fund)	0.612				
Jealousies	0.694				
Bureaucratic complexity					0.593
Budget limitation (according to selectors)					0.650
Complexity of NID and actual age	0.483				
Total Variation explain by the extracted factors					43.80
Extraction Method:		Principal Component Analysis			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy:					0.628

4. Conclusion

The analysis of the profile of the surveyed households clearly indicate that the economic conditions of the beneficiary households are better in comparison to the eligible non-beneficiary households. The improvement might be due to the benefits received from the social safety net programmes, which in turn directs that SSNPs have put positive impact of the livelihood of poor vulnerable households. The study reveals that the main causes of mistargeting in beneficiary selection were improper selection; non-cooperation from public delegate of local government, nepotism and inability to provide bribe/entry fee etc. The factor analysis reduces the 18 identified causes in to five factors - *poor capacity of*

implementing authority, corruption and political bias of the local authority, lack of ability, selection bias rather than poor cooperation of local authority, and resource scarcity and bureaucratic complication. The study recommends for taking remedial measures on the above-mentioned factors as well as increase the allocation in social safety nets sectors in order to extend the coverage of vulnerable people, which will in turn reduce the targeting error too.

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Reference

- [1] Ahmed, A. U., Gilligan, D., Kudat, A. and Colasan R. (2009). Impact evaluation of the conditional cash transfer program in Turkey: A quantitative assessment. Project report prepared for the General Directorate of Social Assistance and Solidarity, Prime Ministry, Government of Turkey. IFPRI, Washington, D.C.
- [2] Ahmed, S. S. (2007). Social Safety Nets in Bangladesh. Background Paper for Bangladesh Poverty Assessment, Mimeo (draft), World Bank, Washington, D.C.
- [3] Bangladesh Bureau of Statistics, (2011). Report of the Household Income & Expenditure Survey 2010.
- [4] Barkat, A., Gupta, K. S., Hussain, A. A., Rahman, M. and Ahamed, F. M. (2013). Improving the Targeting Effectiveness of Social Safety Nets in Bangladesh, NFPCSP-FAO Research Report, conducted by Manob Sakti Unnayan Kendro (MSUK), Dhaka.
- [5] Devereux, S. (2002). Can social safety nets reduce chronic poverty?, *Development Policy Review*, 20(5), 657-675. <http://dx.doi.org/10.1111/1467-7679.00194>
- [6] GoB (2013). Sixth five-year plan fy2011-fy2015: accelerating growth and reducing poverty. Part 1-strategic directions and policy framework. Dhaka: Planning Commission, Ministry of Planning.
- [7] GoB (2015). Budget Documents 2015-16 (Safety Nets).

- [8] HIES (2016). Preliminary Report on Household Income & Expenditure Survey: Statistics Division, Ministry of Planning, Bangladesh.
- [9] Hossain, M. Z., Kazal, M. M. H. and Ahmed, J. U. (2011). Causes of Poor Utilization of Local Funds in the Sylhet Region of Bangladesh – A Multivariate Analysis, *International Journal of Statistical Sciences (Professor P.C. Mahalanobis Memorial Special Issue)*, Vol. 11, September 2011, pp. 245-61.
- [10] Hossain, M. Z. and Ahmed, J. U. (2017). Targeting Effectiveness and Productive Outcomes of the Social Safety Net Programs in Rural Bangladesh: An Evaluation, A research report of GARE, BANBEIS, Ministry of Education, Dhaka.
- [11] Ismat Ara, Shaheen, A., Jahangir, A. M. and Noor, R. M. (2014). Social safety nets and productive outcomes: evidence and implications for Bangladesh, A research report of FAO-NFPCSP, Dhaka.
- [12] Khuda, B. (2011). Social Safety Net Programmes in Bangladesh: A Review, *Bangladesh Development Studies*.
- [13] Manly, B. F. J (2004), *Multivariate Statistical Methods: A Primer*, Third Edition, Chapman and Hall/CRC.
- [14] Slater, R. (2011). Cash transfers, social protection and poverty reduction, *International Journal of Social Welfare*, 20 (3), 250-259. <http://dx.doi.org/10.1111/j.1468-2397.2011.00801.x>
- [15] World Bank (2006). *Social Safety Nets in Bangladesh: An Assessment*. Bangladesh Development Series– Paper No. 9, Washington, D. C.
- [16] World Bank (2008). *Poverty Assessment for Bangladesh: Creating Opportunities and Bridging the East-West Divide*, World Bank Bangladesh Development Series, Paper No.26.
- [17] Zohir S., Mallik B. A., Zabeen S. and Ahsan G. (2010). *Strengthening Social Safety Nets for Mitigating Adverse Impacts of Food Crisis in Bangladesh*, Economic Research Group, Dhaka, Bangladesh.

Appendix Table 1: Profile of the Household Population by Sex

Characteristics	Male (%)	Female (%)	Both (%)
Age group			
0-15	34.8	31.4	33.0
16-30	25.5	23.6	24.5
31-50	22.6	23.0	22.8
51-60	5.20	9.10	7.20
Above 60	11.9	12.9	12.4
Total(n)	6490	6983	13473
Mean age	29.64	32.04	
Marital Status (Age >= 16years)			
Married	70.4	62.4	66.13
Unmarried	26.7	10.8	18.26
Widow	2.3	23.8	13.70
Separated/Divorced	0.6	3.0	1.88
Total (n)	4231	4793	9024
Educational Status (Age 7 years or more)			
No education	38.4	48.9	43.9
1-5 years of schooling	35.5	29.1	32.2
6-9 years of schooling	15.8	15.5	15.6
SSC / HSC	7.9	5.6	6.70
Graduate and above	2.4	0.9	1.60
Total (n)	5802	6309	12111
Occupation (16-60 years)			
Farming	14.4	0.5	7.0
Day laborer	34.6	7.8	20.4
Off-farm activities	14.0	4.4	8.8
Service/Business	16.8	2.3	9.1
Student	10.4	7.1	8.7
Household Work	1.2	67.8	36.4
Others	8.5	10.2	9.5
Total (n)	3458	3893	7351

Income Earner(Age 16 years or more)			
Full time	29.8	4.50	16.3
Part time	42.0	18.3	29.4
No work	11.6	21.9	17.0
Otherwise	16.7	55.3	37.3
Total (n)	4231	4793	9024
SSNP Benefit Status of HH Member			
Currently Beneficiary	12.6	16.5	14.6
Old Beneficiary	2.20	3.50	2.9
Eligible non-beneficiary	13.9	21.0	17.6
Otherwise	71.3	59.0	64.9
Total (n)	6490	6983	13473
Migration status(Age 16 years or more)			
No	92.7	99.2	96.1
Home	5.9	0.7	3.1
Abroad	1.4	0.1	0.7
Total(n)	4231	4793	9024
Disability Status of Household member			
Yes	4.90	2.80	3.80
No	95.1	97.2	96.2
Total(n)	6490	6983	13473
Household Composition			
Sex Ratio	107 women per 100 men		
Female-headed household (percent)	26.72		
Unemployment Rate (15=< Age <=60)	6.40		
Dependency Ratio (%)			
Child (0–14) dependency ratio (divided by the labor force)	52.85		
Aged (>60) dependency ratio (divided by the labor force)	21.67		
Total dependency ratio (child + aged dependency ratio)	74.52		
Average Family size	4.03		

Appendix Table 2: Housing Condition and Landholdings of the Household by SSNP Beneficiary Status

Household Indicators	Type of the Households			
	Current Beneficiary (%)	Old Beneficiary (%)	Eligible Non-Beneficiary (%)	Total (%)
Ownership of Living House				
Yes	91.9	94.2	83.6	89.6
No	8.1	5.8	16.4	10.4
Separate Kitchen in the Household				
Yes	59	65.1	52.4	57.5
No	41	34.9	47.6	42.5
Type of your main house				
Straw roof, muddy wall/ bamboo fence	14.4	11.2	20	15.8
Tin House	81.5	84.4	77.6	80.5
Others	4.2	4.4	2.5	3.7
Ownership of Toilet				
Yes	84	85.5	75.6	81.6
No	15.6	14.5	24.4	18.4
Type of Toilet used by HH members				
Sanitary toilet	4.7	2.5	2.6	3.9
Pukka toilet (water preventing)	5.6	4	4.5	5.1
Pukka toilet (not water preventing)	45	29.8	34.8	40.7
Not Hygienic	44.7	63.7	58.1	50.3
Homestead Land				
No Homestead Land	11.7	13.1	21.4	14.7
1 to 15 Decimal	79.3	73.5	72.5	76.7
16-50 Decimal	8.4	10.9	5.6	7.8
More than 50 Decimal	0.6	2.5	0.6	0.8

Average \pm SD	6.75 \pm 9.18	8.51 \pm 12.9	5.29 \pm 8.52	6.5 \pm 9.4
Agricultural Land				
Landless	77.6	73.1	86.4	79.9
1 to 15 Decimal	5	5.1	4.1	4.7
16-50 Decimal	11.2	6.9	5.8	9.2
More than 50 Decimal	6.2	14.9	3.7	6.2
Average \pm SD	12.8 \pm 12.8	24.9 \pm 69.3	5.5 \pm 19.8	11.6 \pm 4.5
Leased-in or Sharecropped Land				
No Sharecropped land	86.1	79.3	89.5	86.5
1 to 15 Decimal	1.9	2.2	2.2	2.0
16-50 Decimal	6.2	9.1	4.1	5.8
More than 50 Decimal	5.9	9.5	4.2	5.7
Average \pm SD	8.3 \pm 30.5	17.9 \pm 57.9	5.4 \pm 22.6	8.3 \pm 31.8
Total (n)	2045	275	1002	3322