

**“ASSESSMENT OF UTILITY OF SANITARY
LATRINES IN RURAL POPULATION – A
CROSS-SECTIONAL STUDY”**

Submitted by
(REG. NO. BD0115003)

DISSERTATION

Submitted to the
KLE University, Belagavi, Karnataka

In Partial Fulfillment of the requirements for the
degree of

DOCTOR OF MEDICINE (M. D.)

in

COMMUNITY MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE,
J. N. MEDICAL COLLEGE, BELAGAVI – 590010.

KARNATAKA, INDIA.

APRIL - 2018

**KLE UNIVERSITY, BELGAUM,
KARNATAKA.**

**Endorsement by the Head of Department,
Principal / Head of the institution**

This is to certify that the dissertation entitled “ASSESSMENT OF UTILITY OF SANITARY LATRINES IN RURAL POPULATION – A CROSS-SECTIONAL STUDY” is a bonafide and genuine research work done by (REG. NO.BD0115003).

Dr. (Mrs.) PADMAJA WALVEKAR M.D., Ph.D.

Professor and Head,
Department of Community Medicine
J. N. Medical College,
Belagavi – 590010.
Karnataka. India.

Date: . 09. 2017

Place: Belagavi

Dr. N.S. MAHANTSHETTI M.D.,

Principal,
J. N. Medical College,
Belagavi – 590010.
Karnataka, India.

Date: . 09. 2017

Place: Belagavi

UNDERTAKING

I, **(REG. NO. BD0115003)** hereby declare that the information and the data mentioned in my dissertation entitled **“ASSESSMENT OF UTILITY OF SANITARY LATRINES IN RURAL POPULATION – A CROSS-SECTIONAL STUDY”** belongs to me and is original.

I am aware of the definition of plagiarism as detailed below:

- An act or instance of using or closely imitating the language and thoughts of another author without authorization and the representation of that author's work as one's own, as by not crediting the original author.
- A piece of writing or other work reflecting such unauthorized use or imitation.
- The deliberate or reckless representation of another's words, thoughts or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise.

I hereby declare that the dissertation prepared by me is original-one and does not involve plagiarism anywhere. In case at a later stage it is found that I have indulged in plagiarism, then I am solely responsible for the same and the institution is at liberty to take any disciplinary action against me including cancellation of dissertation or any other penalties imposed by the University.

Date: .09.2017

Place: Belagavi

(REG. NO. BD0115003).

LIST OF ABBREVIATIONS USED

ODF	–	Open Defecation Free
CSR	–	Corporate Social Responsibility
UN	–	United Nations
WTD	–	World Toilet Day
NODF	–	Non Open Defecation Free
OBCs	–	Other Backward Castes
PHC	–	Primary Health Centre
SQUAT	–	Sanitation Quality Use Access and Trends
RICE	–	Research Institute for Compassionate Economics
χ^2	–	Chi – square test
DF	–	Degree Of Freedom
NGOs	–	Non Governmental Organizations
ASHA	–	Accredited Social Health Activist

ABSTRACT

BACKGROUND

About one billion people in the developing world, or 15 percent of the global population, practice open defecation. India is the country with the highest number of people practicing open defecation: around 490 million people. India now accounts for about 60% of the world's open defecation with most of it being prevalent in rural areas. The scenario of the availability and use of Sanitary Latrine facilities has indeed seen a steady improvement but still more than half of India's rural population does not have access to proper sanitation services. A very few comprehensive studies on this topic have been done in the state of Karnataka till date. Karnataka ranks 8th among all the states of India when it comes to prevalence of open defecation with around 53% of its rural residents still practicing it.

OBJECTIVES

1. To assess the utility of sanitary latrines in rural population.
2. To know the knowledge and attitude regarding use of sanitary latrines

METHODOLOGY

This rural population based cross-sectional study was conducted among 600 individuals of Primary Health Centre, Vantamuri, attached to Jawaharlal Nehru Medical College, KLE University Belagavi- India. The study was conducted over a period of one year from January 2016 to December 2016. A pre-designed and pre-tested questionnaire was used to collect the data from the participants.

RESULTS

88.33% of the total participants had provision of sanitary privy and used it while the rest 11% did not have the facility and followed open defecation. 79.33% of the study participants used the sanitary privy owned by their household while 9% used community toilet facilities. Most of the study participants cited Cost/Poverty as the main reason for sanitary privy while almost all of the study participants cited Comfort/Convenience as the main reason for using sanitary privy. 90.16% of participants said that they have heard about “Swachh Bharat Abhiyan”. 84.1% of respondents believed open defecation is the root cause of many diseases while 84.33% of the study participants believed that the most perceived disadvantage of open defecation was that it was unhygienic. The association of socio-economic status and type of housing with use of sanitary privy was found to be significant.

CONCLUSION AND INTERPRETATION

The present community based study reported a higher prevalence and use of sanitary privy. Most of the sanitary privies were owned by their households and were of water-seal type. Most of the study participants cited Cost/Poverty as the main reason for sanitary privy while almost all of the study participants cited Comfort/Convenience as the main reason for using sanitary privy. Majority of respondents believed open defecation is the root cause of many diseases and the most perceived disadvantage of open defecation was that it was unhygienic. The association of socio-economic status and type of housing with use of sanitary privy was found to be significant.

KEY WORDS : Open Defecation, Hygiene, Sanitation

CONTENTS

SL. NO.	TOPIC	PAGE NO.
1	INTRODUCTION	1-3
2	OBJECTIVES	4
3	REVIEW OF LITERATURE	5-12
4	METHODOLOGY	13-15
5	RESULTS	16-34
6	DISCUSSION	35-41
7	CONCLUSION	42
8	LIMITATIONS	43
9	RECOMMENDATIONS	44-45
10	SUMMARY	46-48
11	BIBLIOGRAPHY	49-53
12	ANNEXURE I – ETHICAL CLEARANCE	54
13	ANNEXURE II – CONSENT FORM	55-57
14	ANNEXURE III – ASSENT FORM	58-62
14	ANNEXURE IV – PROFORMA	63-69
15	ANNEXURE V – MASTER CHART & KEY	70-75

LIST OF TABLES

TABLE. NO.	DESCRIPTION	PAGE NO.
1	Distribution of study participants according to age	16
2	Distribution of study participants according to sex	16
3	Distribution of study participants according to religion	17
4	Distribution of study participants according to educational status	17
5	Distribution of study participants according to occupation	18
6	Distribution of study participants according to family type	18
7	Distribution of study participants according to socio-economic status	19
8	Distribution of study participants according to type of housing	19
9	Distribution of study participants according to provision of sanitary privy	20
10	Distribution of study participants according to use of sanitary privy	20
11	Distribution of study participants according to ownership of sanitary privy	21
12	Distribution of study participants according to the type of sanitary privy used	21
13	Distribution of study participants according to reasons for not using sanitary privy	22
14	Distribution of the study participants according to reasons for Using Sanitary Privy	22
15	Distribution of study participants according to awareness about sanitation programmes	23

TABLE. NO.	DESCRIPTION	PAGE NO.
16	Distribution of study participants according to beliefs regarding Latrine construction and open defecation	25
17	Distribution of study participants according to their beliefs of open defecation	26
18	Association of age with use of sanitary privy	27
19	Association of sex with use of sanitary privy Association of sex with use of sanitary privy	28
20	Association of religion with use of sanitary privy	29
21	Association of education with use of sanitary privy	30
22	Association of occupation with use of sanitary privy	31
23	Association of type of family with use of sanitary privy	32
24	Association of socio-economic status with use of sanitary privy	33
25	Association of type of housing with use of sanitary privy	34

LIST OF GRAPHS

GRAPH NO.	DESCRIPTION	PAGE NO.
1	Association of age with use of sanitary privy	27
2	Association of sex with use of sanitary privy Association of sex with use of sanitary privy	28
3	Association of religion with use of sanitary privy	29
4	Association of education with use of sanitary privy	30
5	Association of occupation with use of sanitary privy	31
6	Association of type of family with use of sanitary privy	32
7	Association of socio-economic status with use of sanitary privy	33
8	Association of type of housing with use of sanitary privy	34

INTRODUCTION

“The Secret of National health lies in the home of the people”

About one billion people in the developing world, or 15 percent of the global population, practice open defecation¹.

India is the country with the highest number of people practicing open defecation: around 490 million people. This is nearly one-third of India's population².

India now accounts for about 60% of the world's open defecation with most of it being prevalent in rural areas¹.

Other countries which have the most prevalence of open air defecation are Indonesia (54 million), followed by Pakistan (41 million), Nigeria (39 million), Ethiopia (34 million), and Sudan (17million)².

The scenario of the availability and use of Sanitary Latrine facilities has indeed seen a steady improvement but still more than half of India's rural population does not have access to proper sanitation services¹.

The present situation is so grave that elimination of open defecation is one of the main objectives of our Prime Minister's ambitious project – “Swachh Bharat Abhiyan”

The government aims to curb the menace of open air defecation by construction of about 12 million individual, cluster and community toilets, initiate an accountable mechanism to monitor their efficient use, thus aiming an Open-

Defecation Free (ODF) India by 2nd October 2019 – The 150th birth anniversary of Mahatma Gandhi.

The government has also launched a massive awareness campaign involving celebrities and other public figures for this mission. Print Media, Television, Radio etc. have been also roped in for advertisements. Many corporate houses and multinational companies have also pitched in financial support as a part of their Corporate Social Responsibility (CSR) initiatives.

As of 27 October 2016, 56 districts in India were ODF and recently Indore city in Madhya Pradesh state was adjudged the cleanest city of India in the “Swachh Survekshan” 2017 by the Ministry of Urban Development, Government of India³.

The practice of open defecation not only defines poverty and ignorance but proves detrimental to the overall health and hygiene of the society. The fact that high prevalence of infant mortality and malnutrition is also seen in the places that practice open defecation proves it to be a multifaceted issue.

A very few comprehensive studies on this topic have been done in the state of Karnataka till date. Karnataka ranks 8th among all the states of India when it comes to prevalence of open defecation with around 53% of its rural residents still practicing it⁴.

Sanitation is a global development priority. It has been included in the latest Sustainable Development Goals, launched in 2015, and it envisions a target to ensure everyone everywhere has access to toilets by 2030.

Keeping in focus the ubiquitous need of sanitation and proper toilets the United Nations (UN) passed a resolution in 2013 to make World Toilet Day (WTD) as one of its official international UN day.

It is celebrated on 19th of November every year.

The day is observed by various awareness activities world over, and includes organising an "Urgent Run" to sensitise masses about the global sanitation crisis.

Every year this run takes place across the globe and India also actively takes part in this event.

Each year of the World Toilet Day has a different theme, focus or slogan, and the theme for 2016 was "Toilets and Jobs".

This study has been undertaken to bring under focus the gravity of a rather ignored but arguably one of the largest public health problems of India. Various questions have been asked to the participants which throws light on their knowledge, attitude, awareness and health beliefs regarding use of sanitary privy and open defecation.

Furthermore this study shall be helpful in drafting and implementation of policies for making India a cleaner as well as a healthier place to live.

OBJECTIVES OF THE STUDY

1. To assess the utility of sanitary latrines in rural population.
2. To know the knowledge and attitude regarding use of sanitary latrines.

REVIEW OF LITERATURE

The third millennium BC saw the advent of toilets and sewers throughout the world. Mohenjo-Daro circa 2800 BC is credited to have some of the most advanced toilets built into outer walls of homes. These toilets were Western-style, although a primitive form, with vertical chutes, via which waste was disposed of into pits or drains⁵.

Toilets that used water were used widely in the Indus Valley Civilization. The ancient cities of Harappa and Mohenjo-daro had a flush toilet in almost every dwelling, attached to a sophisticated sewage system⁶.

Other prominent civilizations across the world also had well developed sanitation systems, but it was not until mid-19th century that the industrial production of commercial flush toilets begun.

Open defecation and associated lack of sanitary hygiene in general is an important factor in causation of various diseases. Most notably

1. Diarrhea
2. Intestinal worm infections

But also

1. Typhoid
2. Cholera
3. Hepatitis
4. Polio
5. Trachoma, and others⁷

In 2011 alone, infectious diarrhea resulted in around 0.7 million deaths in children under five years old and about 250 million lost school days. It can also lead to under nutrition and stunted growth in children⁸.

A Survey done by a female social worker in Kheri and Raipur Rani Villages of Ambala, Punjab, indicated that sanitary latrines were more accepted in a larger village setting as compared to a smaller village as evidenced by better latrine use rate and maintenance. In both villages, main advantage of having a latrine in the house were told as convenience for women, children and aged. Some villagers considered open air defecation a cleaner act in comparison to in-house latrine. Difficulty in night and in rains was also expressed for open air defecation⁹.

In a qualitative study which focused on two villages (*Soforia* and *Paharfuldi*) from two unions (*Baghaboand Jessore*) of Shibpurupazila under Narshingdi district in Bangladesh, it was seen that near about 85% households owned the latrine of any type, 13% households did not own but they had access and 2% still do not have any access. Altogether 98% households had access to latrine of any type¹⁰.

A study conducted on environmental sanitation, sanitary habits and personal hygiene among Baigas of Samarpur block of Dindori district, Madhya Pradesh indicated that 68% of them opted for open field defecation. The most unhygienic thing about Baigas, which has been observed during investigation is that, they do not wash their hands after defecation, which cannot be stated as even satisfactory as far as personal hygiene is concerned. Even many of them do not take water with them while going for defecation. However, some of them have also reported about washing of their hands, after defecation (25 %). It is observed that most of the Baigas rub their hands on soil after latrine (37 %) or rub their hands on stone (21 %)¹¹

In a study carried out in Nelvoy village of Vellore district, Tamil Nadu, India in 2005-06 Among 97 households interviewed, 30 (30.9%) had toilets but only 25 (83.3%) used them. Seventy-two (74.2%) of respondents defecated in fields, and there was no stigma associated with this traditional practice¹².

A study undertaken in rural Madhya Pradesh concluded that in open defecation free (ODF) villages 79% of the individuals were using a sanitary latrine whereas none of the individuals used it in a non-open defecation free (NODF) villages.

In depth interview with the ODF villagers revealed that, because of shortage of water, they are not at all using pour-flush sanitary toilets; instead some are still using open-field defecation.

The results further indicated that 23% of the population suffered from diarrhoeal diseases in ODF compared with 74% in the NODF¹³.

A study conducted in rural district of Pune, Maharashtra, to find out the reasons for under utilisation of community latrines it was observed that in spite of presence of community latrines 67% population resorted to open defecation. Inadequate water supply (48.6%) being the major reason for the under utilisation of these community latrines followed by lack of awareness for the same (19.5%)¹⁴.

A study done to find out the correlates of open defecation practices among general population, in rural area of Varanasi, Uttar Pradesh, it was observed that open defecation is prevalent among all categories of people in rural India (78.2%). The study also observed that Other Backward Castes (OBCs) have a higher prevalence of open defecation as compared to others. The study also suggested reviewing of all

existing sanitary programmes and encouraging people for construction of improved toilets by their own efforts ¹⁵.

In a community-based cross-sectional quantitative study conducted in 2012 in the district of Bahir Dar Zuria, Ethiopia among 32 rural kebeles (the lowest administrative unit in Ethiopia) results showed that Of the households, 355 (58.4%) had latrines. All the available latrine facilities were pit latrines. Of the respondents who had latrines, 191(53.8%) explained that they had been advised by health workers to construct latrines, and 113 (31.8%) responded that they had been advised by local administrators as part of the local sanitation campaign ¹⁶.

A cross sectional survey conducted in 2012 to study open air defecation practice using pre-tested questionnaires in 946 rural households of Nandivargam village of Kurnool district, India showed that (74.57%) were practicing open defecation. 134 (56.77%) households had toilets of which 97 (71.32 %) were using them while 179 (75.84%) households did not regard open air defecation practice as a stigma ¹⁷.

A cross-sectional study was conducted in March 2008 in Chandragadhi VDC of Nepal where 203 households were surveyed and it was found out that People who were devoid of latrine facilities suffered from diarrhea (40.74%) followed by dysentery (12.03%) respectively. Almost (38%) of the population under study got rid of the excreta of their children in the river nearby and (32.5%) throw in the same latrine they use ¹⁸.

A cross-sectional study to investigate latrine coverage and use among 20 villages (447 households, 1933 individuals) in Orissa India where the Government of India's Total Sanitation Campaign had been implemented at least three years

previously. The results were not on similar lines, while mean latrine coverage among the villages was 72%, there were three villages which had less than 50% coverage. Combined with the 28% of households that did not have latrines¹⁹.

A study carried out to find out awareness and practices pertaining to open defecation at 60 panchayats in Namakkal, Perambalur and Pudukkottai Districts, Tamil Nadu, inferred that 90% of the respondents defecated in the open whereas optimum usage of toilet was limited to 51% of the family members, only few (18%) members of the family use the toilets and 31% of the family members did not use the toilets at all. The reasons cited for not using the toilets were cultural barriers (42%), incomplete knowledge (31%) and water scarcity. Most quoted reason for not constructing toilets was non availability of funds (69%). The study further brought out that 63% of them have shown interest in having a toilet of their own while the remaining 37% of them did not show any interest²⁰.

A longitudinal cohort study of the baseline, midline, and end line status of the WASH project was done in three rounds across thirty thousand households from 50 upazilas (sub-districts) in two stages in Bangladesh and it indicated that the use of sanitary latrines by households increased significantly from the baseline (31.7%) to midline (41.5%) and end line (57.4%) assessment points²¹.

In a similar community based quantitative cross-sectional study was conducted on 759 rural households of Gulomekada district of Ethiopia in 2013, it was observed that out of the 756 households who have latrine, only 433 (57.3%) reported that they use latrine always, 160 (21.1%) use sometimes and 163 (21.6%) did not use latrine at all.

294(49.6%) of the respondents reported latrine utilization has health benefit and effective for environmental sanitation while preferring to go in field was the most frequent rated reason for not using latrines 122 (74.8%).

All respondents of this study (756) revealed that they were advised by different sources to use latrine. 210 (27.8%) and 173 (22.9%) respondents revealed that they were advised by only health professionals and by health professionals and NGO's respectively²².

In a community-based cross-sectional quantitative study 2014 in the Mangu Community of Wa Municipality, Ghana the results indicated that majority (66%) of the houses did not have a sanitary facility. Out of those which had a sanitary facility majority (53%) of them were not shared with other housing units. In terms of religion, most (48%) of them were Muslims and about 35% did not have any formal education. Likewise, 48% were farmers or trader²³.

In a cross-sectional study conducted during September 2013 in the rural setting, Chennai, India.17% of the total study participants reported to have been defecating in the open while 7% used community sanitation facilities²⁴.

In a similar community based cross sectional descriptive study conducted among 506 households in Myagdi districts of Nepal the results were that only 2% of the households defecated openly²⁵.

A cross-sectional study was carried out to understand the knowledge and practices followed for presence and condition of toilet in house and waste disposal in 8 rural villages in 2 districts of Tamil Nadu, India. The results revealed that Un-

availability of toilet was 70% among study population; 40% of them stated financial reasons for absence of toilets ²⁶.

A cross sectional study was conducted in the rural field practice area of Adichunchanagiri Institute of Medical Sciences, B G Nagara, India in 2015. Around 259 households were included and the results concluded that 18% of the total households practiced open air defecation. 80.4% of them were aware of the financial assistance provided for construction of sanitary latrines²⁷.

In a cross sectional study, carried out among the subjects from rural field practice areas of Sri Dharmasthala Manjunatheshwara College of Medical Science and Hospital (SDMCMS&H), Dharwad, Karnataka, the results showed that out of 200 respondents in the study, only 119 (59.5%) of the households had toilets at their homes and 81 (40.5%) houses did not have one.

Among the subjects who did not have a toilet in their house (81), the most common reason for the same was that there was no place to construct it, which was among 44 (54.3%) subjects. 17 (21%) subjects did not feel the need to have a toilet in the house and 20 (24.7%) of the subjects had other reasons for not having toilet in their houses ²⁸.

In a community based cross sectional study conducted in 120 households of Hubballi and rural areas of Noolvi revealed that the practice of open air defecation was prevalent in 44.16% of study sample (21% in urban slums and 63% in rural areas).

77% considered open air defecation bad and 23% had good opinion regarding it. 75% of the participants were aware that open air defecation had adverse health effects (57.77% urban and 20% rural) ²⁹.

Similarly a cross sectional study conducted among 1175 households of rural population in Kuthambakkam village, Tamil Nadu concluded that the prevalence of usage of household sanitary latrine and community latrines was 62.5% and 4.3% respectively. Open air defecation was recorded at 33.1%.

Significant association was found between low standard of living and open air defecation practice ³⁰.

In a study done in four villages of Tehri-Garhwal district of Uttarakhand, India over a three-month period in 2013, it was seen that 50% of rural households do not have latrines³¹.

A cross-sectional study carried out among 400 adults from Sonatti village of Belgaum district of north Karnataka, India, in 2014, it was observed that 99.8 % of the study population practiced open air defecation. Awareness of sanitary toilet use was significantly associated with higher socioeconomic status and higher education³².

MATERIALS AND METHODS

Source of data:

- a) **Source:** Five Sub Centres coming under Primary Health Centre (PHC), Vantamuri.
- b) **Study design:** Cross-sectional Study
- c) **Study Period:** Study was conducted over a period of one year from January 2016 to December 2016.
- d) **Sample size:** The study sample size was calculated using the following formula-

$$\text{Sample size} = \frac{4pq}{d^2}$$

Here,

p= Prevalence; taken as 33% from previous studies;

q= 100-p = 100-33 =67;

d= 4% absolute error

Hence,

$$n = \frac{4 \times 33 \times 67}{16}$$

$$4 \times 4$$

$$= \frac{8844}{16}$$

$$16$$

$$n = 552 \quad 600$$

Thus Sample size is **600**

e) Sampling Method:

Population Proportionate sampling technique

S No.	Sub-Centre	Population	Sample size= $n/N*600$	Total no. of households in largest village	House to be visited
1	Vantamuri	7963 (n_1)	127	884	$884/127=7$ Every 7 th House
2	Bhutramatti	5852 (n_2)	93	303	$303/93=3.3$ Every 3 rd House
3	Honaga	8063 (n_3)	129	1107	$1107/129=8.5$ Every 8 th House
4	Kakati A	8435 (n_4)	135	1260	$1260/135=9.3$ Every 9 th House
5	Kakati B	7315 (n_5)	116	987	$987/116=8.5$ Every 8 th House
Total		37,628	600		

f) Instruments used for data collection Questionnaire

Pre-designed and structured questionnaire was constructed according to SQUAT (Sanitation quality, Use, Access and Trends) survey done by RICE (Research Institute for Compassionate Economics) from December, 2013 to April, 2014 in villages of Rajasthan, Madhya Pradesh, Uttar Pradesh, Haryana, and Bihar. Pre-designed questionnaire was used separately for the present study. Data was collected regarding socio-demographic variables, knowledge, attitude and practice of use of sanitary latrines.

Method of collection of data:

- A written informed consent was taken.
- Study subjects were interviewed using a modified, pre-designed, pre-tested questionnaire.

(SQUAT Questionnaire – Sanitation Quality, Use, Access and Trends)

Inclusion criteria: All the families residing in Vantamuri sub-centre (people of all age groups residing for more than one year preceding the survey) of Vantamuri PHC, in Belagavi District.

Exclusion criteria: Nil

Analysis plan:

Data collected in the questionnaire was coded and entered in Microsoft excel sheet. Tables and graphs were prepared. Statistical analysis was done using percentages and Chi Square test. The ethical clearance was obtained from Institutional Ethics Committee for human subjects research of JNMC, Belagavi.



Introduction



Objectives



Review of Literature



Methodology



Results



Discussion



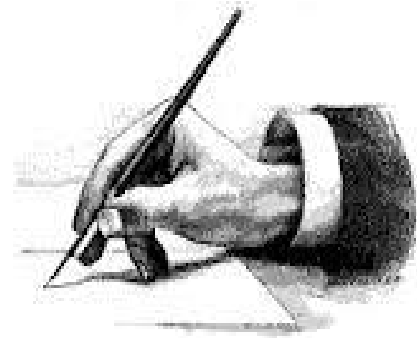
Conclusion



Summary



Bibliography



Annexure-I



Annexure-II



Annexure-III



Annexure-IV



Annexure-V

RESULTS

Socio Demographic Profile

Table 1. Distribution of study participants according to age

Age	Number
18-28	179 (29.84)
29-38	216 (36)
39-48	48 (8)
49-58	61 (10.16)
59 & above	96 (16)

(Figure in brackets indicate percentage)

In the present study maximum number of participants (36%), were between the age group of 29-38 years, followed by 29.84% who were in the age group of 18-28 years.

Table 2. Distribution of study participants according to sex

Sex	Number
Male	398 (66.33)
Female	202 (33.67)

(Figure in brackets indicate percentage)

In the present study maximum number of the study participants (66.33%) were males while rest of them were females.

Table 3. Distribution of study participants according to religion

Religion	Number
Hindu	562 (93.66)
Muslim	34 (5.67)
Others	4 (0.66)

(Figure in brackets indicate percentage)

Maximum number of study participants (93.66 %) were Hindus followed by Muslims (5.67%) and others (Christianity and Sikhism)

Table 4. Distribution of study participants according to educational status

Education	Number
Illiterate	37 (6.17)
Primary School	64 (10.67)
High School	326 (54.33)
More than High School	173 (28.83)

(Figure in brackets indicate percentage)

Maximum number of the study participants were educated up to High School (54.33%) followed by 28.83% who were educated up to more than High School (Matriculation, degree and post-graduation) 10.67% were educated up to primary school. 6.17% of the total study participants were illiterate.

Table 5. Distribution of study participants according to occupation

Occupation	Number
Farmer	153 (25.51)
Factory Worker	114 (19)
Coolie	100 (16.66)
Others	233 (38.83)

(Figure in brackets indicate percentage)

25.51% of the total study participants were farmers which made them the largest occupational group, followed by factory workers (19%) and Coolie (16.66%), 38.83% of the study participants had other occupations which included Housewives, Masons, Carpenters, and Shopkeepers etc.

Table 6. Distribution of study participants according to family type

Type of Family	Number
Joint	245 (40.84)
Nuclear	343 (57.16)
Broken	4 (0.66)
Problem	8 (1.34)

(Figure in brackets indicate percentage)

In the present study, 57.16% of the study participants belonged to nuclear family followed by 40.84% who belonged to joint family.

Table 7. Distribution of study participants according to socio-economic status

Socio-economic status	Number
Class 1	9 (1.5)
Class 2	75 (12.5)
Class 3	99 (16.5)
Class 4	278 (46.33)
Class 5	139 (23.16)

(Figure in brackets indicate percentage)

In the present study, 46.33% belonged to class IV followed by 23.16% who belonged to class V

Housing History

Table 8. Distribution of study participants according to type of housing

Type of Housing	Number
Kaccha	339 (56.5)
Pakka	261 (43.5)

(Figure in brackets indicate percentage)

Most of the study participants (56.5%) lived in a Kaccha house while 43.5% of them lived in Pakka houses.

Table 9. Distribution of study participants according to provision of sanitary privy

Provision of Sanitary Privy	Number
Yes	530 (88.33)
No	70 (11.67)

(Figure in brackets indicate percentage)

88.33% of the total participants had provision of sanitary privy and used it while the rest 11% did not have the facility and followed open air defecation.

Table 10. Distribution of study participants according to use of sanitary privy

Use of Sanitary Privy	Number
Yes	530 (88.33)
Not Applicable	70 (11.67)

(Figure in brackets indicate percentage)

In the present study, 88.33% of the total participants were using sanitary privy.

Table 11. Distribution of study participants according to ownership of sanitary privy.

Sanitary Privy owned by	Number
Household	476 (79.33)
Community	54 (9)
Not Applicable	70 (11.67)

(Figure in brackets indicate percentage)

Only 79.33% of the study participants used the sanitary privy owned by their household.

Table 12. Distribution of study participants according to the type of sanitary privy used

Type of Sanitary Privy	Number
Water Seal	528 (88)
Others	2 (0.33)
Not Applicable	70 (11.67)

(Figure in brackets indicate percentage)

88% of the study participants used water-seal type of sanitary privy.

Attitude towards use of Sanitary Privy
Table 13. Distribution of study participants according to reasons for not using sanitary privy

Reasons	Number
Cost / Poverty	530 (88.34)
Habit / Tradition / Always done so	57 (9.5)
Water shortage	13 (2.2)

(Figure in brackets indicate percentage)

When asked about the reasons for not using a Sanitary Privy most of the study participants (88.34%) cited Cost/Poverty as the main reason followed by Habit/Tradition/Always done so (9.5%) and Water shortage (2.2%)

Table 14. Distribution of the study participants according to reasons for Using Sanitary Privy

Reasons	Number
Comfort / Convenience	591 (98.5)
Privacy	5 (0.83)
Status	4 (0.67)

(Figure in brackets indicate percentage)

When asked about the reasons for using Sanitary Privy almost all of the study participants (98.5%) cited Comfort/Convenience as the main reason

Awareness about sanitation programmes
Table 15. Distribution of study participants according to awareness about sanitation programmes

A.	Asked to construct a latrine	Number
	Yes	528 (88)
	No	72 (12)
B.	If yes , who asked	
	Panchayat	509 (84.84)
	Men in the family	16 (2.66)
	Women in the family	3 (0.5)
	No one told to build	72 (12)
C.	Ever seen poster/pamphlet/wall writing about latrine	
	Yes	541 (90.16)
	No	59 (9.83)
D.	Ever heard about Swachh Bharat Abhiyan	
	Yes	541 (90.16)
	No	59 (9.83)

(Figure in brackets indicate percentage)

When asked about awareness about sanitation programmes, 88% of the total study participants were ever asked to construct a Latrine while the rest 12% were never asked by anyone to construct a Latrine.

Most of the respondents (84.84%) said that Panchayat members told them to construct a Latrine. When asked about whether they have seen advertisements/ posters/ pamphlets about sanitary privy majority of the study participants (90.16%) said yes, while the same number of participants said that they have heard about “Swachh Bharat Abhiyan”

Health Beliefs

Table 16. Distribution of study participants according to beliefs regarding Latrine construction and open defecation

Belief	Pure	Does not matter
Latrine far from house	543 (90.5)	57 (9.5)
Latrine near to house	543 (90.5)	57 (9.5)
Open defecation far from house	543 (90.5)	57 (9.5)
Open defecation near to house	558 (93)	42 (7)
Latrine inside the house	543 (90.5)	57 (9.5)
Latrine constructed near well	561 (93.5)	39 (6.5)
Open defecation near well	568 (94.66)	32 (5.33)

(Figure in brackets indicate percentage)

90.5% of the total study participants opined that a Latrine constructed far from house or defecating in the open far from the house is pure while 9.5% of them said it does not matter to them.

Majority of the study participants (90.5%) found Latrine constructed inside the house pure while 93% of the total respondents found defecating in the open near the house impure. Majority of the study participants (93.5%) found Latrine constructed near a well not pure, while 94.66% of the total respondents said defecating in the open near a well is not pure.

Table 17. Distribution of study participants according to their beliefs of open defecation

Belief	Healthier	Similar
Village using latrine	543 (90.5)	57 (9.5)
	Yes	No
Open air defecation is the root of diseases	505 (84.1)	95 (15.83)
Most perceived disadvantages of open air defecation	Number	
Unhygienic	506 (84.33)	
Diseases	37 (6.16)	
Don't know	57 (9.5)	

(Figure in brackets indicate percentage)

Majority of the respondents (90.5%) opined that a village with no open defecation will have better health as compared to a village which does not. 84.1% of respondents believed that open defecation is the root cause of many diseases. 84.33% of the study participants believed that the most perceived disadvantage of open defecation was that it was unhygienic, 6.16% said that it led to diseases and 9.5% did not know any disadvantage of open defecation.

Association Tables -

Table 18. Association of age with use of sanitary privy

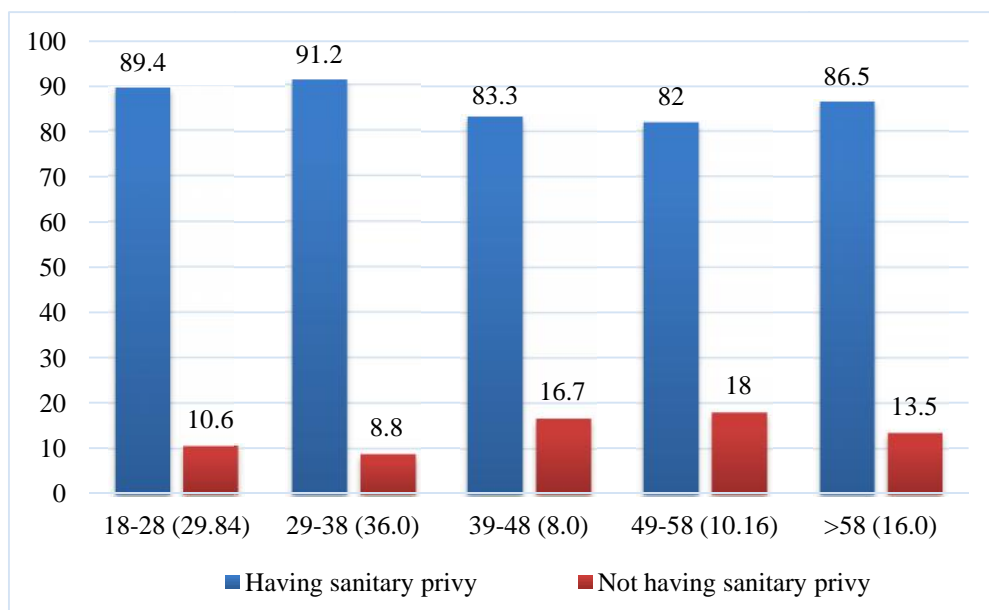
Age	Number	Number having sanitary privy	Number not having sanitary privy
18-28	179 (29.84)	160 (89.4)	19 (10.6)
29-38	216 (36)	197 (91.2)	19 (8.8)
39-48	48 (8)	40 (83.3)	8 (16.7)
49-58	61 (10.16)	50 (82.0)	11 (18.0)
59 & above	96 (16)	83 (86.5)	13 (13.5)

$\chi^2 = 5.810$ $p = 0.214$ $DF = 4$

(Figure in brackets indicate percentage)

The association of age with use of sanitary privy was seen and the difference was not found to be statistically significant ($p = 0.214$)

Figure 1 - Association of age with use of sanitary privy



(Figure in brackets indicate total percentage)

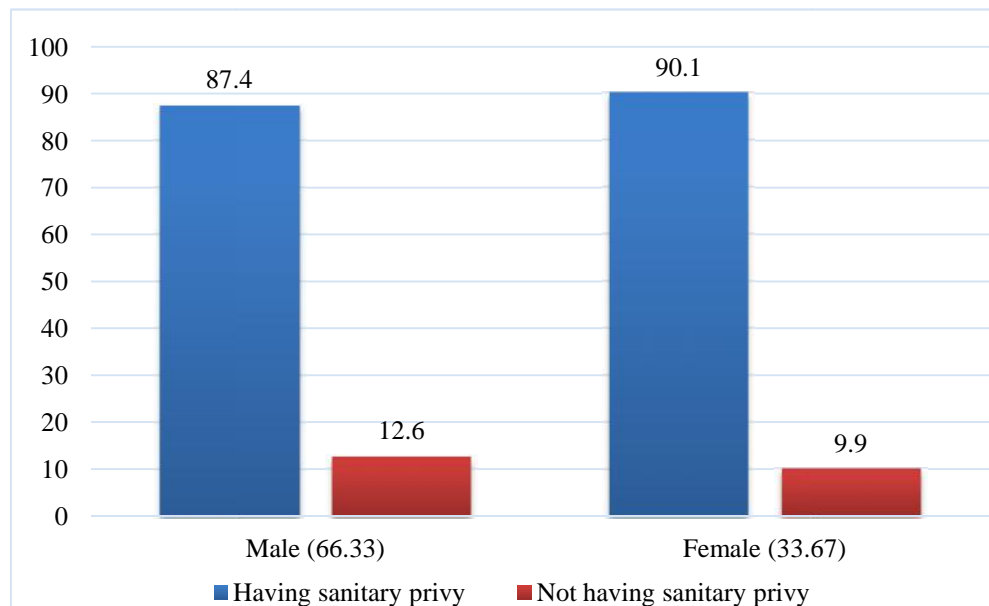
Table 19. Association of sex with use of sanitary privy

Sex	Number	Number having sanitary privy	Number not having sanitary privy
Male	398 (66.33)	348 (87.4)	50 (12.6)
Female	202 (33.67)	182 (90.1)	20 (9.9)
$\chi^2 = 0.921$ $p = 0.337$ $DF = 1$			

(Figure in brackets indicate percentage)

The association of sex with the use of sanitary privy was not found to be statistically significant ($p = 0.337$)

Figure 2 - Association of sex with use of sanitary privy



(Figure in brackets indicate total percentage)

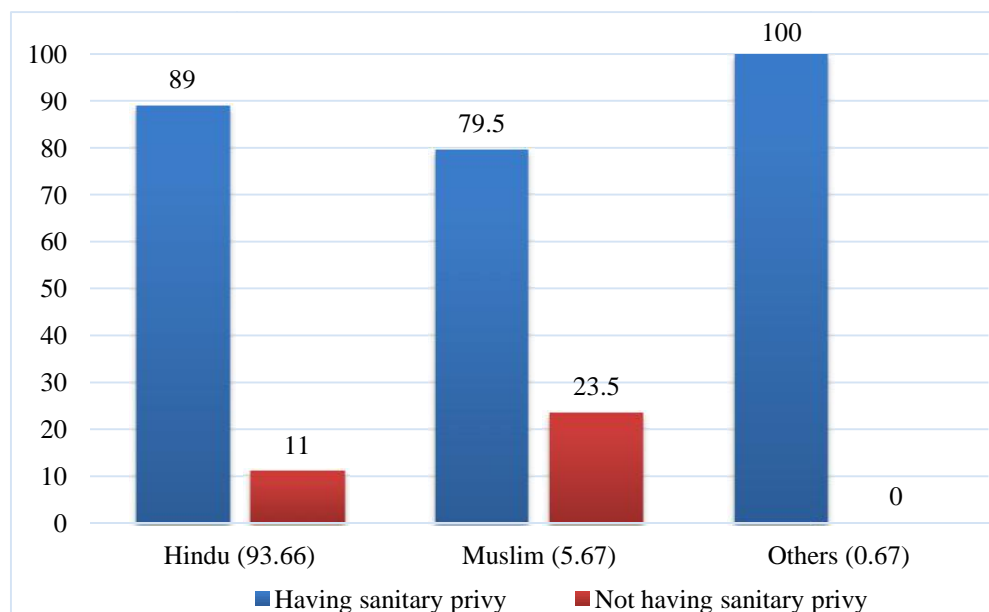
Table 20. Association of religion with use of sanitary privy

Religion	Number	Number having sanitary privy	Number not having sanitary privy
Hindu	562 (93.66)	500 (89.0)	62 (11.0)
Muslim	34 (5.67)	26 (79.5)	8 (23.5)
Others*	4 (0.67)	4	0
$\chi^2 = 5.391$		$p = 0.68$	DF = 2

*(Figure in brackets indicate percentage) *Christianity and Sikhism*

The association of religion with use of sanitary privy was not found to be statistically significant ($p = 0.68$)

Figure 3. - Association of religion with use of sanitary privy



(Figure in brackets indicate total percentage)

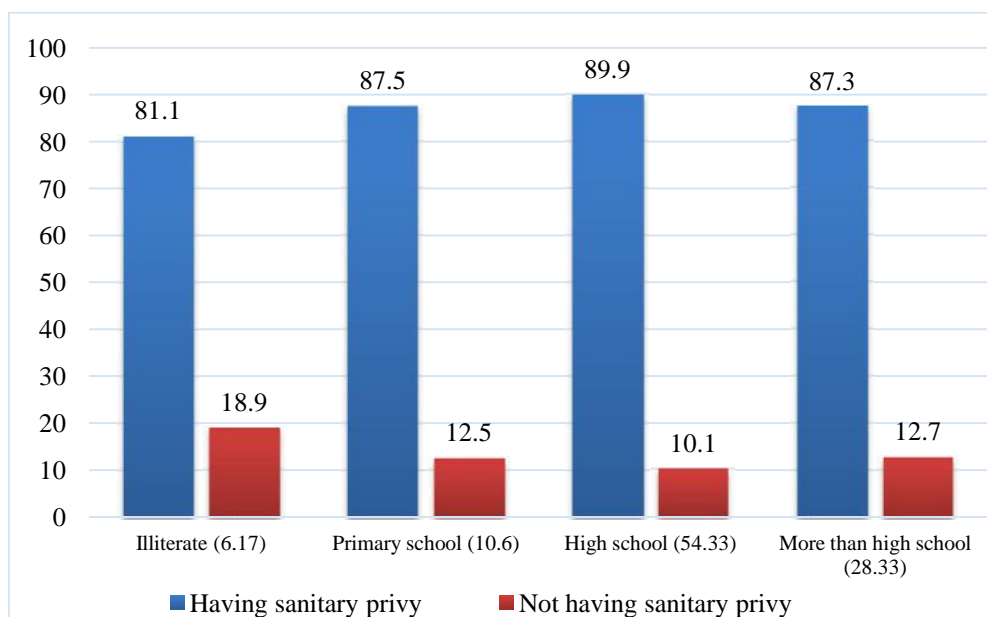
Table 21. Association of education with use of sanitary privy

Education	Number	Number having sanitary privy	Number not having sanitary privy
Illiterate	37 (6.17)	30 (81.1)	7 (18.9)
Primary School	64 (10.67)	56 (87.5)	8 (12.5)
High School	326 (54.33)	293 (89.9)	33 (10.1)
More than High School	173 (28.33)	151 (87.3)	22 (12.7)
$\chi^2 = 2.871$		$p = 0.412$	DF = 3

(Figure in brackets indicate percentage)

The association of education with use of sanitary privy was not found to be statistically significant ($p = 0.412$).

Figure 4 - Association of education with use of sanitary privy



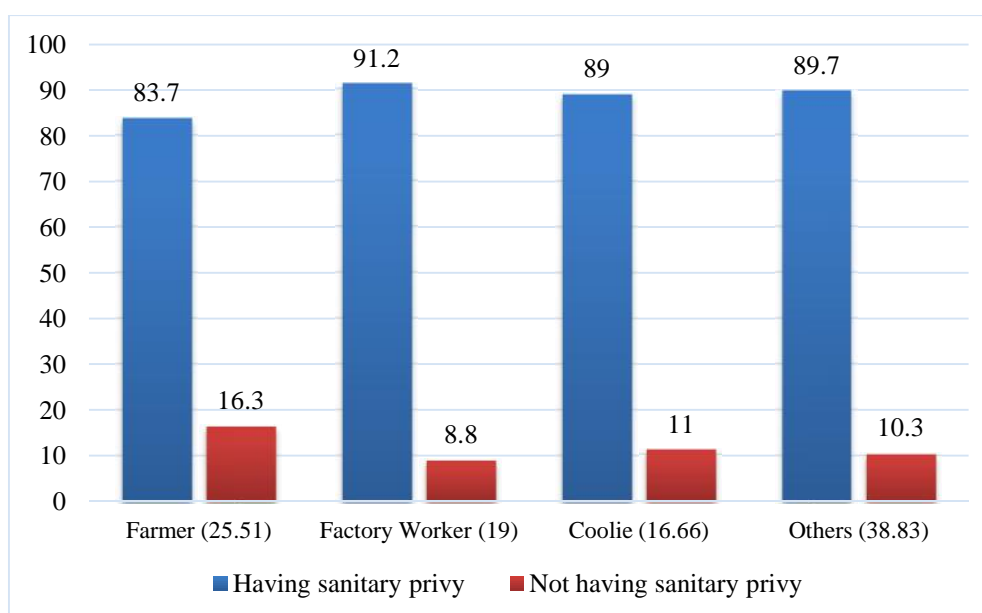
(Figure in brackets indicate total percentage)

Table 22. Association of occupation with use of sanitary privy

Occupation	Number	Number having sanitary privy	Number not having sanitary privy
Farmer	153 (25.51)	128 (83.7)	25 (16.3)
Factory Worker	114 (19)	104 (91.2)	10 (8.8)
Coolie	100 (16.66)	89 (89.0)	11 (11.0)
Others*	233 (38.83)	209 (89.7)	24 (10.3)
$\chi^2 = 4.634$		$p = 0.201$	DF = 3

*(Figure in brackets indicate percentage)*Housewives, Masons, Carpenters and Shopkeepers etc.*

The association of occupation with use of sanitary privy was not found to be statistically significant ($p = 0.201$)

Figure 5 - Association of occupation with use of sanitary privy

(Figure in brackets indicate total percentage)

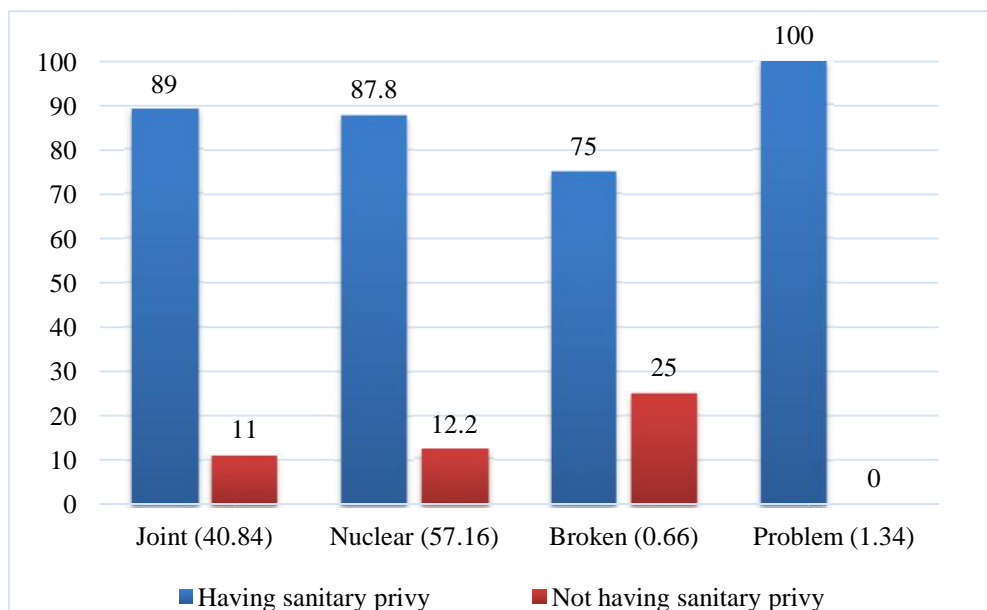
Table 23. Association of type of family with use of sanitary privy

Type of Family	Number	Number having sanitary privy	Number not having sanitary privy
Joint	245 (40.84)	218 (89.0)	27 (11)
Nuclear	343 (57.16)	301 (87.8)	42 (12.2)
Broken	4 (0.66)	3 (75.0)	1 (25.0)
Problem	8 (1.34)	8 (100.0)	0 (0.0)
$\chi^2 = 1.957$		$p = 0.581$	DF = 3

(Figure in brackets indicate percentage)

The association of type of family with use of sanitary privy was not found to be statistically significant ($p = 0.581$)

Figure 6 - Association of type of family with use of sanitary privy



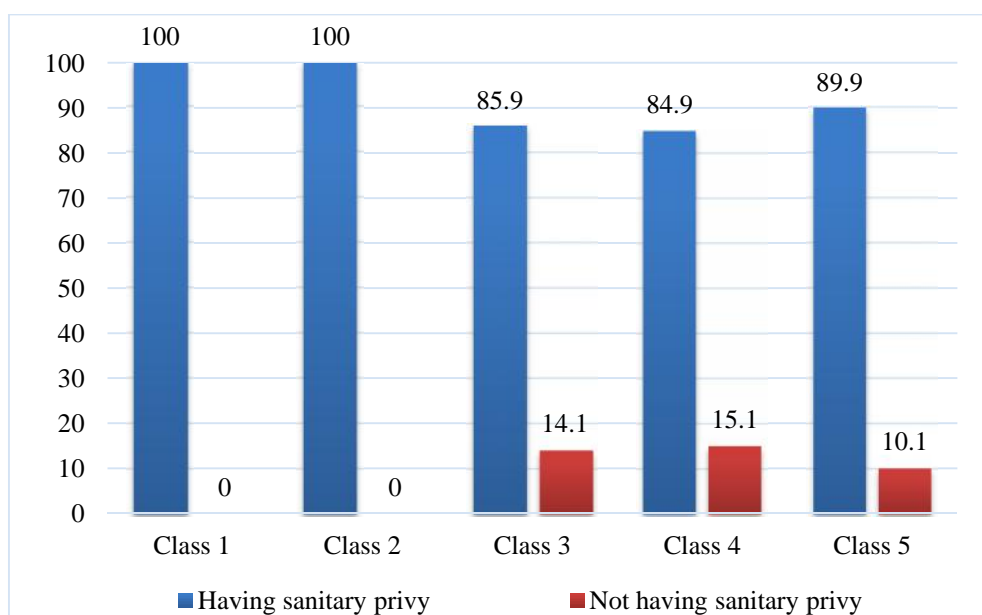
(Figure in brackets indicate total percentage)

Table 24. Association of socio-economic status with use of sanitary privy

Socio-economic status	Number	Number having sanitary privy	Number not having sanitary privy
Class 1	9 (1.5)	9 (100.0)	0 (0.0)
Class 2	75 (12.5)	75 (100.0)	0 (0.0)
Class 3	99 (16.5)	85 (85.9)	14 (14.1)
Class 4	278 (46.33)	236 (84.9)	42 (15.1)
Class 5	139 (23.16)	125 (89.9)	14 (10.1)
$\chi^2 = 15.220$		$p = .004$	DF = 4

(Figure in brackets indicate percentage)

The association of socio-economic status with use of sanitary privy was found to be statistically significant ($p = 0.004$). Indicating that, as the socio-economic status of the participants increased, use of sanitary privy also increased.

Figure 7 - Association of socio-economic status with use of sanitary privy

(Figure in brackets indicate total percentage)

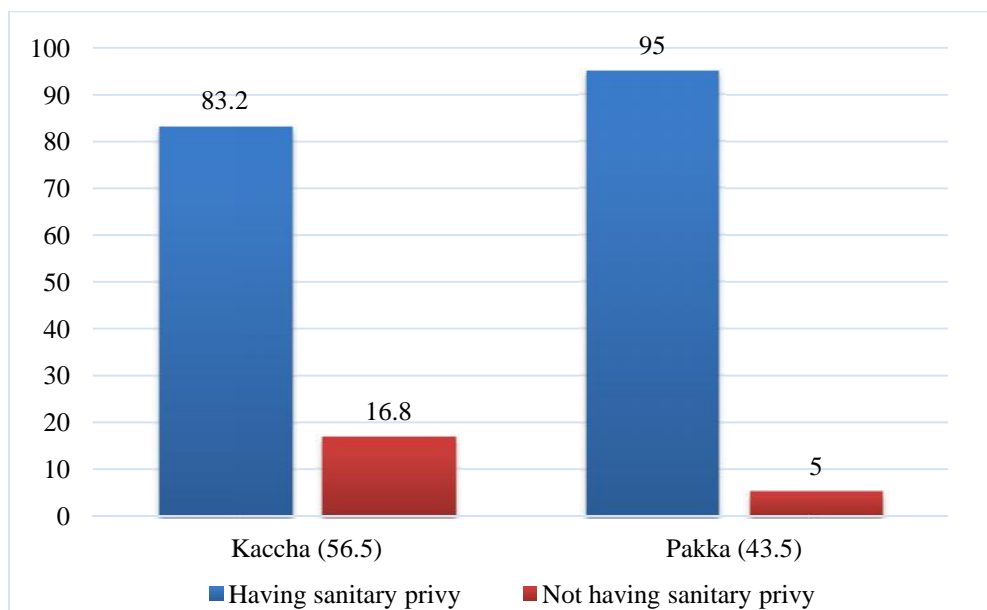
Table 25. Association of type of housing with use of sanitary privy

Type of Housing	Number	Number having sanitary privy	Number not having sanitary privy
Kaccha	339 (56.5)	282 (83.2)	57 (16.8)
Pakka	261 (43.5)	248 (95.0)	13 (5.0)
$\chi^2 = 20.037$		$p = <0.001$	DF = 1

(Figure in brackets indicate percentage)

The association of type of housing with use of sanitary privy was found to be statistically significant ($p = < 0.001$). Indicating that, as the percentage of participants having pakka house increased, use of sanitary privy also increased.

Figure 8 - Association of type of housing with use of sanitary privy



(Figure in brackets indicate total percentage)

DISCUSSION

Socio-demographic profile (Table no. 1 to 7)

In the present study, maximum number of participants (36%), were between the age group of 29-38 years, followed by 29.84% who were in the age group of 18-28 years. The results were similar to the studies done in north Karnataka, India²⁸ and Ghana²³. Results were different to the studies done in rural area of Kuppam, Andhra Pradesh, India³³ and rural area of north Karnataka³² where maximum number of participants (84% and 43.3%) were more than 55 years of age and between 18-30 years age group, respectively.

In the present study, maximum number of the study participants (66.33%) were males while rest of them were females. The results are similar to the studies done at Nepal²⁵ and North Karnataka²⁸, India. In contrast to the study done in Kuthambakkam village of Tamilnadu³⁰, India, where males (81%) were considerably more in number than females and in studies done at rural areas of Hubballi-Dharwad²⁹, and rural areas of Tamilnadu²⁶, India females were more than males.

In the present study, maximum number of study participants (93.66 %) were Hindus followed by Muslims (5.67%) and others (Christianity and Sikhism). The results are similar to studies done in Nepal²⁵ and in Kuthambakkam village, Tamil Nadu³⁰, while Hindus were significantly less (77.5%) in a study done in rural areas of Hubballi-Dharwad, India²⁹.

In the present study, it was encouraging to find that 93.83% of the study participants were literates while only 6.17% of the total study participants were

illiterate. The results are on the similar lines to the studies done in Kuthambakkam village, Tamil Nadu³⁰ and north Karnataka²⁸, where literate study subjects outnumbered their illiterate counterparts, but the number of illiterate study subjects was still more than our study. While in the studies done at rural area of Kuppam, Andhra Pradesh, India³³ and rural area of north Karnataka³² the number of illiterates were significantly more than number of literate study participants.

In the present study, maximum (25.51%) study participants were farmers which made them the largest occupational group, followed by factory workers (19%) and Coolie (16.66). The results are on the similar lines to the studies done in North Karnataka^{28,32} but still in the present study the percentage of farmers are significantly less than the above mentioned studies. This difference could be due to the presence of numerous factories in the present study area and that is why factory workers (19%) and Coolie (16.66%) formed the second and third largest occupational group, respectively.

In the present study, majority (57.16%) of the study participants belonged to nuclear family and rest belonged to joint family. Similar results were found in the studies done at rural area of Kuppam, Andhra Pradesh³³ and rural areas of Tamil Nadu²⁶ whereas the results were quite different in the study done in rural area of north Karnataka³², where almost all the participants (99.5%) lived in a joint family.

In the present study, 46.33% belonged to class IV followed by 23.16% who belonged to class V of the Modified BG Prasad classification for socio-economic status. The results were on similar lines to studies done in rural area of Kuppam, Andhra Pradesh³³ and in rural area of north Karnataka³². Whereas in a study done in

north Karnataka²⁸ it was seen that maximum number of study participants belonged to class IV (42%), followed by class III (30%)

Housing history (Table no. 8 to 12)

In the present study, most of the study participants (56.5%) lived in a Kaccha house while 43.5% of them lived in Pakka houses where as in a study done at 60 panchayats in Namakkal, Perambalur and Pudukkottai Districts of Tamil Nadu²⁰ 12% were living in thatched houses, 36% were living in tiled houses and the remaining were living in concrete houses. In a study done by in Ghana²³ only 25.6% of the total participants lived in Kaccha houses, this difference could be due to regional and cultural diversities.

In the present study, 88.33% of the total participants had provision of sanitary privy and used it while the rest 11% did not have the facility and followed open air defecation. The percentage of open air defecation in our study is less than the global percentage¹ and rural percentage of Karnataka state⁴. This percentage of open defecation is significantly less than some studies done outside India^{16,23}, while in a study done in Nepal²⁵, the percentage of open air defecation was found to be 2% only.

The percentage of use of sanitary latrine found in the present study is much higher than many other similar studies done in India^{20, 24,28,29,32}

The reason could be due to better participation at the community level, better programme implementation at the Panchayat level and better sensitization activities at Schools.

In the present study, it was encouraging to know that all the participants who had a sanitary privy were using it, whereas in a similar study done in north Karnataka,

India²⁸ the percentage of utility was 95%. In a similar study done in Ghana²³ 93.3% of the sanitary facilities were functional.

In the present study, 79.33% of the study participants used the sanitary privy owned by their household while 9% used community toilet facilities. Similar results were seen in a study done at Thandalam village, Chennai²⁴. In a study done in rural field practice of a tertiary care hospital of southern Karnataka²⁷ nearly 90% of the latrines were privately owned while less number (62.5%) of private sanitary facilities were seen in a study done among rural population of Kuthambakkam village, Tamil Nadu³⁰.

In our study, 88% of the total study participants used water-seal type of sanitary privy, the percentage of other type of privy usage was negligible. Interestingly a study done at Nepal¹⁸ found that 25.12% of the total study participants used pit latrines while 21.67% of them used water-seal type of sanitary privy while a study done in Bahir Dar Zuria district, Ethiopia¹⁶ showed that in their study area only pit latrines were in use exclusively. Since these studies were done abroad, the difference in use of type of sanitary privy could be due to varied cultural habits and financial barriers.

Attitude towards use of sanitary privy (Table no. 13 and 14)

In the present study, when asked about the reasons for not using a Sanitary Privy most of the study participants (88.34%) cited Cost/Poverty as the main reason followed by Habit/Tradition/Always done so (9.5%) and Water shortage (2.2%).

Similar studies done in rural areas of Hubballi-Dharwad, Karnataka²⁹, Namakkal, Tamil Nadu²⁰, rural field practice of a tertiary care hospital of southern Karnataka²⁷ and rural population of Kuthambakkam village, Tamil Nadu³⁰, main reason cited was No Funds followed by No Space whereas study done in Nandivargam, Kurnool, Andhra Pradesh¹⁷ showed Space Constraints (86.27%) as the main reason.

In the present study, few of the participants who followed open defecation lived in a rented accommodation with no sanitary privy.

Almost all of the study participants (98.5%) cited Comfort/Convenience as the main reason for using sanitary privy whereas in similar studies^{17,27,29} the main reasons cited were safety for women and children, better option during rains and hygiene.

Awareness about Sanitation Programmes (table no. 15)

In the present study, 88% of the total study participants were ever asked to construct a Latrine while the rest 12% were never asked by anyone to construct a Latrine.

Most of the respondents (84.84%) said that Panchayat members told them to construct a Latrine. When asked about whether they have seen advertisements/posters/pamphlets about sanitary privy majority of the study participants (90.16%) said yes, while the same number of participants said that they have heard about “Swachh Bharat Abhiyan”. Similar study done among rural population of Yadwad, North Karnataka²⁸, showed that 66% of the study participants knew about “Swachh Bharat Abhiyan” and 62.9% even found this programme impactful. Conversely in a study done among rural communities in Ethiopia¹⁶ only 4.5% of study participants found mass media as the main source for privy construction.

With the launch of “Swachh Bharat Abhiyan” sanitation and cleanliness has taken a front seat and has become a national priority. All the Schools, Government Offices and Public Institutions are dedicatedly working towards the success of this programme, initial results of which are encouraging as well.

Health Beliefs (Table no. 16 and 17)

Interestingly in our study, almost all of the participants who considered latrine constructed far from house pure also had no apparent problems with open defecation far from house, while 93% of the total participants found open defecation near the house impure. This is a serious concern as open defecation anywhere is a potential source to many diseases, and moreover it acts as a threat to privacy.

Majority of the study participants (90.5%) found Latrine constructed inside the house pure. 93% of the total respondents found defecating in the open near the house impure. Majority of the study participants (93.5%) found Latrine constructed near a well not pure, while 94.66% of the total respondents said defecating in the open near a well is not pure.

In our study, majority of the respondents (90.5%) opined that a village with no open defecation will have better health as compared to a village which does not. Similar results were found in a study done in Sonatti village of Belgaum District, North Karnataka³³, where 76% of the study participants believed that having a personal sanitary privy will improve their overall health.

In our study, it was encouraging to note that 84.1% of respondents believed open defecation is the root cause of many diseases, which is in sharp contrast to a study done among rural population of Kuthambakkam village, Tamil Nadu³⁰, where

only 12.7% of the study population was aware about spread of diseases due to open defecation.

In our study, 84.33% of the study participants believed that the most perceived disadvantage of open defecation was that it was unhygienic, 6.16% said that it led to diseases and 9.5% did not know any disadvantage of open defecation. Similar results were seen in a study done in rural areas of Hubballi-Dharwad, Karnataka²⁹, where 36% of the study participants considered bad hygiene as the most perceived disadvantage of open defecation, this percentage is much less than what was noted in our study but still was the most perceived disadvantage.

Association with use of sanitary privy (Table no. 18 to 25)

In our study we calculated the association of Age, Sex, Religion, Education, Occupation, type of family, socio-economic status and type of housing. The association of socio-economic status and type of housing with use of sanitary privy was found to be significant (p value <0.05)

Similar results were found in studies done among rural population of Yadwad, North Karnataka²⁸ and rural population of Kuthambakkam village, Tamil Nadu³⁰, where significant association was found for socio-economic status, while in other studies significant association was noted for educational status and footwear wearing habit.

CONCLUSION

The present community based study reported a higher prevalence (88.33%) and use of sanitary privy. Most of the sanitary privies were owned by their households and were of water-seal type.

Most of the study participants cited Cost/Poverty as the main reason for sanitary privy while almost all of the study participants cited Comfort/Convenience as the main reason for using sanitary privy.

Most of the respondents said that Panchayat members told them to construct a Latrine while most of them had also heard about “Swachh Bharat Abhiyan” and other advertisements related to sanitation.

Almost all of the participants considered latrine constructed far from house pure but had no apparent problems with open defecation far from house.

Majority of the participants found open defecation near the house impure. Most of the study participants found Latrine constructed inside the house pure and open defecation near the house impure.

Most of the respondents opined that a village with no open defecation will have better health as compared to a village which does not.

Majority of respondents believed open defecation is the root cause of many diseases and the most perceived disadvantage of open defecation was that it was unhygienic.

The association of socio-economic status and type of housing with use of sanitary privy was found to be significant.

LIMITATIONS

The limitations of the study were

1. Some study participants may not disclose their sanitary practices due to embarrassment.
2. Long term consistent use of sanitary privies cannot be ensured, it might change because of various constraints.

RECOMMENDATIONS

1. Though majority of the study participants used sanitary latrines but there were still a few who had no issues defecating in the open. This is one of the prime reasons why this area has not been declared open defecation free. There still is a need for behavioural and lifestyle changes to be brought about to fill this gap.
2. Many study participants complained about late release of grant from the respective panchayat heads meant for the construction of sanitary toilets. A proper audit of these complaints is necessary.
3. Areas where space constraints are one of the reasons for open defecation, more community toilets should be constructed. These toilets can be constructed by generous donations from the users themselves or philanthropists. Proper maintenance and cleanliness of these toilets should be ensured so that they remain functional.
4. Long term use of existing sanitary latrines should be ensured by dedicated sensitization programmes in the community level and Schools. Stigmas and misconceptions regarding use of sanitary latrines and open defecation should be addressed regularly.
5. More aggressive outreach of Government programmes is needed. Emphasis should be given upon hazards of open defecation and proper education should be given by Anganwadi workers and ASHA so that it becomes our collective priority.
6. Local Non-Governmental Organisations (NGOs) and self-help groups should pitch in with assistance for the construction of new latrines, maintenance of

existing latrines, implementation of government programmes related to sanitation and spreading awareness regarding the importance of using proper sanitary services, thus helping in the holistic development of our country.

SUMMARY

The present study was a community based cross sectional study undertaken to assess the utility of sanitary latrines in rural population and to know the knowledge and attitude regarding use of sanitary latrines in a rural area of Belagavi, Karnataka, India.

The study included 600 participants aged above 18 years belonging to five Sub Centres coming under Primary Health Centre, Vantamuri, Belagavi, which is a rural field practice area of Department of Community Medicine, KLE University's J.N. Medical College, Belagavi. The study was conducted over a period of one year from January 2016 to December 2016. A pre-designed and pre-tested questionnaire was used to collect the data from the participants.

Findings of the study revealed:

In the present study, maximum number of participants (36%), were between the age group of 29-38 years, followed by 29.84% who were in the age group of 18-28 years. Majority of the study participants (66.33%) were males while rest of them were females.

In our study, maximum number of study participants (93.66 %) were Hindus followed by Muslims (5.67%) and others (Christianity and Sikhism). While 93.83% of the study participants were literates whereas only 6.17% of the total study participants were illiterate.

In our study, maximum (25.51%) study participants were farmers which made them the largest occupational group, followed by factory workers (19%) and Coolie

(16.66). Majority (57.16%) of the study participants belonged to nuclear family and rest belonged to joint family while 46.33% belonged to class IV followed by 23.16% who belonged to class V of the Modified BG Prasad scale for socio-economic status.

In the present study, most of the study participants (56.5%) lived in a Kaccha house while 43.5% of them lived in Pakka houses. 88.33% of the total participants had provision of sanitary privy and used it while the rest 11% did not have the facility and followed open air defecation.

In our study, all the participants who had a sanitary privy were using it, 79.33% of the study participants used the sanitary privy owned by their household while 9% used community toilet facilities.

All the participants in our study, who had a sanitary privy were using it. 79.33% of the study participants used the sanitary privy owned by their household while 9% used community toilet facilities. 88% of the total study participants used water-seal type of sanitary privy, the percentage of other type of privy usage was negligible.

In the present study, when asked about the reasons for not using a Sanitary Privy most of the study participants (88.34%) cited Cost/Poverty as the main reason followed by Habit/Tradition/Always done so (9.5%) and Water shortage (2.2%). Whereas almost all of the study participants (98.5%) cited Comfort/Convenience as the main reason for using sanitary privy.

In our study, 88% of the total study participants were ever asked to construct a Latrine while the rest 12% were never asked by anyone to construct a Latrine. Most of the respondents (84.84%) said that Panchayat members told them to construct a

Latrine. When asked about whether they have seen advertisements/posters/pamphlets about sanitary privy majority of the study participants (90.16%) said yes, while the same number of participants said that they have heard about “Swachh Bharat Abhiyan”

In the present study, almost all of the participants who considered latrine constructed far from house pure also had no apparent problems with open defecation far from house, while 93% of the total participants found open defecation near the house impure. Majority of the study participants (90.5%) found Latrine constructed inside the house pure. 93% of the total respondents found defecating in the open near the house impure.

In our study, Majority of the study participants (93.5%) found Latrine constructed near a well not pure, while 94.66% of the total respondents said defecating in the open near a well is not pure. Majority of the respondents (90.5%) opined that a village with no open defecation will have better health as compared to a village which does not.

In the present study, 84.1% of respondents believed open defecation is the root cause of many diseases. 84.33% of the study participants believed that the most perceived disadvantage of open defecation was that it was unhygienic, 6.16% said that it led to diseases and 9.5% did not know any disadvantage of open defecation.

In our study, the association of Age, Sex, Religion, Education, Occupation, type of family, socio-economic status and type of housing was assessed. The association of socio-economic status and type of housing with use of sanitary privy was found to be significant, while other factors were not significantly associated.

BIBLIOGRAPHY

1. JMP Progress on drinking water and sanitation, 2014 Update. WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), (2014). ISBN 978 92 4 150724 0, page 19-20.
2. Table 16 R/U: Percentage of persons in respective age categories going for open defecation". Swachhta Status Report 2016 (PDF). Ministry of Statistics and Programme Implementation, Government of India. 2016. pp. 69–70.
3. http://swachh-survekshan.in/SS_2017_Report.pdf
4. "Table 16 R/U: Percentage of persons in respective age categories going for open defecation, Swachhta Status Report 2016" (PDF). Ministry of Statistics and Programme Implementation, Government of India. 2016.
5. Teresi, Dick, et al Discoveries: The Ancient Roots of Modern Science—from the Babylonians 2002. New York, NY: Simon & Schuster. ISBN 0684837188.
6. Rodda, J. C. and Ubertini, Lucio, The Basis of Civilization - Water Science? pg 161. International Association of Hydrological Sciences (International Association of Hydrological Sciences Press 2004).
7. Spears D, Ghosh A, Cumming O (2013) Open Defecation and Childhood Stunting in India: An Ecological Analysis of New Data from 112 Districts. PLoS ONE (2013) 8(9): e73784.
8. Walker, CL; Rudan, I; Liu, L; Nair, H; Theodoratou, E; Bhutta, ZA; O'Brien, KL; Campbell, H; Black, RE "Global burden of childhood pneumonia and diarrhoea". Lancet. (20 Apr 2013). 381 (9875): 1405–16.

9. Singh A. & Arora A.K. , Knowledge, attitude, practices of villagers regarding sanitary latrine in North India. *Indian Journal of Preventive and Social Medicine* 2003; 34 (3) and (4): Page no. 118-23.
10. Nuzhat Choudhury Mohammad Awlad Hossain Exploring the Current Status of Sanitary Latrine use in ShibpurUpazila,Narsingdi District, BRAC Research Report 11 (2006, November) : 1-21
11. Dwivedi P. and Sharma A.N. , A Study on Environmental Sanitation, Sanitary Habits and Personal Hygiene among the Baigas of Samnapur Block of Dindori District, Madhya Pradesh. *J. Hum. Ecol.*, 22(1): 7-10 (2007)Page no. 7-10.
12. Banda K et al Water handling, sanitation and defecation practices in rural southern India: a knowledge, attitudes and practices study *Transactions of the Royal Society of Tropical Medicine and Hygiene* (2007) 101, 1124—1130
13. Chamka T. , Godfrey S. , Bhatt J. , Rao P.V. , Meshram P. and Singh S.B. , Cross-sectional health indicator study of open defecation-free villages in Madhya Pradesh, India. *Waterlines* 2008; 27 (3): Page no. 236-47.
14. Bhardwaj A. , Surana A. , Mithra P. , Singh A. , Panesar S. , Chikkara P. ,A Community basedcross - sectional study on use of sanitary latrines in a rural setup in Maharashtra.*Healthline* 2013; 4 (1): Page no. 89-93.
15. Shankar H. , Singh G.P. , Singh P. , Correlates of open field defecation practices among general population in rural area of Varanasi, India. *Journal of Preventive and Social Medicine* 2013; 44 (3)-(4): Page no. 122-27.
16. Awoke and Muche: A cross sectional study: latrine coverage and associated factors among rural communities in the District of Bahir Dar Zuria, Ethiopia. *BMC Public Health* 2013 13:99.

17. Ashish Bijaykrishna Banerjee et al., A study of open air defecation practice in rural Nandivargam village Int. J. Bioassays, 2013, 2 (07), 1051-1054
18. Sah RB, Baral DD, Ghimire A, Pokharel PK. Study on knowledge and practice of water and sanitation application in Chandragadhi VDC of Jhapa District. Health Renaissance. 2014 Jan 17;11(3):241-5.
19. Barnard S, Routray P, Majorin F, Peletz R, Boisson S, Sinha A, Clasen T. Impact of Indian Total Sanitation Campaign on latrine coverage and use: a cross-sectional study in Orissa three years following programme implementation. PloS one. 2013 Aug 21;8(8):e71438.
20. J. Geetha, S. Sampath Kumar, Open Defecation: Awareness & Practices of Rural Districts of Tamil Nadu, India. Social Science 2014 ; 3(5): Page no. 537-39.
21. Akter T, Ali AR, Dey NC. Transition overtime in household latrine use in rural Bangladesh: a longitudinal cohort study. BMC public health. 2014 Jul 15;14(1):721.
22. Debesay N, Ingale L, Gebresilassie A, Assefa H, Yemane D Latrine Utilization and Associated Factors in the Rural Communities of Gulomekada District, Tigray Region, North Ethiopia, 2013: A Community Based Cross-Sectional Study. J Community Med Health Educ (2015) 5: 338. doi:10.4172/21610711.1000338
23. Tampah-Naah AM, Anthony N. Cross-Sectional Study of Improved Sanitary Facilities' Availability in an Urban Setting of Ghana. Open Access Library Journal. 2015 Apr 30;2(04):1.
24. Kuberan A, Singh AK, Kasav JB, Prasad S, Surapaneni KM, Upadhyay V, et al. Water and sanitation hygiene knowledge, attitude, and practices among

- household members living in rural setting of India. *J Nat Sc Biol Med* 2015;6:S69-74.
25. Magar BKP, Kaphle HP, Gupta N. Open defecation free (ODF) status of Magdi district of Nepal after three years of declaration: a cross-sectional study. *Int J Health Sci Res.* 2016; 6(9):351-355.
26. Mittal A et al. A cross-sectional study to determine knowledge, attitude and practice of sanitation in rural areas of Tamil Nadu, India *Int J Community Med Public Health.* 2016 Jul;3(7):1910-1914
27. Sheethal MP et al. A cross-sectional study on the coverage and utilization of sanitary latrine in rural field practice area of a tertiary care hospital in Southern Karnataka, India *Int J Community Med Public Health.* 2016 Jun;3(6):1540-1543
28. Dr. Divya D.C & Dr. Kotrabasappa K. A cross sectional study on the use of sanitary latrines among rural population of Northern Karnataka., *Advance Research Journal of Multidisciplinary Discoveries.* 11.0,C-7(2017):35-39 ISSN-2456-1045.
29. Bathija GV et al. Defecation practices in rural residents of urban slums and rural areas of hubballi, Dharwad : a cross sectional study *Int J Community Med Public Health.* 2017 Mar;4(3):724-728
30. Anuradha R, Dutta R, Raja JD, Lawrence D, Timsi J, Sivaprakasam P. Role of community in swachhbharat mission. Their knowledge, attitude and practices of sanitary latrine usage in rural areas, Tamil Nadu. *Indian J Community Med* 2017;42:107-10.

31. O'reilly K et al. Exploring “The Remote” and “The Rural”: Open Defecation and Latrine Use in Uttarakhand, India *World Development* 2017 Vol. 93, pp. 193–205.
32. Jeratagi S, Kumar Y, Mallapur MD. Awareness about sanitary toilets in a rural area of north Karnataka, India: a cross sectional study. *Int J Community Med Public Health* 2017;4:363-9.
33. Veerapu N, Subramaniyan P, Praveenkumar BA, Arun G. Promotion of sanitation and hygiene in a rural area of South India: A community-based study. *J Family Med Prim Care* 2016;5:587-92

ANNEXURE I – ETHICAL CLEARANCE CERTIFICATE



K.L.E.UNIVERSITY'S
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
(Accredited 'A' Grade by NAAC)

Website: <http://www.jnmc.edu>
E-Mail : dome@jnmc.edu

Phone: (+ 91-(0)831 Office : 2471350
Principal: 2471701
Fax No. +91 (0)831 – 2470759

Ref: MDC/DOME/ 380 -

Date: 19/11/2015

To,

(REG. NO.BD0115003)

J.N.Medical College,
BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled
“ASSESSMENT OF UTILITY OF SANITARY LATRINES IN RURAL POPULATION –
A CROSS SECTIONAL STUDY”, is ethical and justifiable. The proposed research project has
been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Arathi Darshan)
Member Secretary
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

(Dr. Ganga Pilli)
Chairman,
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

ANNEXURE II – INFORMED CONSENT FORM

“ASSESSMENT OF UTILITY OF SANITARY LATRINES IN RURAL POPULATION – A CROSS SECTIONAL STUDY”

Investigator: _____

Guide: _____

Introduction:

You are being invited to participate in this study to assess the utility of sanitary latrines in rural field practice areas of J.N. Medical College Belagavi.

Explanation of Procedures:

I will be interviewing the head of the household to know about their use of Sanitary Latrines and knowledge and attitude about open air defecation. I shall also ask about what are the hindrances and motivating factors regarding the use of sanitary latrines.

Possible benefits:

The investigator does not promise that you will receive direct benefit from this study. It shall be beneficial for whole community and shall also help policy makers to design new programmes accordingly. It shall also be beneficial for educating the masses about the hazards of open air defecation.

Possible risks:

No risks are involved in the study. You are only going to be interviewed for the sake of collecting your views and information.

Cost of participation:

The cost of the study will be borne by the researcher. You will not have any costs attached to your participation.

Incentives: There will be no incentives awarded to you for participating in the study.

Legal rights: By signing this consent form, you are not waiving off any of your legal rights.

Privacy and Confidentiality:

The results of the study may be published for scientific purposes. However your identity will not be revealed. All information collected will be coded so that no one other than the investigator will know your identity.

Withdrawal from the study:

Your participation in the study is purely voluntary. You are free to decide whether or not to participate in the study. If you decide to participate and later feel to withdraw; you are free to do so.

Authorization to publish the results:

The researcher may use the information gathered from this study for presentation in scientific journals. However your identity will not be revealed.

Questions:

If you have any questions about rights as a research participant, you can contact **Prof. (Dr). G. S. Pilli**, Chairman, Institutional Ethics Committee on Human Subjects' Research, J. N. Medical College, Belagavi - 590010 phone no: 0831-2471350

CONSENT STATEMENT

“I have permitted the investigator to conduct the study. My signature below indicates my permission. I have read (or been read/told) the information provided above. I was given the opportunity to ask questions and they have been answered to my satisfaction”

Name and Signature/ left thumb impression of the participant:

Name and Signature of the interviewer:

Name and Signature/ left thumb impression of the eyewitness:

Date: _____

Place:_____

ANNEXURE III – PROFORMA

K.L.E. UNIVERSITY’S J.N.MEDICAL COLLEGE, BELAGAVI

DEPARTMENT OF COMMUNITY MEDICINE

RESEARCH QUESTIONNAIRE

**“ASSESSMENT OF UTILITY OF SANITARY LATRINES IN RURAL
POPULATION – A CROSS SECTIONAL STUDY”**

[Note: All the personal information provided during this study will be kept confidential.

Only aggregated data will be published.]

PROFORMA

(One Proforma for Each Household)

A) SOCIO-DEMOGRAPHIC DATA

1. Name -
2. Age -
3. Sex –
4. Place (Sub centre) _____
5. Religion -
 - a) Hindu
 - b) Muslim
 - c) Others
6. Education -
 - a) Illiterate
 - b) Primary School
 - c) High School
 - d) > High School

7. Occupation -

8. Type of family -

- a) Joint
- b) Nuclear
- c) Broken
- d) Problem

9. Total income of the family-

10. Family Size-

11. Socioeconomic Status -(According to Revised B.G. Prasad's classification)

PCI = / Total no. of family members

B) HOUSING HISTORY

1) Type of Housing -

- a) Kutchha
- b) Pucca

2) Is there a Sanitary Privy – Yes/No

3) If Yes, Do you use it – Yes/No

4) Whether owned by – Household/Community

5) What type of Latrine do you use?

- a) Water-sealed
- b) Others

C) ATTITUDE TOWARDS USE OF SANITARY PRIVY

1) Why do you think people do not use sanitary privy?

- (i) Cost/poverty
- (ii) Pleasure/convenience
- (iii) Habit/tradition/always done so
- (iv) Problem of water shortage
- (v) Not aware of the facility
- (vi) Caste based discrimination
- (vii) Morbid fear of the shallow pit getting filled too soon
- (viii) Others

2) Why do you think people use sanitary privy?

- (i) Comfort/convenience
- (ii) Latrine improves health
- (iii) Status
- (iv) Old/disabled people
- (v) Privacy
- (vi) Others

(D) AWARENESS ABOUT SANITATION PROGRAMMES

1) Has anyone ever asked you to construct a latrine? - Yes/No

2) If yes, then who asked you to do so?

- (i) Women in the family
- (ii) Men in the family
- (iii) Family members of wife/daughter-in-law
- (iv) Family members living away
- (v) Panchayat head

(vi) Non-governmental organization

(vii) Other (specify)

- 1) Do you know of any nongovernmental organisation which helps people construct toilets? Yes/No If Yes then name of the organisation: _____
- 2) Have you ever seen a poster/wall writing/pamphlet about latrines? Yes/no
- 3) Have you ever heard of the Swachh Bharat Abhiyan? Yes/no
- 4) Have you heard of _____(Sanitation Programme of Karnataka State)

(D) Health beliefs

1) In your opinion

- a) Latrine constructed far from the house – pure/ not pure/ does not matter to you
- b) Defecating in the open far from the house - pure/ not pure/ does not matter to you
- c) Latrine constructed near the house - pure/ not pure/ does not matter to you
- d) Defecating in the open near the house - pure/ not pure/ does not matter to you
- e) Latrine constructed inside the house - pure/ not pure/ does not matter to you
- f) Latrine constructed near a well - pure/ not pure/ does not matter to you
- g) Defecating in the open near a well - pure/ not pure/ does not matter to you

2) Imagine that there are two villages: In one village, everyone uses a latrine to defecate, while in the other, everyone goes out in the open. In which village would children be healthier, or would they be similar in both villages?

- (i) Latrine
- (ii) Open
- (iii) Similar

3) Do you think Open Air Defecation is the root cause of many diseases? - Yes/No

4) Perceived disadvantages of Open-air defecation

(i) Unhygienic

(ii) Embarrassing

(iii) Diseases

(iv) Foul Odour

(v) Fly breeding

(vi) Difficulty in rainy season

(vii) Distance

(viii) Don't know

Annexure-IV - Master Chart

Sr No	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH		
1	1	1	1	1	3	1	2	60000	3	1666.666667	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1		
2	5	1	3	1	4	4	2	240000	3	6666.666667	1	2	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	2	1	2	3		
3	3	1	1	1	3	2	2	180000	5	3000	3	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	3			
4	1	2	4	1	3	4	2	60000	3	1666.666667	4	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1			
5	1	1	2	1	3	3	2	84000	4	1850	4	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	3			
6	3	1	1	1	3	4	2	60000	5	1000	4	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1		
7	1	2	5	1	4	2	1	60000	14	3581.428581	2	1	1	1	1	1	1	1	2	0	2	2	2	2	1	2	1	2	1	2	2	1	1	1		
8	3	1	1	1	3	1	2	30000	3	833.3333333	5	1	1	1	1	1	4	1	2	0	2	1	1	2	1	2	1	2	1	2	2	1	1	1		
9	1	1	2	1	4	1	2	82000	5	1200	4	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1		
10	1	1	2	1	3	2	2	120000	3	3333.333333	2	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	3		
11	1	2	1	1	3	2	1	48000	6	666.666667	5	1	1	1	1	1	3	5	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	1		
12	1	2	5	2	3	2	2	120000	2	5000	2	1	1	1	1	1	3	1	2	0	2	1	1	2	1	2	1	2	1	2	2	1	1	3		
13	1	2	4	1	4	4	1	120000	12	833.3333333	5	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
14	3	1	4	1	3	3	1	30000	4	625	5	1	1	1	1	1	1	2	0	2	1	1	2	3	3	3	2	3	3	2	3	2	8			
15	1	1	1	1	4	4	1	120000	6	1666.666667	4	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	1	1		
16	5	1	4	1	3	1	1	84000	8	885	5	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1		
17	5	2	5	1	1	2	4	100000	8	1190.48619	4	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
18	3	1	4	1	3	3	1	30000	4	625	5	1	1	1	1	1	1	2	0	2	1	1	2	3	3	3	3	3	2	3	2	3	2	8		
19	1	1	5	1	4	1	1	200000	6	2888.888889	3	2	1	1	2	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	2	1	2	1	1	
20	5	1	3	1	3	1	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	1	1	1	
21	1	1	4	1	2	4	2	60000	4	1250	4	2	1	1	1	1	1	2	0	2	2	2	2	3	3	3	3	3	3	3	3	2	8			
22	1	1	2	1	3	2	2	120000	3	3333.333333	2	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1	
23	1	1	1	1	4	3	2	50000	4	1041.666667	4	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	3	
24	3	1	3	1	3	4	2	240000	4	5000	2	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	1	
25	5	1	1	1	3	4	1	144000	9	1333.333333	4	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	3	
26	3	1	1	1	3	4	3	120000	6	1666.666667	4	2	2	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	1	1
27	1	2	5	1	4	2	1	600000	14	3581.428581	2	1	1	1	1	1	1	2	0	2	2	2	2	1	2	1	2	1	2	1	2	2	1	2	1	
28	3	1	1	1	3	4	2	60000	5	1000	4	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	1	1	
29	5	1	3	1	3	4	2	240000	5	4000	2	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
30	1	2	3	1	3	3	3	60000	4	1250	4	1	1	1	2	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	3	
31	5	1	3	1	2	1	1	160000	16	833.3333333	5	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	1
32	1	2	3	1	3	3	2	60000	4	1250	4	1	1	1	2	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
33	1	2	3	1	3	3	2	60000	4	1250	4	1	1	1	2	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
34	1	2	3	1	3	4	2	60000	6	833.3333333	5	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	3	
35	1	1	1	1	4	1	1	60000	6	833.3333333	5	1	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	1
36	1	2	4	1	4	4	2	120000	2	5000	2	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
37	1	2	3	1	3	3	2	60000	4	1250	4	1	1	1	2	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	3	
38	5	1	1	1	4	1	2	60000	4	1250	4	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	3	
39	3	2	1	1	4	4	2	30000	4	625	5	1	2	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	1	
40	3	1	1	1	3	2	1	60000	4	1250	4	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
41	1	1	2	1	3	1	1	80000	8	833.3333333	5	1	1	1	1	1	1	1	2	0	2	2	2	2	3	3	3	3	3	3	3	3	3	2	8	
42	1	1	4	2	1	1	1	60000	6	833.3333333	5	1	2	0	0	1	1	2	0	2	2	2	2	3	3	3	3	3	3	3	3	3	2	8		
43	3	1	5	1	4	1	1	60000	5	1000	4	1	1	1	1	1	3	5	2	0	2	1	1	2	1	2	1	2	1	2	2	1	2	3	8	
44	1	2	5	1	3	2	2	82000	4	1500	4	1	1	1	2	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
45	3	1	2	1	4	4	2	82000	4	1500	4	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	3	
46	1	1	1	1	4	1	2	60000	5	1000	4	1	1	1	2	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	3	
47	5	1	3	1	4	4	2	240000	3	6666.666667	1	2	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	3	
48	1	1	5	1	3	3	1	90000	5	1500	4	1	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1
49	1	1	4	1	4	4	1	84000	8	1000	4	2	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	
50	1	2	5	1	3	1	1	50000	5	833.3333333	5	1	2	0	0	1	1	1	5	2	2	2	2	3	3	3	2	3	2	2	3	2	8			
51	1	1	4	1	4	4	1	60000	6	833.3333333	5	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	2	1	
52	3	1	3	2	3	4	1	120000	6	1666.666667	4	2	2	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	1
53	1	1	1	1	4	1	2	60000	5	1000																										

Annexure-IV - Master Chart

92	1	1	2	1	3	4	2	120000	4	2500	3	1	2	0	0	0	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	2	1	
93	1	1	2	1	4	4	1	300000	6	4166.666667	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	
94	1	1	5	1	1	1	1	60000	6	833.3333333	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	3	
95	1	1	3	1	3	4	2	120000	5	2000	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
96	1	1	4	1	2	4	2	60000	4	1250	4	2	1	1	1	1	1	1	1	2	0	2	2	2	3	3	3	3	3	3	2	3	2	8		
97	5	1	4	1	1	1	2	60000	2	2500	3	1	1	1	2	1	1	1	1	1	5	2	2	2	2	3	3	3	3	3	2	2	3	2	8	
98	1	1	1	1	4	1	1	60000	6	833.3333333	5	1	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	
99	1	2	4	1	4	4	1	120000	12	833.3333333	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
100	1	1	2	1	4	1	2	100000	4	2083.3333333	3	1	2	0	0	0	1	1	1	2	0	2	1	1	2	3	3	3	2	3	2	2	3	2	8	
101	3	1	1	1	3	2	1	60000	4	1250	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	3	
102	5	1	3	1	3	4	2	240000	5	4000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
103	1	2	5	1	4	2	1	120000	4	2500	3	2	1	1	1	1	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	1	1	
104	5	1	3	1	3	1	1	360000	10	3000	3	2	1	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
105	1	1	2	1	4	3	2	100000	5	1666.666667	4	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	3	
106	1	1	1	1	3	4	1	48000	10	400	5	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
107	1	2	5	1	3	4	2	100000	3	2888.888889	3	1	2	0	0	0	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	1	1	
108	3	1	5	1	2	2	2	84000	3	2333.3333333	3	1	1	1	1	1	1	1	1	2	0	2	2	2	3	3	3	2	3	3	3	3	2	8		
109	5	1	3	1	3	4	2	120000	6	1666.666667	4	1	2	0	0	0	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
110	1	1	4	1	3	3	1	60000	5	1000	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	3	
111	1	1	1	1	4	1	2	60000	5	1000	4	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
112	1	1	4	1	3	2	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
113	3	1	3	1	3	4	2	220000	5	3666.666667	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1
114	1	1	2	2	1	4	4	200000	3	5555.555556	2	2	1	1	1	1	4	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	3
115	3	2	1	4	2	4	2	84000	4	1850	4	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1	
116	3	1	3	1	3	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
117	1	1	4	1	3	3	1	90000	9	833.3333333	5	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
118	5	1	1	1	4	1	3	60000	4	1250	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	3	
119	1	2	1	1	3	4	2	200000	5	3333.3333333	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
120	1	1	4	1	4	4	1	84000	8	1000	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
121	1	2	5	1	4	2	1	180000	9	1666.666667	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
122	1	2	3	1	3	3	2	60000	4	1250	4	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	3	
123	1	1	5	1	4	2	2	82000	4	1500	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1
124	1	2	1	1	3	2	1	48000	6	666.6666667	5	1	1	1	1	1	3	5	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
125	1	2	3	1	3	4	2	120000	4	2500	3	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
126	1	1	4	1	4	2	1	90000	8	1081.428581	4	1	2	0	0	0	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	1	1	3	
127	1	1	4	1	3	2	1	120000	8	1428.581429	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
128	1	2	3	1	3	4	2	200000	5	3333.3333333	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1
129	1	1	3	1	3	4	2	120000	5	2000	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
130	1	1	2	1	3	2	1	84000	6	1166.666667	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	3	
131	1	2	1	1	3	4	2	200000	5	3333.3333333	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
132	1	1	5	1	3	3	1	50000	6	694.4444444	5	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
133	5	1	3	1	3	4	2	240000	5	4000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
134	5	1	4	1	1	4	2	120000	5	2000	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
135	1	1	2	1	4	4	2	150000	3	4166.666667	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
136	3	1	5	1	4	4	1	100000	8	1190.48619	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
137	3	1	1	1	3	1	2	30000	3	833.3333333	5	1	1	1	1	1	4	1	2	0	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1	1
138	1	2	3	1	3	3	2	60000	4	1250	4	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
139	1	2	3	1	3	4	2	120000	6	1666.666667	4	2	2	0	0	0	1	1	1	1	5	2	2	2	3	3	3	3	3	3	3	3	2	8		
140	1	2	3	1	3	4	2	120000	5	2000	3	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
141	1	2	4	1	4	1	2	100000	4	2083.3333333	3	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
142	3	1	1	2	3	3	2	80000	4	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	1
143	5	1	2	1	2	1	1	84000	8	885	5	1	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	1	1	1	
144	5	1	3	1	3																															

Annexure-IV - Master Chart

185	1	2	5	1	3	1	1	50000	5	833.3333333	5	1	2	0	0	0	1	1	1	5	2	2	2	2	3	3	3	3	3	3	2	3	2	8
186	1	2	3	1	4	4	2	360000	4	8500	1	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
187	1	1	3	1	3	4	2	120000	5	2000	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
188	5	2	3	1	2	4	1	84000	9	888.8888889	5	2	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
189	1	2	1	4	3	3	1	160000	10	1333.3333333	4	1	1	1	1	1	1	1	2	0	2	2	2	2	3	3	3	2	3	2	3	2	8	
190	3	1	1	4	3	1	1	160000	8	1904.861905	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
191	5	2	5	1	1	2	4	100000	8	1190.48619	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
192	1	2	2	1	3	1	1	100000	10	833.3333333	5	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
193	1	1	3	1	3	3	2	82000	6	1000	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
194	1	1	2	1	3	2	1	84000	6	1166.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
195	1	1	2	1	4	4	2	150000	3	4166.666667	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
196	1	2	4	1	4	1	1	100000	8	1041.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
197	1	1	5	1	4	1	1	20000	6	2888.888889	3	2	1	1	2	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	2	1	1	1
198	1	1	2	1	4	2	2	82000	3	2000	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
199	1	1	2	1	4	1	2	100000	4	2083.3333333	3	1	2	0	0	0	1	1	2	0	2	1	1	2	3	3	3	3	3	3	3	2	8	
200	3	1	2	1	4	4	2	120000	4	2500	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
201	1	2	1	1	3	4	2	60000	3	1666.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
202	1	1	4	1	3	3	2	60000	4	1250	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
203	3	1	3	1	4	4	2	100000	4	2083.3333333	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
204	1	2	3	1	3	3	2	60000	4	1250	4	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
205	3	1	1	1	3	4	2	120000	4	2500	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
206	1	1	2	2	1	4	4	60000	5	1000	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
207	1	2	3	1	3	4	2	120000	4	2500	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
208	3	1	5	1	4	4	1	100000	8	1190.48619	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
209	4	1	2	1	4	4	2	120000	4	2500	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
210	1	1	4	1	4	4	1	140000	6	1944.444444	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
211	1	2	5	1	3	4	1	60000	5	1000	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
212	4	1	3	1	3	4	2	220000	5	3666.666667	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
213	5	1	3	1	3	4	2	240000	5	4000	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
214	1	1	4	1	2	1	2	60000	5	1000	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
215	1	1	4	1	3	2	1	120000	6	1666.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
216	4	1	2	1	1	3	2	60000	4	1250	4	1	2	0	0	0	1	1	2	0	2	2	2	3	3	3	3	3	3	3	3	2	8	
217	1	2	1	1	3	4	2	200000	5	3333.3333333	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
218	1	1	2	1	3	2	2	120000	3	3333.3333333	2	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
219	4	1	2	1	1	3	2	60000	4	1250	4	1	2	0	0	0	1	1	2	0	2	2	2	3	3	3	3	3	3	3	3	2	8	
220	1	2	1	1	4	2	2	50000	5	833.3333333	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
221	1	1	1	1	3	3	1	82000	8	858.1428581	5	1	1	1	1	1	4	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
222	1	1	4	1	3	3	2	60000	4	1250	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
223	1	1	1	3	3	3	1	30000	6	416.6666667	5	2	1	1	1	2	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
224	1	1	3	1	3	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
225	1	1	4	1	3	2	2	144000	3	4000	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
226	5	1	3	1	4	1	1	160000	5	2666.666667	3	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
227	5	1	3	1	3	4	2	240000	5	4000	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
228	1	2	1	1	3	1	1	90000	8	1081.428581	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
229	1	2	4	1	4	1	1	60000	9	555.5555556	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
230	4	2	1	1	2	1	2	60000	4	1250	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
231	5	1	5	1	3	1	2	60000	2	2500	3	2	1	1	1	1	1	1	2	0	2	1	1	2	3	3	3	3	2	2	3	2	8	
232	4	2	5	1	3	2	1	60000	5	1000	4	1	1	1	1	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	2	1	1	1
233	1	2	4	1	3	3	1	100000	8	1190.48619	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
234	4	1	1	1	3	4	2	60000	5	1000	4	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
235	1	2	4	1	3	3	1	60000	6	833.3333333	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
236	1	2	2	1	3	2	2	84000	3	2333.3333333	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
237	1	2	2	1	3	1	1	100000	10	833.3333333	5	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1
238	1	1	4	1	3	3	2	60000	4	1250	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	

Annexure-IV - Master Chart

278	4	1	3	1	3	4	2	220000	5	3666.666667	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1		
279	1	2	5	1	4	1	1	200000	9	1851.851852	3	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
280	5	1	3	1	3	1	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
281	1	1	4	1	3	4	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
282	5	1	3	1	4	1	1	160000	5	2666.666667	3	1	2	0	0	0	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
283	1	2	2	1	3	2	2	84000	3	2333.333333	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
284	5	1	3	1	3	4	2	240000	5	4000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
285	5	1	4	1	2	1	2	60000	5	1000	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
286	5	2	5	1	1	1	1	80000	11	530.3030303	5	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
287	4	1	2	1	3	1	2	36000	6	500	5	1	1	1	1	1	1	1	1	1	5	2	2	2	1	2	1	2	1	2	1	2	1	1	1		
288	1	2	3	1	3	3	2	60000	2	2500	3	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
289	4	1	4	1	3	3	1	150000	9	1388.888889	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
290	1	2	4	1	3	3	1	100000	8	1190.48619	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
291	5	1	5	1	2	1	1	60000	6	833.3333333	5	1	2	0	0	0	1	3	2	0	2	2	2	2	3	3	3	3	3	2	2	3	2	8			
292	5	1	1	2	1	3	1	24000	8	250	5	1	2	0	0	0	1	1	1	1	5	2	1	1	2	3	3	3	3	3	3	3	3	2	8		
293	2	1	4	1	3	2	1	60000	6	833.3333333	5	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
294	2	2	2	1	3	2	2	84000	3	2333.333333	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
295	4	1	3	1	4	4	2	100000	4	2083.333333	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
296	5	2	3	1	2	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
297	2	1	3	1	3	3	2	60000	2	2500	3	1	1	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
298	2	1	2	1	4	4	1	300000	6	4166.666667	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
299	2	1	4	1	2	3	2	30000	2	1250	4	1	2	0	0	0	1	1	2	0	2	2	2	2	3	3	3	3	3	2	2	3	2	8			
300	2	2	1	1	4	4	2	20000	4	416.666667	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
301	2	2	1	1	3	4	1	100000	16	520.8333333	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
302	4	1	2	1	4	4	1	300000	6	4166.666667	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
303	2	1	5	1	3	4	1	200000	5	3333.333333	2	1	1	1	2	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
304	4	1	1	1	4	4	2	60000	3	1666.666667	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
305	2	2	2	1	3	2	2	84000	3	2333.333333	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
306	5	1	3	1	3	1	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
307	4	1	3	1	4	4	1	60000	6	833.3333333	5	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
308	2	1	5	1	3	1	1	60000	6	833.3333333	5	1	1	1	1	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1	
309	2	1	4	1	3	1	1	80000	6	982.2222222	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
310	2	1	2	1	4	3	2	100000	5	1666.666667	4	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
311	4	2	1	1	4	2	2	84000	4	1850	4	1	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
312	2	1	5	1	3	3	1	100000	9	925.9259259	5	1	1	1	1	1	3	1	1	1	5	2	2	2	2	1	2	1	2	1	2	1	2	1	1	1	
313	5	1	3	1	4	1	1	160000	5	2666.666667	3	1	2	0	0	0	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
314	2	1	1	1	2	1	2	50000	4	1041.666667	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
315	2	1	4	1	3	3	1	60000	5	1000	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
316	2	1	2	1	2	4	2	60000	6	833.3333333	5	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
317	5	2	3	1	2	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
318	2	1	4	1	1	2	2	60000	3	1666.666667	4	1	1	1	1	1	1	1	2	0	2	2	2	2	3	3	3	3	3	3	3	3	3	2	8		
319	2	1	2	1	3	2	2	120000	3	3333.333333	2	2	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
320	2	1	1	2	4	4	1	120000	11	909.0909091	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
321	2	1	4	1	3	2	1	120000	8	1428.581429	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
322	5	1	1	1	3	4	1	144000	9	1333.333333	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
323	5	1	2	1	2	1	1	84000	8	885	5	1	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
324	2	2	3	1	3	4	2	120000	4	2500	3	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
325	4	1	1	1	4	2	2	60000	4	1250	4	1	2	0	0	0	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1		
326	2	2	3	1	3	4	2	200000	5	3333.333333	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
327	2	1	2	2	1	4	4	200000	3	5555.555556	2	2	1	1	1	1	4	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
328	2	1	3	1	3	3	2	60000	2	2500	3	1	1	1	1	1																					

Annexure-IV - Master Chart

371	2	1	4	1	3	4	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	
372	5	2	5	1	3	1	2	40000	4	833.3333333	5	2	1	1	1	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1
373	5	2	5	1	3	1	2	60000	2	2500	3	2	1	1	1	1	1	1	2	0	2	2	2	2	1	2	1	2	1	2	2	1	1	1		
374	4	1	1	1	4	4	2	60000	3	1666.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
375	2	2	4	1	3	3	1	100000	9	925.9259259	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
376	5	1	5	1	4	4	1	240000	8	2858.142858	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
377	5	1	4	1	1	4	2	120000	5	2000	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
378	2	2	4	1	4	1	1	60000	9	555.5555556	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
379	2	1	4	1	3	2	1	100000	5	1666.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
380	4	2	1	1	3	3	2	60000	4	1250	4	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
381	2	1	4	1	3	2	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
382	2	2	1	1	3	1	2	60000	4	1250	4	2	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
383	5	1	3	1	3	4	2	120000	6	1666.666667	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
384	2	1	4	1	3	2	2	144000	3	4000	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
385	2	2	1	1	3	2	2	120000	3	3333.333333	2	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
386	5	1	5	2	2	4	1	60000	5	1000	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
387	2	1	1	1	4	1	1	84000	6	1166.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
388	2	1	3	1	3	3	2	82000	6	1000	4	1	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
389	2	2	3	1	3	3	2	60000	2	2500	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
390	2	1	4	1	4	2	1	90000	8	1081.428581	4	1	2	0	0	0	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
391	2	1	5	1	4	1	1	60000	5	1000	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
392	2	1	4	1	3	2	2	60000	4	1250	4	1	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
393	4	1	1	1	3	2	1	60000	4	1250	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
394	2	1	1	2	3	1	1	84000	6	1166.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
395	2	2	3	1	3	3	2	60000	4	1250	4	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
396	2	1	2	1	4	3	2	100000	5	1666.666667	4	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
397	2	1	1	1	4	1	2	40000	4	833.3333333	5	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
398	2	1	4	1	4	2	2	60000	5	1000	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
399	4	1	3	1	4	4	1	60000	6	833.3333333	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
400	5	2	3	1	2	4	1	84000	9	888.8888889	5	2	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
401	2	2	4	1	3	4	1	60000	6	833.3333333	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
402	2	1	1	1	4	4	1	120000	6	1666.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
403	2	2	4	1	4	4	2	240000	4	5000	2	2	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
404	5	1	3	1	3	4	2	120000	6	1666.666667	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
405	4	1	2	1	3	1	2	84000	5	1400	4	2	2	0	0	0	1	1	1	1	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
406	2	2	3	1	3	4	2	120000	5	2000	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
407	2	1	4	1	2	3	1	144000	10	1200	4	1	1	1	1	1	1	1	1	5	2	2	2	1	2	1	2	1	2	1	2	1	1	1		
408	4	1	5	1	2	1	2	60000	4	1250	4	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
409	2	1	4	1	4	4	1	140000	6	1944.444444	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
410	2	1	4	1	3	1	1	60000	8	625	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
411	2	2	5	1	4	1	1	200000	9	1851.851852	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
412	2	2	1	1	3	2	2	36000	5	600	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
413	2	1	4	1	4	4	1	200000	9	1851.851852	3	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
414	2	2	1	1	3	2	2	120000	3	3333.333333	2	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
415	4	2	1	1	3	4	2	30000	4	625	5	1	1	1	2	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
416	2	1	1	2	4	4	1	120000	11	909.0909091	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
417	2	1	5	1	3	3	1	100000	9	925.9259259	5	1	1	1	1	1	3	1	1	5	2	2	2	2	1	2	1	2	1	2	1	2	1	1	1	
418	2	2	5	1	4	2	1	120000	4	2500	3	2	1	1	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1		
419	2	1	1	1	3	4	2	82000	4	1500	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
420	2	2	3	1	3	4	2	120000	6	1666.666667	4	2	2	0	0	0	1	1	1	5	2	2	2	2	3	3	3	3	3	2	3	2	8			
421	2	1	4	1	4	3	2	60000	4	1250	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
422	4	1	1	1	3	4	2	120000	4	2500	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
423	5	2	5	2	1	3	2	80000	4	1458.333333	4	1	1	1	1	1	1	1	1	5																

Annexure-IV - Master Chart

464	5	2	3	1	2	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
465	2	2	4	1	4	3	2	120000	3	3333.333333	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1
466	2	1	2	1	4	1	2	82000	5	1200	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
467	2	1	4	1	3	4	2	60000	4	1250	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
468	2	1	3	1	3	4	2	120000	5	2000	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
469	2	2	4	1	3	3	1	60000	6	833.3333333	5	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	2	1	1	1	
470	2	1	4	1	2	1	2	60000	5	1000	4	1	2	0	0	0	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
471	2	1	4	1	3	2	2	60000	4	1250	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
472	2	1	1	1	2	1	2	50000	4	1041.666667	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
473	5	2	5	1	3	1	1	60000	6	833.3333333	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
474	2	1	2	2	1	4	4	200000	3	5555.555556	2	2	1	1	1	1	4	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
475	2	1	3	1	3	3	2	82000	6	1000	4	1	1	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
476	5	1	2	1	3	1	1	60000	8	814.2858143	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
477	2	1	1	1	3	4	1	160000	9	1481.481481	4	2	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
478	2	1	1	2	1	2	1	20000	4	416.6666667	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
479	2	2	1	1	3	2	2	60000	4	1250	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
480	2	1	4	1	1	2	2	60000	3	1666.666667	4	1	1	1	1	1	1	1	1	2	0	2	2	2	2	3	3	3	3	3	3	3	3	2	8	8	
481	2	1	2	2	1	4	4	60000	5	1000	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
482	5	1	5	1	4	4	1	240000	8	2858.142858	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	2	1	1	1	
483	2	1	2	1	4	1	2	82000	5	1200	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
484	2	2	5	1	3	4	2	100000	4	2083.333333	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
485	2	1	2	1	4	1	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
486	2	1	4	1	3	2	2	60000	5	1000	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
487	5	1	5	1	2	1	2	60000	3	1666.666667	4	1	1	1	2	1	1	1	1	1	5	2	1	1	2	3	3	3	3	3	3	3	3	2	8	8	
488	5	2	3	1	2	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
489	2	2	1	3	4	2	2	82000	6	1000	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
490	4	1	4	1	3	3	2	100000	8	1041.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
491	2	2	5	1	3	4	1	36000	15	200	5	1	2	0	0	0	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
492	2	2	1	1	3	2	2	60000	4	1250	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
493	2	2	4	1	3	2	2	60000	4	1250	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
494	2	2	1	1	3	2	2	36000	5	600	5	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
495	2	1	2	1	3	3	2	84000	4	1850	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
496	5	1	5	1	3	1	2	60000	2	2500	3	2	1	1	1	1	1	1	2	0	2	1	1	2	3	3	3	2	3	3	2	3	2	8	8		
497	2	1	4	1	3	4	1	120000	14	814.2858143	5	1	1	1	1	1	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
498	2	2	4	1	4	2	1	120000	6	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
499	2	1	4	1	3	4	1	80000	6	1111.111111	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
500	2	1	1	1	2	1	2	50000	4	1041.666667	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
501	2	2	1	1	3	2	2	60000	4	1250	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
502	2	1	5	1	3	3	1	50000	6	694.4444444	5	1	1	1	2	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
503	2	2	5	1	3	2	2	82000	4	1500	4	1	1	1	2	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
504	2	2	1	1	3	3	1	160000	10	1333.333333	4	1	1	1	1	1	1	1	2	0	2	2	2	2	3	3	3	3	3	2	2	3	2	8	8		
505	2	1	4	1	3	2	2	60000	5	1000	4	1	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
506	2	1	2	1	4	1	2	60000	3	1666.666667	4	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
507	5	1	3	1	3	1	1	360000	10	3000	3	2	1	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
508	2	1	3	1	3	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
509	2	1	2	1	4	2	2	82000	3	2000	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
510	2	1	3	1	3	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
511	2	1	2	1	4	4	2	160000	3	4444.444444	2	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
512	5	2	5	2	3	4	1	120000	5	2000	3	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
513	2	1	4	1	3	2	2	60000	4	1250	4	1	1	1	1	1	3	1	1	1	5	2	1	1	2	1	2	1	2	1	2	2	1	1	1	1	
514	5	2	5	1	3	1	2	40000	4	833.3333333	5	2	1	1	1	1	1	1	2	0	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1	1
515	2	1	5	1	4	1	1	60000	5	1000	4																										

Annexure-IV - Master Chart

557	2	2	5	1	3	1	1	80000	5	1333.333333	4	1	2	0	0	0	1	1	2	0	2	2	2	2	1	2	1	2	1	2	2	1	1	1		
558	2	2	3	1	3	4	2	120000	5	2000	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1
559	5	1	3	1	4	1	1	160000	5	2666.666667	3	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
560	2	2	3	1	3	4	2	60000	6	833.333333	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
561	2	1	2	1	3	1	1	80000	8	833.333333	5	1	1	1	1	1	1	1	1	2	0	2	2	2	2	3	3	3	2	3	3	3	3	2	8	
562	2	1	3	1	3	4	2	240000	4	5000	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
563	2	2	3	1	3	3	2	120000	5	2000	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
564	2	1	2	1	4	2	2	82000	4	1500	4	1	2	0	0	0	1	1	1	5	2	2	2	2	3	3	3	3	3	3	3	3	3	2	8	
565	2	1	1	1	4	3	2	50000	4	1041.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
566	2	2	1	1	3	2	2	36000	5	600	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
567	2	1	2	1	4	2	2	120000	2	5000	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
568	4	1	5	1	2	1	2	60000	4	1250	4	1	1	1	2	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
569	2	2	1	1	3	4	2	84000	4	1850	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
570	2	1	1	1	1	1	1	80000	2	2916.666667	3	1	1	1	2	1	4	1	1	5	2	2	2	1	2	1	2	1	2	1	2	1	1	1	1	
571	4	1	1	1	4	4	1	20000	6	288.888889	5	1	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
572	2	2	4	1	4	1	1	100000	8	1041.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
573	2	1	1	1	1	1	1	80000	2	2916.666667	3	1	1	1	2	1	4	1	1	5	2	2	2	2	1	2	1	2	1	2	1	2	1	1	1	
574	2	1	4	1	3	1	1	60000	8	625	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
575	2	1	3	1	3	3	2	60000	2	2500	3	1	1	1	1	1	1	1	1	2	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
576	2	1	1	1	4	1	1	60000	6	833.333333	5	1	1	1	1	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
577	2	2	3	1	3	3	2	120000	5	2000	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
578	2	2	3	1	3	4	2	60000	6	833.333333	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
579	2	2	5	1	3	2	2	82000	4	1500	4	1	1	1	2	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	
580	2	1	1	2	3	1	1	84000	6	1166.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
581	2	1	4	1	4	2	2	60000	5	1000	4	1	2	0	0	0	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
582	4	1	5	1	4	4	1	100000	8	1190.48619	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
583	5	1	4	1	1	4	1	120000	5	2000	3	2	1	1	1	1	1	1	1	5	2	2	2	1	2	1	2	1	2	1	2	1	1	1	1	
584	4	2	1	1	3	4	2	30000	4	625	5	1	1	1	2	1	3	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
585	2	1	4	1	3	4	2	120000	3	3333.333333	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
586	2	1	4	1	4	2	2	60000	3	1666.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
587	5	2	5	1	3	1	1	60000	6	833.333333	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
588	5	1	3	1	2	1	1	160000	16	833.333333	5	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
589	4	2	1	1	3	4	2	84000	5	1400	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
590	2	2	4	1	3	4	1	60000	6	833.333333	5	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
591	2	2	3	1	3	4	2	120000	4	2500	3	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
592	5	1	5	1	2	1	2	60000	3	1666.666667	4	1	1	1	2	1	1	1	1	5	2	1	1	2	3	3	3	2	3	3	3	3	2	8	8	
593	2	2	4	1	4	2	1	120000	6	1666.666667	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
594	5	1	5	1	2	1	2	60000	3	1666.666667	4	1	1	1	2	1	1	1	1	5	2	1	1	2	3	3	3	3	3	3	3	3	3	2	8	8
595	2	1	2	1	4	4	2	160000	3	4444.444444	2	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
596	2	1	1	1	4	1	1	84000	6	1166.666667	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
597	2	1	4	1	3	2	2	60000	4	1250	4	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1
598	2	2	5	1	1	2	1	60000	5	1000	4	2	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	2	1	1
599	2	2	3	1	3	4	2	120000	6	1666.666667	4	2	2	0	0	0	1	1	1	5	2	2	2	2	3	3	3	3	3	3	3	3	3	2	8	8
600	2	1	4	1	3	4	2	120000	3	3333.333333	2	1	1	1	1	1	1	1	1	5	2	1	1	2	1	2	1	2	1	2	1	2	1	1	1	1

ANNEXURE IV – KEY TO MASTER CHART

PART 1 – Socio – demographic data

A. Age of the study participant

Age	code
18-28	1
29-38	2
39-48	3
49-58	4
59 & above	5

B. Sex of the Study participant

Sex	code
Male	1
Female	2

C. Subcentre

Name	Code
Vantamuri	1
Bhutramatti	2
Honaga	3
Kakati (A)	4
Kakati (B)	5

D. Religion of the study participant

Religion	Code
Hindu	1
Muslim	2
Others	3

E. Education of the study participant

Education	Code
Illiterate	1
Primary School	2
High School	3
More than High School	4

F. Occupation of the study participant

Occupation	Code
Farmer	1
Factory Worker	2
Coolie	3
Others	4

G. Type of family of the study participant

Type of Family	Code
Joint	1
Nuclear	2
Broken	3
Problem	4

H. Total income of the family

I. Family size

J. Per-capita income

K. Distribution of the study participant according to the socio-economic status

Socio-economic status	Code
Class 1	1
Class 2	2
Class 3	3
Class 4	4
Class 5	5

PART 2 – Housing History

L. Type of housing

Type	Code
Kaccha	1
Pakka	2

M. Provision of Sanitary Privy

Provision	Code
Yes	1
No	2

N. Use of Sanitary Privy

Use	Code
Yes	1
Not Applicable	2

O. Sanitary Privy Owned by

Sanitary Privy owned by	Code
Household	1
Community	2
Not Applicable	3

P. Type of Sanitary Privy

Type	Code
Water Seal	1
Others	2
Not Applicable	3

PART 3 – Attitude towards use of Sanitary Privy

Q. Reasons for not using Sanitary Privy

Reasons	Code
Cost / Poverty	1
Habit / Tradition / Always done so	2
Water shortage	3

R. Reasons for Using Sanitary Privy

Reasons	Code
Comfort / Convenience	1
Status	2
Privacy	3

PART 4 - Awareness about Sanitation Programs

S. If ever asked to construct a Latrine

Answer	Code
Yes	1
No	2

T. If yes then who asked you to do so

Answer	Code
Women in the Family	1
Men in the family	2
Panchayat Head	3

U. Do you know any NGO which helps people construct toilets?

Answer	Code
Yes	1
No	2

V. Ever seen a Poster/Pamphlet/Wall writing about Latrines

Answer	Code
Yes	541
No	59

W. Ever heard about Swachh Bharat Abhiyan

Answer	Code
Yes	1
No	2

X. Ever heard about sanitation programme of Karnataka State

Answer	Code
Yes	1
No	2

PART 5 – Health Beliefs

Y. In the opinion of the study subjects latrine constructed far from the house

Belief	Code
Pure	1
Does not matter	2

Z. Defecating in the open far from the house

Belief	Code
Not Pure	1
Does not matter	2

AA. Latrine constructed near the house

Belief	Code
Pure	1
Does Not matter	2

AB. Defecating in the open near the house

Belief	Code
Not Pure	1
Does not matter	2

AC. Latrine constructed inside the house

Belief	Code
Pure	1
Does Not matter	2

AD. Latrine constructed near a well

Belief	Code
Not Pure	1
Does not matter	2

AE. Defecating in the open near a well

Belief	Code
Not Pure	1
Does not matter	2

AF. Imagine there are 2 villages; in one village, everyone uses a latrine to defecate, while in the other, everyone goes out in the open. In which village would children be healthier, or would they be similar in both villages.

Belief	Code
Village using Latrine	1
Similar in both villages	2

AG. Is open air defecation the root cause of many diseases

Belief	Code
Yes	1
No	2

AH. Most Perceived disadvantage of Open air defecation

Belief	Code
Unhygienic	1
Diseases	3
Don't Know	8