"WATER, SANITATION AND HYGIENE PRACTICES AMONG RURAL HOUSEHOLDS - A COMMUNITY BASED CROSS-SECTIONAL STUDY"

Submitted by

(REG. NO. BD0120005)

Dissertation

Submitted to
KAHER, Belagavi, Karnataka,
In partial fulfilment of the requirements for the degree of

M. D. (Doctor of Medicine)
In
COMMUNITY MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE,
JAWAHARLAL NEHRU MEDICAL COLLEGE,
KAHER, BELAGAVI – 590010
KARNATAKA.

JUNE/JULY 2023

KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH, BELAGAVI

Endorsement by the HOD & Principal / Head of the Institution

This is to certify that the dissertation entitled **"WATER, SANITATION AND HYGIENE PRACTICES AMONG RURAL HOUSEHOLDS - A COMMUNITY BASED CROSS-SECTIONAL STUDY"** is a bona fide research work done by the candidate **(REG. NO. BD0120005).**

KAHER J.N. MEDICAL COLLEGE BELAGAVI

Dr. Chandra S Metgud MD PhD
Professor and Head,
Department of Community Medicine,
J. N. Medical College,
KAHER, Belagavi – 590010,
Karnataka, India.

Dept. of Community Medicine J.N. Medical College Belagavi

Place: Belagavi
Date: 15/12/22

Dr.(Mrs.)N. S. Mahantshetti MD
Principal,
J. N. Medical College,
KAHER, Belagavi – 590010,
Karnataka, India.

PRINCIPAL
J.N. Medical College,
BELAGAVI- 590 010

Place: Belagavi
Date: 15/12/22

UNDERTAKING

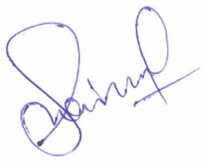
I, **(Reg. No. BD0120005),** hereby declare that the information and the data mentioned in my dissertation entitled **"Water, Sanitation and Hygiene practices among rural households - a Community based Cross-sectional Study"** belongs to me and is original. I am aware of the definition of plagiarism 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: 15/12/22

Place: Belagavi



(REG NO: BD0120005)

PLAGIARISM ACCEPTED LETTER

KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH

JAWAHARLAL NEHRU MEDICAL COLLEGE

(Recognized by Medical Council of India, New Delhi)

Accredited 'A+' Grade by NAAC (3rd Cycle) **Placed in Category 'A' by MHRD (GoI)**

Nehru Nagar, Belagavi- 590 010, Karnataka, INDIA

0831 - 2471350 0831 - 2470759 www.jnmc.edu principal@jnmc.edu

Ref No: MDC/PG/ Date: 22-11-2022

ACCEPTANCE LETTER

The softcopy of thesis entitled: **"WATER, SANITATION AND HYGIENE PRACTICES AMONG RURAL HOUSEHOLDS – A COMMUNITY BASED CROSS SECTIONAL STUDY"** has been submitted for Anti-Plagiarism check through Turnitin software. The scan has been carried out and the scanned output reveals a match percentage of **05%** which is within the acceptable limits of **10%** as per the guidelines given by UGC.

Guide. Deepti M Kadenganal

KAHER BELAGAVI J.N. MEDICAL COLLEGE

Dr. (Mrs.) N.S. Mahantashetti.
Chairperson-Antiplagiarism Committee &
Principal,
J. N. Medical College, Belagavi.

To,
Reg. No. BD0120005.
Postgraduate Student,
2020-21 Batch,
Department of Community Medicine,
J. N. Medical College, Belagavi.

LIST OF ABBREVIATIONS USED

S.No.	Abbreviations	Expansion of the abbreviations
1.	ASHA	Accredited Social Health Activist
2.	COVID	Coronavirus Disease
3.	CPI	Consumer Price Index
4.	CF	Correction factor
5.	CI	Confidence Interval
6.	DOME	Department of Medical Education
7.	DOI	Digital Object Identifier System
8.	ITI	Industrial Training Institute
9.	JNMC	Jawaharlal Nehru Medical College
10.	LPG	Liquid Petroleum gas
11.	NFHS	National Family Health Survey
12.	NGO	Non-Governmental Organization
13.	OR	Odd's Ratio
14.	OAD	Open Air Defecation
15.	ODF	Open air Defecation Compaign
16.	PG	Post Graduate
17.	PHC	Primary Health Care
18.	PUC	Pre-University Course
19.	SBM	Swachh Bharat Mission
20.	SDG	Sustainable Development Goals
21.	SES	Socio-Economic Status

22.	SPSS	Statistical Package for the Social Sciences
23.	TV	Tele Vision
24.	UN	United Nations
25.	UNICEF	United Nations Children's Fund
26.	UNDP	United Nations Development Programme
27.	WHO	World health organization
28.	WASH	Water, Sanitation and Hygiene
29.	χ 2	Chi – Square

ABSTRACT

Title: "WATER, SANITATION AND HYGIENE PRACTICES AMONG RURAL HOUSEHOLDS - A COMMUNITY BASED CROSS-SECTIONAL STUDY"

Introduction:

World Health Organisation (WHO) Global report 2019 on Water, Sanitation & Hygiene (WASH) reported that 53 billion people had an access to safely managed and improved drinking water source and two billion people had an access to contaminated drinking water source. One billion people had an access to improved sanitation facility and 2 billion people did not have basic sanitation facility. 45 billion people had the facility for hand washing in their premises. 30 billion people did not have the facility for hand washing in their premises.

Many studies done earlier include any one of the aspects like water or sanitation or hygiene. Hence the present study was done to assess the status of water, sanitation and hygiene and also to determine microbiological quality of drinking water from main source and households among rural area.

Materials & methods

A community based cross–sectional study was conducted among rural households in the rural field practice area of PHC Vantamuri, in Belagavi district. The study was conducted from 1st January 2021 to 31st December 2021 (12 months). A population proportionate sampling method was used to choose a representative sample of households from each village from the five subcentres under the Primary Health Centre, Vantamuri. Systematic random sampling was used for selection of the households for data collection. Pre - validated and Pre - tested questionnaire regarding

practices about water, sanitation and hygienic practices among rural households was used modified WHO/UNICEF 2018 questionnaire. Twenty drinking water samples from main water source and twenty household water samples were collected as per guidelines of drinking water quality proposed by WHO 1997. Data collected was coded and entered in MS Excel sheet. Chi-square test and Multiple logistic regression were used to find the association between the predictor variables and the outcome variables.

Results:

24.1 % of the households were in the age group of 31 – 40 years. 66.7 % of the households were females. 46.3% had completed primary/secondary level of education. 64.1% belonged to Class IV socio – economic status. 86.0% were having the continuous availability of water from their source every day. 70.8% were using piped water as a primary source of drinking water. 74.2% did not use any method for making the water safe for drinking purpose and 25.8% used some method to make water safer for drinking purpose at the household level. 77.1% had toilet facility in their households and 22.9% did not have any toilet facility in their households and were still practicing open air defecation. 93.3% participants did not have any hand washing facility in their houses and only 6.7% had hand washing facility in their houses. 91.3% were washing hands with soap after defecation, 8.7% were not practicing hand wash with soap after defecation. Availability of water were associated with government employees $p = 0.0017(\chi^2 - 19.1974)$. Availability of toilet facility in their households were associated with graduates $p < 0.001(\chi^2 - 38.958)$. Good hand wash practices were associated with younger age group $p < 0.001(\chi^2 - 43.628)$. Open air defecation was associated with SES V $p < 0.001$ (χ^2- 29.0723). Only 10% of water

samples analyzed were fit for human consumption remaining 36 samples (90%) were unfit.

Conclusions:

Seven out of ten households were using piped water as a primary source of drinking water. Eight out of ten households had the sanitation facility in their households. Majority of the study participants practiced hand wash with soap after using toilet. More than one – third of the study participants practiced hand wash with soap after coming from outside and after feeding the child. Age, Socioeconomic status, occupation was associated with availability of water and sanitation facilities were associated with Age, Socioeconomic status, occupation and educational qualifications. Hand wash practices were associated with age and educational qualification.

Keywords: WASH, Drinking water, Hand washing, Sanitation, Water quality.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF GRAPHS

INTRODUCTION

"Water, Sanitation and Hygiene Practices among Rural Households - A Community Based Cross-Sectional Study"

Access to clean water, basic sanitation and proper hygiene facilities are essential basic needs for human survival and wellbeing. Lack of these needs results in deterioration of health conditions of millions of people, especially rural population are at higher risk.[1] World Health Organisation (WHO) Global report 2019 on Water, Sanitation & Hygiene (WASH) reported that 53 billion people had access to safely managed and improved drinking water source and two billion people had an access to contaminated drinking water source. One billion people had access to improved sanitation facility and two billion people did not have basic sanitation facility. 45 billion people had the facility for hand washing in their premises. 30 billion people did not have the facility for hand washing in their premises.[2]

According to National Family Health Survey - 5 in India 2019 - 2021, 99% of urban households and 95% of rural households had safe access to improved sources of drinking water. 96% of urban households and 76% of rural households had access for improved sanitation facility.[3] NFHS – 5 Survey in Karnataka 2019 – 2021 reported 94.1% of rural households had access to safe improved drinking water sources. 68.5% of rural households used improved sanitation facility.[4] NFHS – 5 Survey in Belagavi district 2019 – 2021 reported that 94.4% of the population had improved accessibility to safe drinking water. 67.7% of them had access to improved sanitation facility.[5] In 2015, United Nations set the Sustainable Development Goal 6 to ensure availability and sustainable management of water and sanitation for all. SDG 6.1 aimed to achieve

universal and equitable access to safe and affordable drinking water for all by 2030' and SDG 6.2 was aimed at achieving access to adequate and equitable sanitation and hygiene for all and end open sanitation practices by 2030.[6]

'Basic sanitation' is defined by United Nations (UN) and WHO as "use of improved facilities that are not shared with another household. (Improved facilities include flush to piped sewer system source, ventilated pit latrines, composting toilets or pit latrines with slab). 'Safely managed drinking water' is defined as 'drinking water from improved water resource, which is located near premises accessible when needed and free from faecal, chemical, pathological matter." [7]

'Good water' and 'clean sanitation' are the two main components of a health and sustainable life. Globally access to safe water source has increased from 76% in 1990 to 91% in 2015 and access to clean sanitation facilities move from 54%-68% respectively.[8] Safe drinking water, sanitation and hygiene are crucial to human health and well-being. Safe 'WASH' is not only prerequisite to health, but contributes to livelihoods, school attendance and dignity and helps to create resilient communities living in healthy environment. Poor WASH conditions lead to water related diseases like cholera, malnutrition and neglected tropical diseases.[2]

'Swachh Bharat Mission' was launched in 2014 by honorable Prime Minister of India Shri Narendra Modi and it was partnered by UNICEF in 2019. But these Sanitation facilities have remained largely unused by the rural population, and has led to practice of 'open air defecation.[9]

Safe drinking water and improved sanitation are the two important pre requisites for improving the quality of life. Rural areas are vulnerable because they

lack access to improved water sources and sanitary facilities and they live in unhygienic environments. Open air defecation is still practiced in rural areas, even with implementation of WASH programs like 'total sanitation campaign'.[10]

Many studies done earlier include any one of the aspects like water or sanitation or hygiene. Hence the present study was done to assess the status of water, sanitation and hygiene and also to determine microbiological quality of drinking water from main source and households among rural area.

OBJECTIVE OF THE STUDY

1. To assess the status of water, sanitation and hygienic practices among rural households.

2. To assess the microbiological quality of drinking water at rural households and their primary sources.

REVIEW OF LITERATURE

A primer for health professionals released by WHO on water, sanitation, hygiene and health in 2019, showed in 2017, 71% global population used safely managed drinking water sources, 2 billion people used drinking water source contaminated with faeces, 45% global population used toilets or latrines where excreta were disposed in situ and 673 million population practiced open air defecation. 60% global population practiced hand washing with soap and water at their premises. 1.4 billion global population did not have hand washing facility at their premises.[2]

NFHS – 5 report (2019- 2021) released from the Ministry of Health and Family Welfare, Government of India, report on water, sanitation and hygienic practices showed 96% households used improved source of drinking water. 46% households used tube well/bore well. 23% used piped water into dwelling, yard or plot, 66% households did not treat their water to make it safer for drinking. 16% used boiling, 15% used straining the water with cloth before drinking were the methods followed. 69% households used improved sanitation facility. 19% households were practising open air defecation.76% households had access to toilet facility. 75% households, soap was available at the hand washing place. 68% households had water in their premises for hand washing.[3]

A cross sectional study was done among 300 households in Chandigarh, North India in 2014, Municipal water supply was the primary source of drinking water and for domestic purposes in rural areas of Chandigarh. Among 300 households, 206 households (68.6%) revealed that they did not do any treatment for the water to

become safer for drinking. 174 households (58%) stored drinking water in plastic bottle containers or buckets. Water samples collected from 201 households (67%) showed increased contamination and they found that increased contamination was due to containers in which they stored drinking water. 291 households (97%) had functioning toilet in their houses and 8 households (3%) had revealed the reason for not using toilets in their premises was due to lack of finances and lack of space for construction. Regarding personal hygiene, 249 households (83%) washed regularly their hands with soap and 51 households (17%) used only water or ash for the same.[8]

A cross sectional study was conducted among 796 households in Siliguri, West Bengal in 2016, revealed that 733 households (92%) used improved drinking water source. 63 households (8%) used unimproved water source. 565 households (71.1%) used public tap water as the primary source. 79 households (9.9%) used piped drinking water, 67 households (8.4%) used tube well, 22 households (2.8%) used protected dug well and 19 households (2.4%) used to store drinking water in small drums from cart. 437 households (54.9%) used improved secondary water source, 359 (45.1%) used unimproved secondary water source. 679 household (85.4%) adult women spent more than 30 minutes to fetch water in one trip. 651 households (81.8%) did not use any method of water treatment to make it safer to drink. 145 households (18.2%) followed the method of water treatment to make it safer for drinking. Among 145 households, 52 households (35.9%) used method of water boiling. 28 households (19.3%) used to strain water with the cloth, 25 households (17.2%) used water filters, 22 households (15.2%) used to add chlorine tablets to the drinking water. 15 households (10.3%) used solar disinfection and 21 households (13.1%) allowed water to stand still and settle. 523 households (65.7%) used improved sanitation, 216 households (27.2%) used shared latrines, 21

households (2.6%) used pit latrines without slab, 29 households (3.6%) used open field, 162 households (20.4%) did not have any sanitation facilities inside their homes, and 126 households (16.8%) used community latrines.[10]

A cross sectional study was conducted among 152 households in urban and rural parts of Delhi in 2013 found that 22 households (14%) had domestic animal cattle in the house. 134 households (88%) used improved drinking water source; 18 households (12%) used unimproved drinking water source. 78 households (51%) used public hand pipe as the primary drinking water source, 57 households (37%) used municipal tap water, 5 households (3%) used tankers, 3 households (2%) got water from private vendors, 3 households (2%) used filter water and 2 households (1%) used bottled water as a primary drinking water source. 124 households (81%) revealed that they did not do any household water treatment method to make it safer to drink, 18 households (11%) did water treatment method sometimes, 10 households (8%) did water treatment method always before drinking. 88 households (57%) stored drinking water in closed containers, 46 households (30%) stored drinking water in open containers, 18 households (13%) used mixture of open and closed containers. 69 households (45%) used improved toilet facility, 78 households (51%) used shared toilet facility with their neighbours, 5 households (4%) revealed that they practiced open field sanitation. 26 households (18%) revealed that they always washed their hands with soap, 122 households (80%) revealed that they washed their hands with soap occasionally (once a week, once or twice a month) and 4 households (2%) revealed that they washed their hands with soap rarely (not often or never).[11]

A cross - sectional study was conducted among 395 households in Kasubi slum, Kampala city, Uganda, Kenya in 2018. 303 households (76.7%) used piped water supply as the primary drinking water source, 92 households (23.3) used water from springs. 278 households (78.4%) spent less than 20 minutes to fetch water from primary drinking water source, 288 households (72.9%) paid money to get water for their drinking purpose. 377 households (95.4%) revealed that they used water treatment methods like boiling to prevent diarrheal diseases. 383 households (97%) used proper water collection and storage methods such as jerry cans or pots. 350 households (88.6%) stored drinking water in closed and clean containers.[12]

A cross - sectional study was conducted in rural areas of coastal Karnataka in 2009 among 40 households found that 80 water samples were collected and sent for microbiological water quality assessment of well water using multiple tube fermentation method. Coliforms were isolated from 119 (70%) water samples and were unfit for drinking purpose. 48 (28.2%) of the samples showed Klebsiella as an isolated organism and 36 (21.2%) of the samples showed Pseudomonas species as an isolated organism.[13]

A cross-sectional study was done in Kaduna state, North-western Nigeria in 2016 among 854 study participants to assess the knowledge, attitude and practices towards water, sanitation and hygiene. 52.5% of the households used surface water as major drinking water source. 44.8% of the households used unprotected hand dug wells. 46.2% of the households used purification method for drinking water. 76.5% of the households used pit latrines for excreta disposal. 41.4% of the households had open air defecation. 65.4% of the households used soap and water after defecation.

48.4% of the households used plastic containers for fetching water from different sources. [1]

A cross-sectional study was done in rural healthcare facilities in Rwanda, East Africa in 2011 to conduct systematic rapid screening assessments of healthcare facility, to assess the need and suitability of healthcare workers to receive donation of water treatment system, to conduct baseline assessment of WASH in the healthcare facility among 17 healthcare facilities, 11 healthcare facilities had piped water on the site which were treated surface water, 6 healthcare facilities had piped water on the site from (untreated water) local water source. 60% of water access points were found to be functional. 44% of the healthcare facilities sanitation was found to be in hygienic condition. [14]

A cross-sectional study was conducted in 2018 among refugee camps in Bangladesh to assess the WASH needs and vulnerability among 3,576 households. 87% of the households used tube wells for their primary and secondary source of water. 79% of the households reported that adult women were responsible for water collection. 17% of the households were following water treatment process and 13% households used aqua tabs. 41% of the households were using covered containers for storing drinking water. 2% households were practicing open air defecation and 49% of the households with under five children used latrine facilities. [15]

A community based cross sectional study was conducted in 2019 in urban slums of Trikuta Nagar, Jammu and Kashmir, India among 100 households to assess and report care indicators on sanitation and drinking water. 60% households used tube well/Borewell as a main source of drinking water. 61% households reported adult women used to fetch water. 20% households were following water treatment process.

42% households used pit latrine without slab or open pit for their sanitation. 90% households were sharing the common sanitation facility. [16]

A cross sectional study, published in 2017 was conducted among rural population in Kuthambakam village, Tiruvallur, Tamil Nadu to find the knowledge, attitude and practices of sanitary latrine usage among 275 households using lottery method. Mean age of the study participants was 48.2 ± 12.4 years. 172 (62.5%) households had sanitary latrines inside their houses. 161 (58.5%) households used public taps as common source of water for toilets. 103 (37.4%) households did not have sanitary latrines inside their houses. 90 (33%) households practiced open air defecation. By univariate analysis, they found the significant association between household standard of living and open-air defecation practices ($p = 0.0016$). [17]

A community based cross sectional study was conducted in 2014 in rural part of Salem, Tamil Nadu among 300 households to assess the knowledge on drinking water and sanitation. 284 (94.7%) households used drinking water with covered containers. 256 (85.3%) households used pipeline water as a main source of drinking water. 136 (94.3%) used boiling as water purification method. 188 (62.7%) households used toilet facility, which was available inside their premises. 198 (66%) households used soap for handwashing after using toilets. 97 families (32.3%) without toilet facility used open air defecation. 102 (34%) households used ash, plain water for hand washing after using toilet. [18]

A descriptive study was conducted in selected villages of Udupi district, Karnataka published in 2016 to assess the knowledge and practice on water sanitation and hygiene among 300 households. 99% of the households used open drainage system for liquid waste disposal. 92.3% households had water available in all seasons.

89.3% household females used to fetch water from source. 70% households used boiled or filtered water for drinking purpose. 83.7% households had cleaned their water storing vessels daily. 70% households practiced hand washing with soap and water after defecation, significant association was found between knowledge of WASH and age (χ^2= 4.60; p< 0.08), education (χ^2=1.34; p<0.05) occupation (χ^2=1.09; p<0.05) of the participants.[19]

A cross-sectional study was conducted in Hegannhalli, Bangalore, Karnataka in 2016 from 480 households to assess baseline information on knowledge, attitude and practice of sanitation and hygiene. Mean age of the study participants was 25.4 ± 11.98 years. 267 (55.6%) households did not follow any method of water treatment process. 404 (89.2%) households were cleaning their drinking water storage vessels on alternate days. 450 (93.8%) households practiced handwashing before handling food. 233 (48.7%) households washed their hands with soap and water. 380 (79.2%) households were disposing their solid waste through municipality vans. There was an association between sanitation and hygiene knowledge and socioeconomic status of the participants (χ^2= 8.400; p<0.01). [20]

A community based prospective enteric fever surveillance was conducted in two Municipal wards of Kolkata city in 2017, households with 6 months to 15 years children from cohort study were chosen for water sanitation household survey during the first round of the survey, 4,104 households and second round of the survey, 3,906 households were surveyed. In round one survey 1,824(44.44%) households used piped water into yard or plot as main source of drinking water. 1,660 (40.45%) households used public taps as a primary source of drinking water. 2,506 (61.06%) households, adult women used to fetch water from source. 3,538 (86.21%) households

did not practice any domestic water treatment process. In round 2 survey 1,865 (47.75%) households used public tap as primary source of drinking water. 1,770 (45.31%) households of adult women used to fetch water from primary source. In sanitary facility for round 1, 2051 (49.98%). In round 2,168 (55.50%) households used pour flush to septic tank. [21]

A cross-sectional study was conducted in 2013 rural area of Thandalam village, Tiruvallur, Tamil Nadu among 100 households to understand knowledge attitude and practices of drinking water and sanitation facility. Average age of the participants was 39±9.7 years. 42% of households used public taps as primary source of drinking water. 95% households used to fetch water from source within their premises. In 85% households, women used to fetch water from the source. 75% households used to store drinking water in closed containers. 45% households did not practice any method of domestic water treatment process. 25% households did not have toilet facility inside their premises. 17% participants used plain water or ash for handwashing and 97% households used to dispose their waste in open drainage. [22]

A mixed method study was conducted to understand socio cultural factors having an impact on water safety, knowledge attitude and practice of water handling, usage, sanitary facility in Kanniyambadi block of Vellore district, Tamil Nadu, published in 2007, using questionnaire and focused group discussions among 110 individuals selected for individual questionnaire; 97 (88.2%) households were able to finish the questionnaire. 43 (76.8%) used separate storage for drinking water. 41(42.3%) households practiced water treatment process for drinking water. 30 (30.9%) households had toilets inside their premises and 72 (74.2%) households practiced open air defecation. 67 (69.1%) practiced handwashing with soap and water

after defecation. In focus group discussion the reasons quoted for defecation in open areas was age old custom, tradition and they did not have financial resources to build toilet. [23]

A community based cross sectional study was conducted among Sugali tribe, Chittoor district, Andhra Pradesh among 500 under five children's households in 2013. 69% of the households did not do anything to make the water safe for drinking. 93.8% households used to store the water in closed container. 74.2% households used to clean the storing water vessels daily. 84.8% households were practicing open air defecation and only 4% of the children belonging to study households used latrine for sanitation. 37.4% of households were practicing handwash with soap and water after defecation. Median WASH score was 15 out of 22. In multiple linear regression, child demographic factors were 0.3% of variance (adjusted R^2=0.08) in total WASH score. [24]

A cross-sectional study was conducted in 2013 among 40 urban households of South Delhi to assess the water and sanitation hygiene related attitude and practice. Average age of the participants was 36 years. 31(78%) had perceived that available water is safe for drinking. 30 (75%) of the study participants did not do anything to make water safe for drinking. 39 (98%) of study participants washed their hands before eating food, 35 (85%) practiced hand washing after defecation and 18 (45%) households used piped water in yard/ plot as a main source of drinking water. In 37 (93%) households, adult women used to fetch water from the source, 25 (63%) used to store drinking water in a closed container and 13 (33%) used to clean the water containing vessels daily. [25]

A cross-sectional study was conducted in Shikharchandi slum of Bhubaneshwar, Odisha in 2020 to study the knowledge and practice of hand washing among mothers among 150 households and 80 children to study the knowledge and practice of handwashing. Mean age of the women participants was 31 ± 17 years. 85% of the participants were practicing hand washing before preparing food. 15% of the children of their household did not use soap in the school premises for handwashing. 72% of the study participants were practicing hand wash with soap after using toilet. 17.5% of the children were practicing hand washing with soap before consuming food. [26]

A descriptive cross-sectional study was conducted in 2018, Sindhupalchowk and Bhaktapur districts of Nepal to assess the school going children's knowledge and their practices on water, sanitation and hygiene. Among 220 rural and urban school students, 51.8% of the school students were females. Among urban school students, 57.9% stored their drinking water in closed containers. 62.8% of the rural school students were cleaning their water storage containers every day, 94.4% of the school students were practicing handwashing with Soap. 98.9% of the school students were practicing handwashing with soap before consumption of food, only 33% of the school students were practicing handwash with soap after using toilet. [27]

A cross-sectional study was conducted in urban Latur, Maharashtra in 2018 among 204 mothers of under-five children to determine the knowledge and practices of hand washing in urban slums. 100% of the study participants were practicing handwashing with soap after using toilet. 97.57% were practicing handwash before consuming food. 93.63% of the study participants were practicing washing hands

after changing the child diaper. 184 (90.2%) of the study participants were practicing hand washing with soap or antiseptic. [28]

A cross sectional community-based study was conducted in two villages of Tigiria block, Cuttack district, Odisha, in 2020 among 879 study participants. 415 (47%) were females and the mean age was 36·7 ± 17. 9 years. 49.3% of study participants used tube well and 46.6% used dug well as a primary source of drinking water. 7.1% of the study participants followed some household method to purify their drinking water. 39.4% of the study participants practiced open air defecation. 157 (17.9%) of the study participants were practicing handwashing before consuming food and 531 (60.4.%) study participants were practicing handwashing with soap after defecation. (29.8%) 262 study participants were practicing washing hands with ash/soil after defecation. [29]

A cross sectional community-based study was conducted in Adichunchanagiri village, Mandya district, Karnataka in 2015 among 259 households to determine the sanitary latrine coverage, use and factors influencing its use in a rural community. Mean age of the study participants was 44.88 ± 13.91 years. 213 (82%) households had the facility of sanitary latrines. 189 (90%) of the households used private latrines. 72 (33.80%) of the households had sanitary latrines inside their houses. 18% of the households practiced open air defecation. 22% of the households did not have any sanitary latrine due to lack of space. [30]

METHODOLOGY

A community based cross – sectional study was conducted to assess the status of water, sanitation and hygienic practices among rural households and the microbiological quality of drinking water at selected sources was conducted in the rural field practice area of PHC Vantamuri, under the administrative control of JNMC in Belagavi district, Karnataka state, India. The study was conducted from 1st January 2021 to 31st December 2021 (12 months).

Sample size calculation was done by using the formula $n = 4pq/d^2$, taking the prevalence (p) as the prevalence of WASH Practices, as 50% and allowable error as 5%. (Based on various studies done in India, reference range of 49.5% - 50.5%). Estimated sample size was 400 and we have taken 10% extra of the sample size for the households locked consecutively for data collection. Data was collected from 415 households; Ten women of the household didn't give consent as men of the household were not there during data collection, five households were locked even after three consecutive visits, and ten members of the household were being sick at that time.

The rural field practice area of Primary Health Centre, Vantamuri, Belagavi has five subcentres with total households of 6,924 as per community needs and assets survey on 2019-2020 with a total population of 39476, total of 19 villages from each subcentre of PHC Vantamuri. A population proportionate sampling method was used to choose a representative sample of households from each village from the five subcentres under the Primary Health Centre, Vantamuri.

The number of households from each sub - centre were included in the study using proportionate sampling method are shown below:

Total no of households in field practice of PHC Vantamuri = 6,924

Name of the subcentres in Vantamuri PHC	Total no of households registered in one year (2020)	Calculation for proportionate sampling	No of households selected for study
Vantamuri (Rural)	1629	1629/6924 X 400	94
Bhutaramanahatti	1025	1025/6924 X 400	59
Honaga	1509	1509/6924 X 400	87
Kakati -A	1328	1328/6924 X 400	77
Kakati -B	1433	1433/6924 X 400	83
TOTAL	**6,924**		**400**

Systematic random sampling was used for selection of the households for data collection. Sampling interval was calculated from number of households selected from that area with total number of households in the same subcentre area.

Name of the villages in Vantamuri subcentre	Total no of households registered in one year (2020)	Calculation for proportionate sampling	No of household selected for study	Sampling interval
Vantamuri	1148	1148/1629 X 94	66	Every 17th household
Halbhavi	110	110/1629 X 94	7	Every 15th household
Bomnatti	90	90/1629 X 94	5	Every 18th household
Irbhavi	69	69/1629 X 94	4	Every 17th household
H. Hosur	212	212/1629 X 94	12	Every 17th household
TOTAL	**1629**		**94**	

Name of the villages in Bhutaramanahatti subcentre	Total no of households registered in one year (2020)	Calculation for proportionate sampling	No of household selected for study	Sampling interval
Bhutaramanahatti	392	392/1025 X 59	22	Every 6th household
Gugranatti	130	130/1025 X 59	8	Every 16th household
G. Hosur	105	105/1025 X 59	6	Every 17th household
Ukkad	78	78/1025 X 59	5	Every 15th household
Ramdurg	110	110/1025 X 59	6	Every 18th household
Bennali	70	70/1025 X 59	4	Every 17th household
Dasarwadi	70	70/1025 X 59	4	Every 17th household
Godihal	70	70/1025 X 59	4	Every 17th household
Total	**1025**		**59**	

Name of the villages in Honaga subcentres	Total no of households registered in one year (2020	Calculation for proportionate sampling	No of household selected for study	Sampling interval
Honaga	1361	1361/1509 X 87	78	Every 17th household
Jumanal	148	148/1509 X 87	9	Every 16th household
TOTAL	**1509**		**87**	

Name of the village in Kakati -A subcentres	Total no of households registered in one year (2020)	calculation for proportionate sampling	No of household selected for study	Sampling interval
Kakati -A	1328	1328/1328 X 77	77	Every 17th household
Total	**1328**		**77**	

Name of the village in Kakati -B subcentres	Total no of households registered in one year (2020)	Calculation for proportionate sampling	No of household selected for study	Sampling interval
Kakati -B	1285	1285/1433 X 83	74	Every 17th household
Somnatti	148	148/1433 X 83	9	Every 16th household
Total	**1433**		**83**	

Inclusion Criteria:

All the selected households in the rural field practice area of PHC Vantamuri residing since last 12 months preceding the survey.

Exclusion Criteria:

Households locked after three consecutive visits.

Ethical clearance was obtained from the Institutional Ethics Committee for Human Subjects' Research of the Medical College dated 25/01/2021 vide under letter MDC/DOME/78 (ANNEXURE – I). Written informed consent was obtained from all the study participants before the data collection (ANNEXURE – III).

Pilot study was done to find out the feasibility of the study in 40 households. After pilot study, questionnaire was modified and data was collected from each selected household in each village. Investigator interviewed using pre - validated and pre - tested questionnaire regarding practices about water, sanitation and hygienic practices among rural households using modified WHO/UNICEF 2018 questionnaire. [31] Drinking Water samples from main source and household water samples were collected as per guidelines of drinking water quality proposed by WHO 1997. [32] The selected households were located with the help of Accredited Social Health Activist (ASHA) workers of the respective villages. Data was collected from the study participants after obtaining informed consent from study participants.

The research questionnaire consisted of following sections:

1. Personal identifiers
2. Socio- demographic information of study participants
3. Main drinking water source
4. Secondary water source
5. Sanitation practices
6. Waste disposal practices
7. Hygienic practices

WATER SAMPLE ANALYSIS:

250 ml of drinking water was collected in the selected households in the rural field practice area in a sterile screw capped bottle and it was transported to laboratory within 6 hrs of collected time.[33] In the Department of Microbiology, JNMC, Belagavi, the water sample was processed by multiple tube fermentation method and was checked for the presence of coliforms. Water quality was recorded as fit or unfit for the human drinking purpose.

Water samples were collected from each subcentre, chosen by 10% of the selected households, total 40 samples were collected from all five subcentres of PHC Vantamuri.

The samples that were tested unfit were further processed for identification of bacteria contaminating the sample by phenotypic methods.

Drinking Water samples were collected based on 10% of total no of households selected for study. (N=40)

Vantamuri	10 % of 94	9.4= 9	4- Household 5 – Main source
Bhutaramanahatti	10% of 59	5.9= 6	3- Household 3 – Main source
Honaga	10% of 87	8.7= 9	4 - Household 5 – Main source
Kakati A	10 % of 77	7.7= 8	4 – Household 4 – Main source
Kakati B	10 % of 83	8.3= 8	4 – Household 4 – Main source
Total		40	

PROCEDURE FOR WATER TESTING (AT DEPARTMENT OF MICROBIOLOGY) [33]

STEP 1: 5ml of water in 5ml of double strength MacConkey broth in a test tube

STEP 2: 5ml of water in 5 ml of single strength MacConkey broth test tube

STEP 3: Incubation at 37°-degree C for 18-24 hrs.

INTERPRETATION:

MacConkey agar plate incubated at 37-degree c for 18-24 hrs

After 24 hrs – organism will be identified & report will be generated as fit/unfit for human consumption.

Unfit samples- Identified bacteria was reported.

Definition of study variables:

1. **Age**: Age was recorded to the nearest completed years (as on last birthday).

2. **Education**: (as per the Census of India criteria, 2011). [34]

   Illiterate – A person who cannot read / write with understanding in any language and who has completed seven years of age.

   Primary - Person who had studied from 1st to 5th standard.

   Secondary – Person who had studied from 6th to 8th standard.

   High school – Person who had studied till 9th to 12th standard

   PUC / ITI / Diploma - A person who had completed education up to PUC or any diploma or ITI.

   Degree / Graduate - A person who had completed any graduation degree course or any under-graduation course

   Post graduate - A person who had completed any post - graduation course.

3. **Occupation -** The activity to which one regularly devotes oneself, especially one's regular work or means of getting a living

   Homemaker – A person whose primary activity was carrying out household tasks without being paid.

   Government employee - one who works in the public sector.

   Private employee - one who works in private sector

Agriculture - A person who works in a farm or a field.

Labourer - A person doing unskilled manual work for wages.

Self-employed - A person engaged in commercial or industrial business either an owner or executive

Unemployed – A person who is presently not working to earn a living.

4. Socio – economic status

Information regarding per capita income of the family (in rupees / month) was collected and socio-economic status was classified using modified B.G. Prasad's classification for the study period of 2020. [35]

Monthly Per Capita Income = Total monthly income of family

Total number of family members

Modification was done using the Correction Factor.

Correction Factor (CF) was obtained as below, the study period was from 1st January to 31st December 2020 and hence, the mean Consumer Price index for that period was taken.

Average Consumer price index for the year 2020 (by 2001 base) = 330. [35]

$$CF = \frac{\text{Value of consumer index average (2020)} \times 4.93 \times 4.63}{100}$$

$$= \frac{330 \times 4.93 \times 4.63}{100}$$

$$= 75.33$$

Modified B. G. Prasad's Classification = Per capita family monthly income of 1961 (B. G. Prasad) x CF

Socio economic class	Prasad's classification 1961 (per capita income in rupees / month)	Modified Prasad's classification 2020 (per capita income in rupees / month) [35]
I	100 and above	7533 and above
II	50 - 99	3766 - 7532
III	30 - 49	2260 - 3765
IV	15 - 29	1130 -2259
V	< 15	1129 and below

TYPE OF FAMILY [36]

Nuclear family: The family consisting of married couple along with their dependent children.

Three generation family: The household where all the representatives of the three generation live together in the same house.

Joint family: Consists of number of married couples and their children who live in the same household.

Definition of WASH variables:[37]

Improved drinking-water sources - are ones that are more likely to be protected from external contamination, particularly faeces. Household connections, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collection are examples of improved water sources.

Unimproved sources of water include unprotected wells, unprotected springs, surface water (such as water from rivers, dams, or lakes), vendor-provided water, bottled water (unless water is accessible from an improved source for other purposes), and water from tanker trucks.

Improved sanitation facilities - is the sanitary separation of human contact and human waste. Pit latrines with septic tanks, ventilated-improved pit latrines, or pit latrines with slab or composting toilets are examples of enhanced sanitation.

Unimproved sanitation - Sanitation facilities that are shared or open to the public are not regarded as unimproved sanitation. Additionally, flushing or pouring waste into a different place, pit latrines without slabs or open pits, bucket latrines, hanging latrines, or open defecation are unimproved sanitation

DATA ANALYSIS:

The data collected was coded and entered in MS Excel sheet. To analyse the data SPSS 25.0 trial version was used. Frequency and percentages were calculated. Chi-square test and Multiple logistic regression were used to find the association between the predictor variables and the outcome variables. A probability value (p value) of less than 0.05 was considered as statistically significant.

RESULTS

Section – I: Socio-demographic variables

Table 1: Distribution of the study participants according to their age (n=415)

Age in years	Frequency	Percentage
>18-20	64	15.4
21-30	84	20.2
31-40	100	24.1
41-50	41	9.9
51-60	56	13.5
>60	70	16.9
Total	**415**	**100.0**

Among 415 study participants, 100 (24.1%) participants were in the 31-40 years age group, 84 (20.2%) were in the age group of 21-30 years, 70 (16.9%) were in the age group of >60 years, 64 (15.4%) were in the age group of > 18-20 years, 56 (13.5%) were in the age group of 51-60 years and only 41 (9.9%) were in the age group of 41-50 years.

Graph 1- Distribution of the study participants according to their age (n=415)

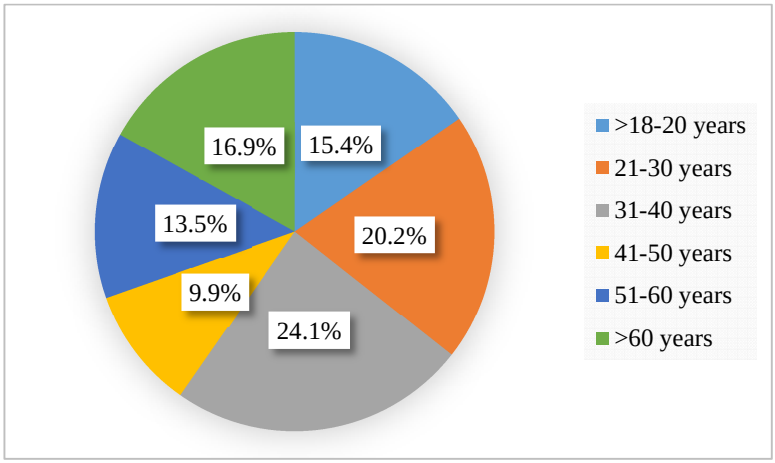


Table 2: Distribution of the study participants according to their gender (n=415)

Gender	Frequency	Percentage
Male	138	33.3
Female	277	66.7
Total	**415**	**100**

277 (66.7%) study participants were females and 138 (33.3%) study participants were males.

Graph 2- Distribution of the study participants according to their gender (n=415)

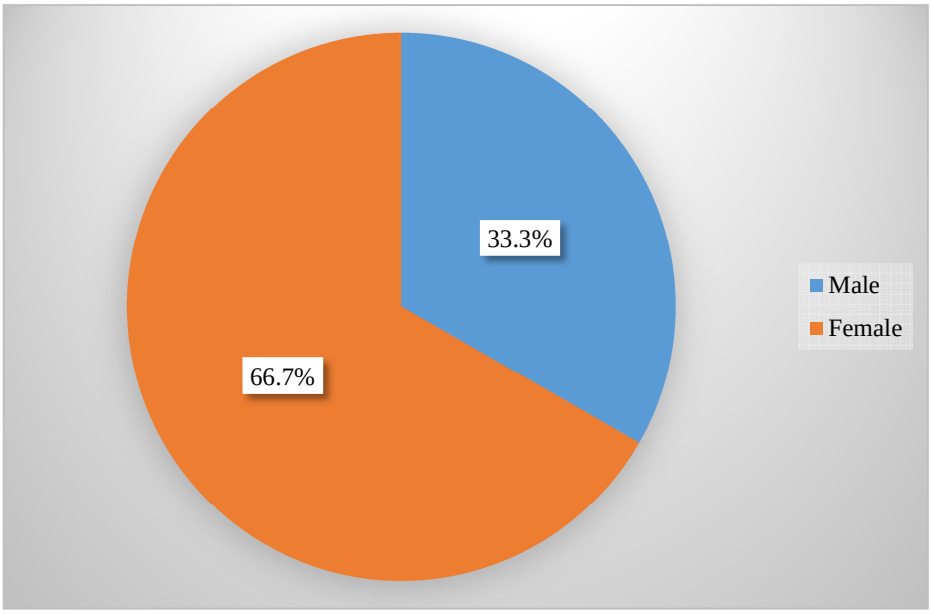


Table 3: Distribution of the study participants according to their educational status (n=415)

Educational status	Frequency	Percentage
Illiterate	24	5.8
Primary/Secondary School (Completed 7th Std)	192	46.3
High School (Completed Up To 10th Std)	106	25.5
PUC/Diploma/ITI	79	19.0
Graduate/PG	14	3.4
Total	**415**	**100.0**

Among 415 study participants, educational status of the study participants showed that 192 (46.3%) had completed primary/secondary level of education, 106 (25.5 %) had completed 10th Standard/High School, 79 (19.0%) had completed PUC/Diploma/ITI, 24 (5.8%) were illiterates and only 14 (3.4%) were Graduates/PGs.

Graph 3: Distribution of the study participants according to their education (n=415)

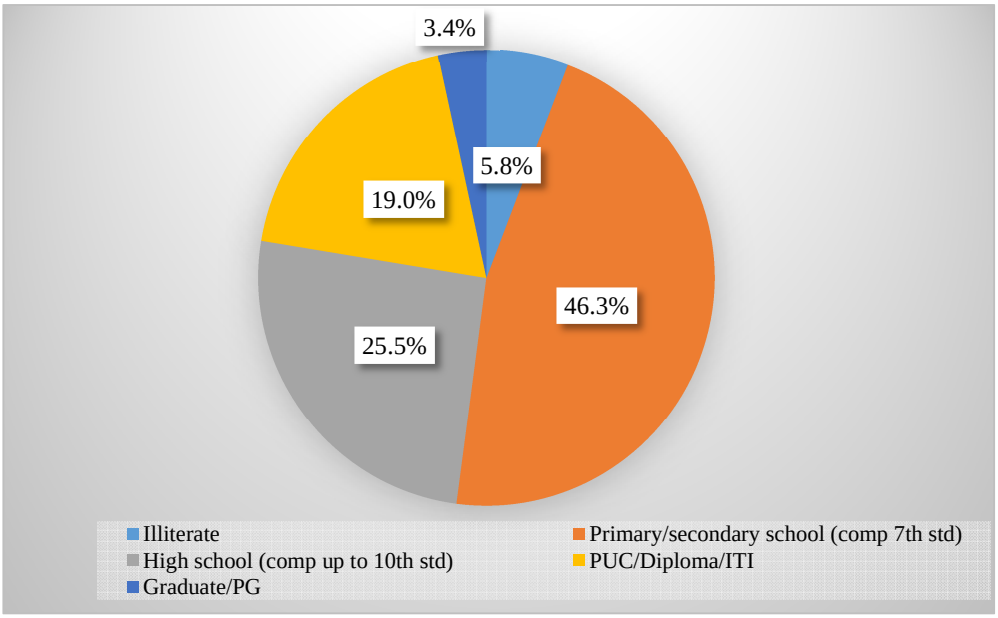


Table 4: Distribution of the study participants according to their occupation (n=415)

Occupation	Frequency	Percentage
Home maker	254	61.2
Govt Employee	9	2.2
Private Employee	39	9.4
Agriculture	6	1.4
Labourer	55	13.3
Self-Employed	5	1.2
Unemployed	47	11.3
Total	**415**	**100.0**

Among the 415 study participants, 254 (61.2%) were homemakers, 55 (13.3%) were daily labourers, 47 (11.3%) were unemployed, 39 (9.4%) were employees in private sector, 9 (2.2%) were working in government sector, 6 (1.4%) were in agriculture and only 5 (1,2%) were self - employed.

Graph 4: Distribution of the study participants according to their occupation (n=415)

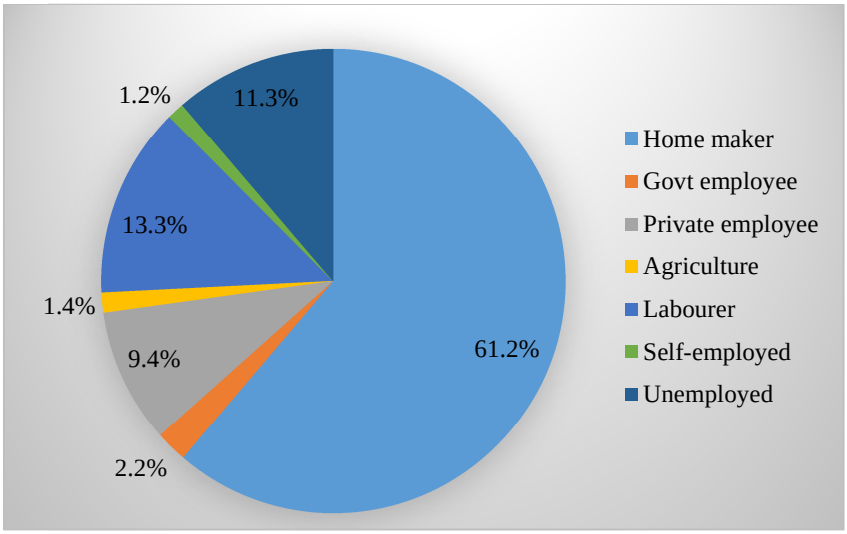


Table 5: Distribution of the study participants according to their residing area (n=415)

Residence Address (Subcentre)		
Subcentre	**Frequency**	**Percentage**
Vantamuri	87	21
Bhutaramanahatti	77	18.6
Honaga	87	21
Kakati – A	78	18.7
Kakati – B	86	20.7
Total	**415**	**100.0**

Population proportionate sampling method was used to select the number of study participants from each sub – centre. Out of 415 participants, 87 (21%) each were from Vantamuri and Honaga, 86 (20.7%) were from Kakati - B, 78 (18.7%) were from Kakati -A and 77 (18.6%) were from Bhutaramanahatti subcentre of PHC Vantamuri in Belagavi district.

Graph 5: Distribution of the study participants according to their residing area (n=415)

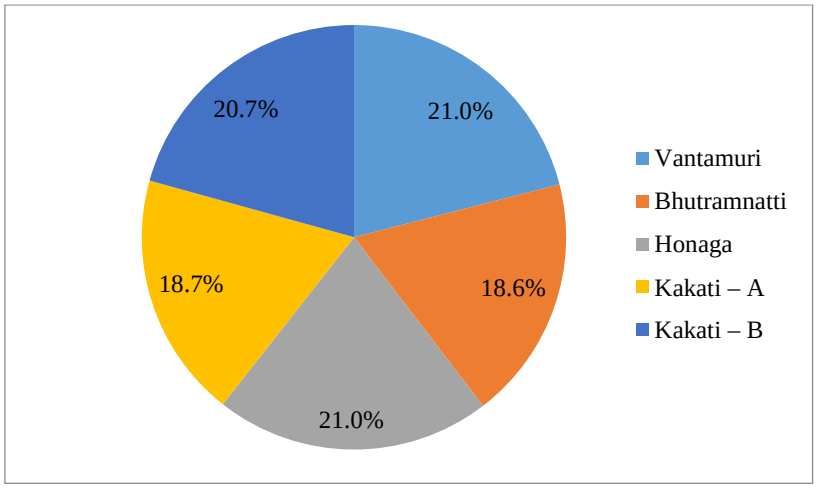


Table 6: Distribution of the study participants according to types of family (n=415)

Type of Family	Frequency	Percentage
Nuclear Family	96	23.1
Three Generation Family	265	63.9
Joint Family	54	13
Total	**415**	**100**

Among 415 study participants, 265 (63.9%) study participants belonged to three generation family, 96 (23.1%) study participants belonged to nuclear family and 54 (13.0%) to joint family.

Graph 6: Distribution of the study participants according to types of family (n=415)

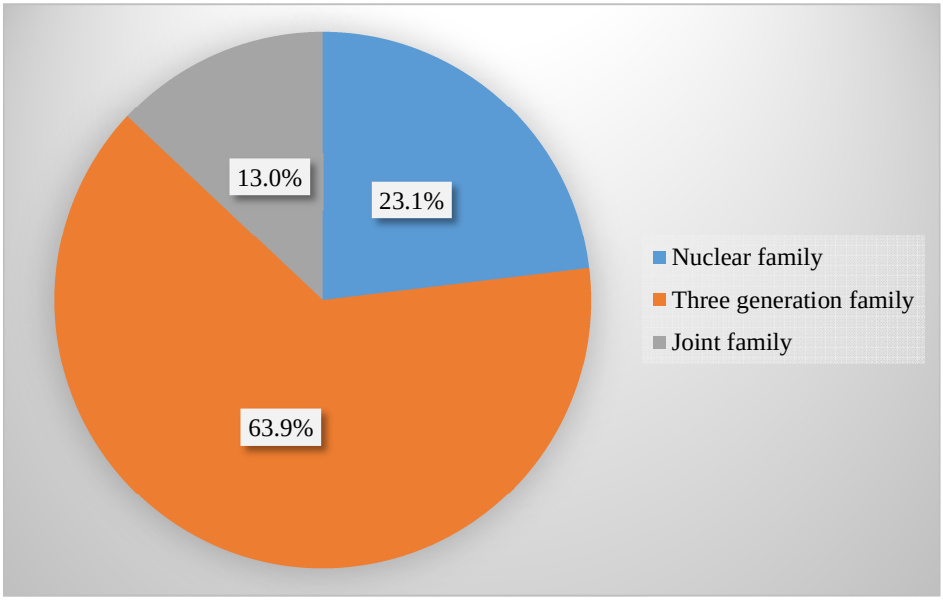


Table 7: Distribution of the study participants according to total number of members in their household (n=415)

Total members in the household		
Total members in the household	**Frequency**	**Percentage**
01-02	21	5.1
03-05	179	43.1
06-09	175	42.2
10-14	31	7.5
15-18	9	2.2
Total	**415**	**100**

Among 415 study participants, 179 households (43.1%) had 3-5 total members in their household, 175 (42.2%) had 6-9 members, 31 (7.5%) had 10-14 members, 21 (5.1%) had 1-2 members and 9 (2.2%) had 15-18 members in their household.

Graph 7: Distribution of the study participants according to total number of members in their household n=415)

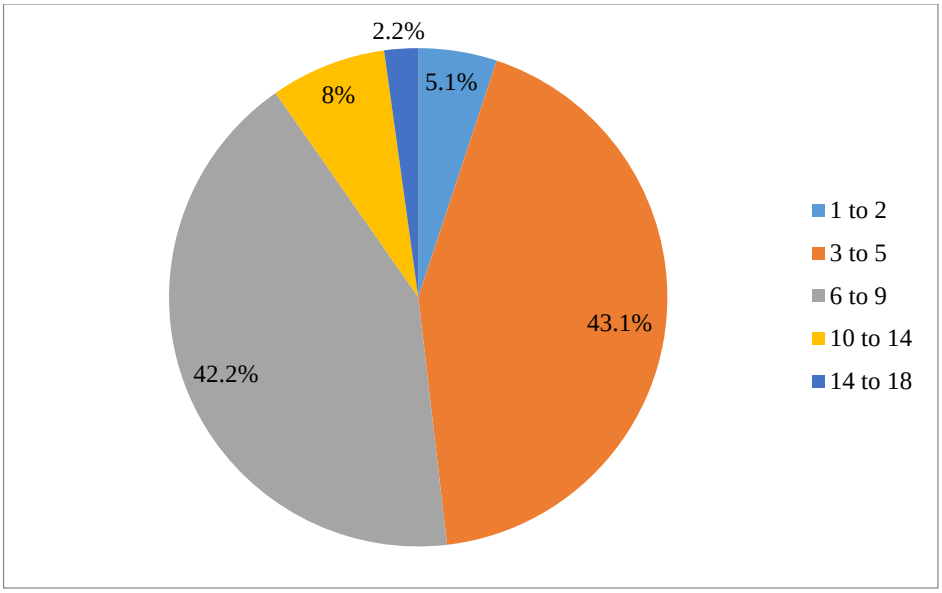
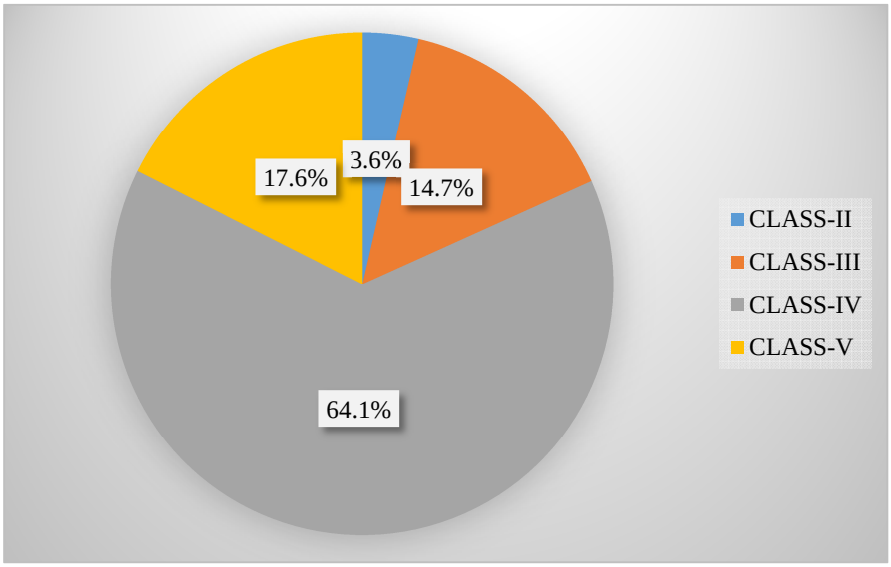


Table 8: Distribution of the study participants according to their socioeconomic status (n=415)

Socio-economic status		
SES	**Frequency**	**Percentage**
Class-II	15	3.6
Class-III	61	14.7
Class-IV	266	64.1
Class-V	73	17.6
Total	**415**	**100.0**

In the present study, according to modified B.G. Prasad's classification of socio-economic status, 266 (64.1%) participants belonged to Class IV, 61 (14.7%) belonged to Class III, 73 (17.6%) belonged to Class V, and only 15 (3.6 %) belonged to Class II; none of them belonged to class – I.

Graph 8: Distribution of the study participants according to their socioeconomic status (n=415)



SECTION II: AVAILABILITY OF WATER

Table 9: Distribution of study participants according to availability of drinking water (n=415)

Availability of drinking water everyday		
Availability of drinking water	**Frequency**	**Percentage**
Yes	357	86
No	58	14
Total	**415**	**100**

Out of 415 households, 357 (86.0%) were having the continuous availability of water from their source every day, other 58 (14%) were having intermittent water supply. 216 (52%) did not had drums/storage tank, 199 (48%) had drums/ storage tanks in their houses.

Table 10: Distribution of the study participants according to storage of containers (n=415)

Storing container for drinking water		
Storing container	**Frequency**	**Percentage**
Covered containers	327	78.8
Uncovered containers	59	14.2
Mixture of both covered & uncovered containers	29	7
Total	**415**	**100**

Out of 415 households, 327 (78.8%) used a cover for their storage containers for drinking water, 59 (14.2%) did not use any cover for their storage and 29 (7.0%) had both covered and uncovered containers for the purpose of storing drinking water.

Table 11: Distribution of the study participants according to capacity of storage tank/drums in litres in their houses (n=200)

Storage capacity of water tank/drums		
Number of litres	**Frequency**	**Percentage**
<100	111	55.5
100-500	43	21.5
600-1000	27	13.5
>1000	19	9.5
Total	**200**	**100.0**

Among 200 households who had storage tank/drums in their household, 111 (55.5%) had less than 100 litre storage tanks for storing the water, 43 (21.5%) had 100-500 litre capacity, 27 (13.5%) had 600-1,000 litre capacity and only 19 (9.5%) had more than 1,000 litre capacity of storage tanks for storing water.

Section - III: MAIN DRINKING WATER SOURCE

Table 12: Distribution of the study participants according to their primary source of drinking water (n=415)

	Primary source of drinking water		Secondary source of drinking water	
Sources	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Piped Water	294	70.8	283	68.2
Dug Well Water	49	11.8	51	12.3
Delivered Water	26	6.3	33	8.0
Packaged Water	2	0.5		
Tube Well/Borewell	44	10.6	48	11.6
Total	415	100	415	100

Out of 415 study participants, 294 (70.8%) were using piped water as a primary source of drinking water, 49 (11.8%) were using dug well water, 44 (10.6%) were using tube well/borewell, 26 (6.3%) were using delivered water and only 2 (0.5%) were using packaged water as a primary source of drinking water. Out of 415 study participants, 283 (68.2%) were using piped water, 51 (12.3%) were using dug well water, 48 (11.6%) were using tube well/borewell and 33 (8.0%) were using delivered (tanker) water as a secondary source of drinking water for their households.

Out of 294 households with piped water supply, 221 (75.2%) were using public tap or stand pipe for purpose of drinking water, 34 (11.6%) were getting piped water connection into compound, 21 (7.1%) were having piped water connection into yard or plot/ dwelling and only 18 (6.1%) were collecting piped water from neighbourhood.

Out of 49 households using dug well as source of drinking water supply, 23 (47%) were using protected dug well water source for drinking water and 26 (53%) were using unprotected dug well water.

Out of 26 households using delivered water, 22 (84.6%) were using tanker – trucker for the purpose of drinking water and 4 (15.4%) were using cart with small tank or drum as a source of delivered drinking water.

Out of 44 households using tube well/bore well as source of drinking water supply, 32 (72.7%) were using bore well/tube well which were present outside their compound and 12 (27.3%) were using tube well/bore well, which were present inside their compound.

Graph 9: Distribution of the study participants according to their primary source and secondary source of drinking water (n=415)

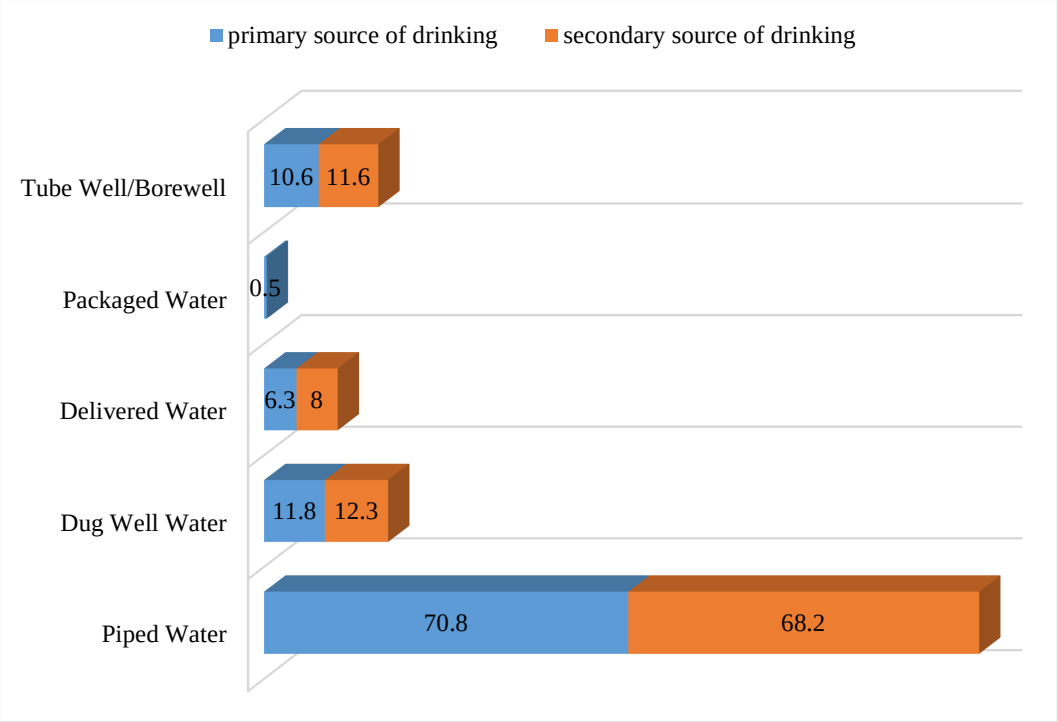
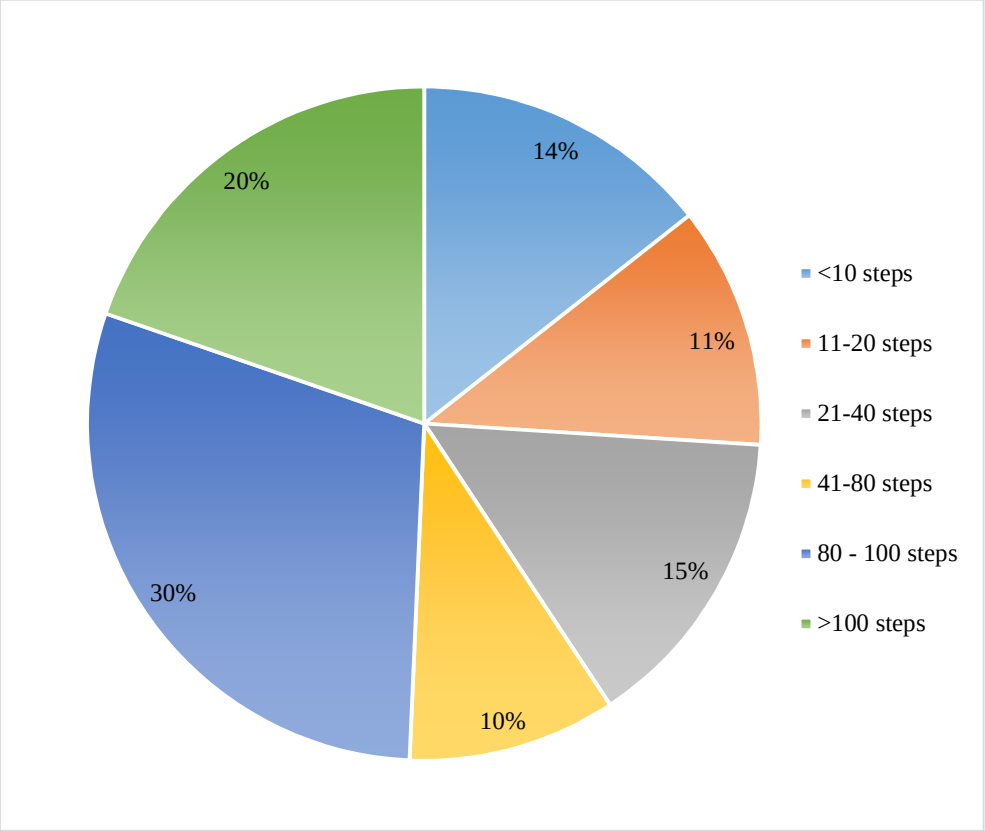


Table 13: Distribution of the study participants according to the distance to fetch water from drinking water source (n=381)

Distance to fetch water from drinking water source		
Distance to fetch water	**Frequency**	**Percentage**
<10 steps	55	14.4
11-20 steps	44	11.6
21-40 steps	56	14.7
41-80 steps	38	10
80 - 100 steps	113	29.6
>100 steps	75	19.7
Total	**381**	**100**

Out of 381 households, 113 (29.6%) were taking 80 - 100 steps for fetching drinking water, 75 (19.7%) were taking >100 steps for fetching drinking water, 56 (14.7%) were taking 21-40 steps for fetching drinking water, 55 (14.4%) were taking less than ten steps for fetching drinking water, 44 (11.6%) were taking l1- 20 steps for fetching drinking water and only 38 (10%) were taking 41 – 80 steps for fetching drinking water.

Graph 10: Distribution of the study participants according to distance to fetch water from drinking water source (n=381)



RESPONSIBILITY OF WATER COLLECTION

Table 14: Distribution of study participants according to type of household containers used for storing drinking water (n=415)

Type of household containers for storing drinking water		
Type of containers	**Frequency**	**Percentage**
Clay	28	6.7
Plastic	238	57.3
Steel	146	35.2
Copper	3	0.7
Total	**415**	**100.0**

Out of 415 households, 238 (57.3%) were using plastic containers for storing drinking water, 146 (35.2%) were using steel containers, 28 (6.7%) were using clay containers and only three (0.7%) were using copper containers for storing drinking water in their households.

Out of 415 households, 384 (92.5%) were washing their vessels used for drinking water storage daily, 22 (5.3%) were washing their stored containers weekly once and only 9 (2.2%) were washing on alternative days.

Table 15: Distribution of the study participants according to member of household to fetch water (n=378)

Member to fetch water from the source		
Household member	**Frequency**	**Percent**
Adult woman (>18 years)	246	64.6
Adult man (>18 years)	109	28.6
Both adult man and woman	26	6.8
Total	**381**	**100.0**

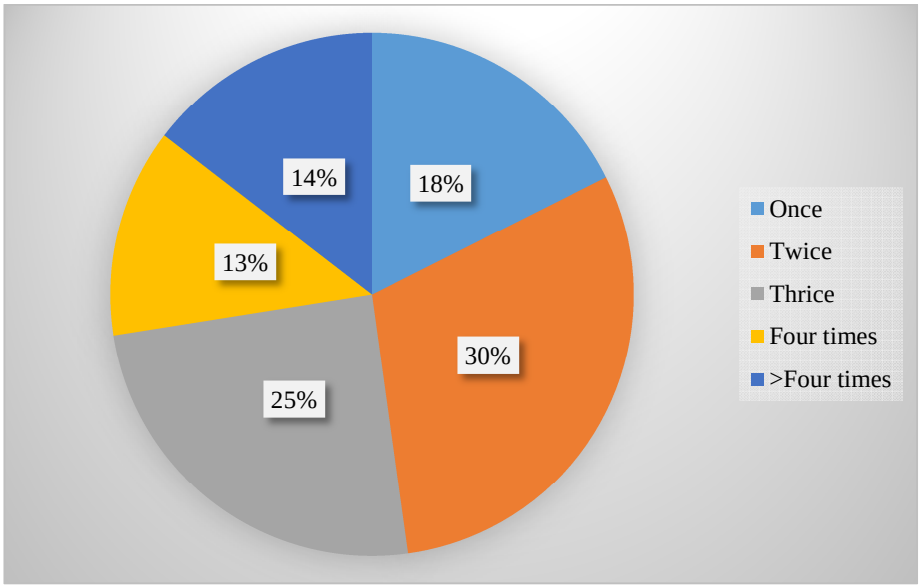
Out of 381 households, 246 (64.6%) adult women > 18 years went to fetch water for their household and 109 (28.6%) adult man >18 years of age went to fetch water for their household and only 26 (6.8%) both adult woman and men went to fetch water for their household. (Kids were not sent to fetch water in any household.)

Table 16: Distribution of study participants according to number of trips/day for fetching water from the source for drinking water (n=381)

Fetch water from the source		
No. of trips/day	**Frequency**	**Percentage**
Once	67	17.6
Twice	115	30.2
Thrice	94	24.7
Four times	49	12.9
>Four times	56	14.6
Total	**381**	**100**

Out of 381 households, 115 (30.2%) were taking two trips a day for fetching drinking water, 94 (24.7%) were taking three trips for fetching drinking water, 67 (17.6%) were taking only one trip, 56 (14.6%) were taking > four times and 49 (12.9%) were taking four trips for fetching drinking water.

Graph 11: Distribution of study participants according to number of trips for fetching water/ day (n=381)



WATER QUALITY AND SAFETY

Table 17: Distribution of the study participants according to making drinking water safer (n=415)

Drinking water safer for consumption		
Safer for consumption at home	**Frequency**	**Percentage**
Yes	107	25.8
No	308	74.2
Total	**415**	**100.0**

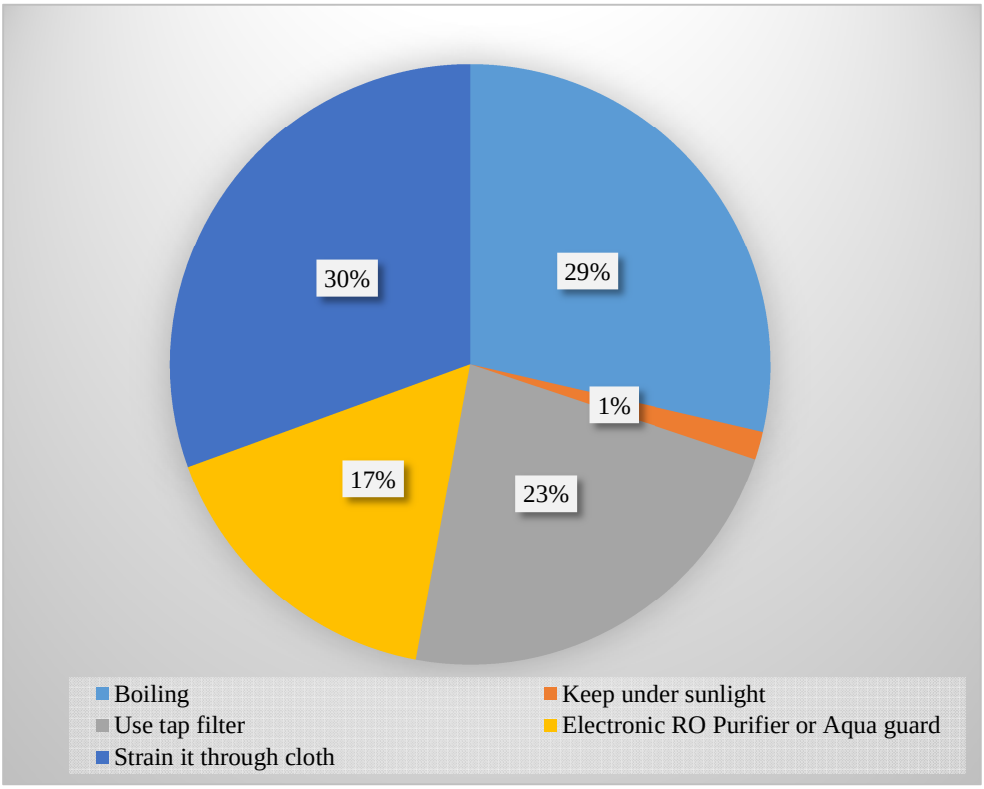
Among 415 households, 308 (74.2%) did not do any method for making the water safe for drinking purpose and 107 (25.8%) used some method to make water safer for drinking purpose at the household level.

Table 18: Distribution of study participants according to methods of making water safer for drinking (n=415)

Methods to make drinking water safer for consumption		
Methods	**Frequency**	**Percentage**
Boiling	55	13.3
Keep under sunlight	3	0.7
Use tap filter	44	10.6
Electronic RO Purifier or Aqua guard filter	32	7.7
Strain it through cloth	59	14.2
None	222	53.5
Total	**415**	**100.0**

Among 415 households, 59 participants (14.2%) used straining with cloth to make water safer for consumption, 55 (13.3%) used boiling method, 44 (10.6%) used tap filter, 32 (7.7%) used electronic RO purifier or Aqua guard filter and only three (0.7%) were keeping water under sunlight to make safer for drinking.

Graph 12: Distribution of study participants according to methods of making water safer for drinking (n=415)



ACCEPTABILITY:

All (415) of the study (100%) participants conveyed that their drinking water was always acceptable.

SECTION IV: SANITATION

Table 19: Distribution of the study participants according to disposal of household kitchen waste (n=415)

Kitchen waste disposal		
Kitchen waste disposal	**Frequency**	**Percentage**
Backyard composting	207	49.9
Domestic animal feeding	103	24.8
Dumping in undesignated open area	101	24.3
Dumping in community pit (streets)	4	1.0
Total	**415**	**100.0**

Among 415 households, 207 (49.9%) were disposing kitchen waste in their backyard for composting, 103 (24.8) were disposing kitchen waste by feeding domestic animals, 101 (24.3%) were disposing kitchen waste in undesignated open areas and only 4 (1.0%) were disposing kitchen waste in street community pits.

Graph 13: Distribution of the study participants according to disposal of household kitchen wastes (n=415)

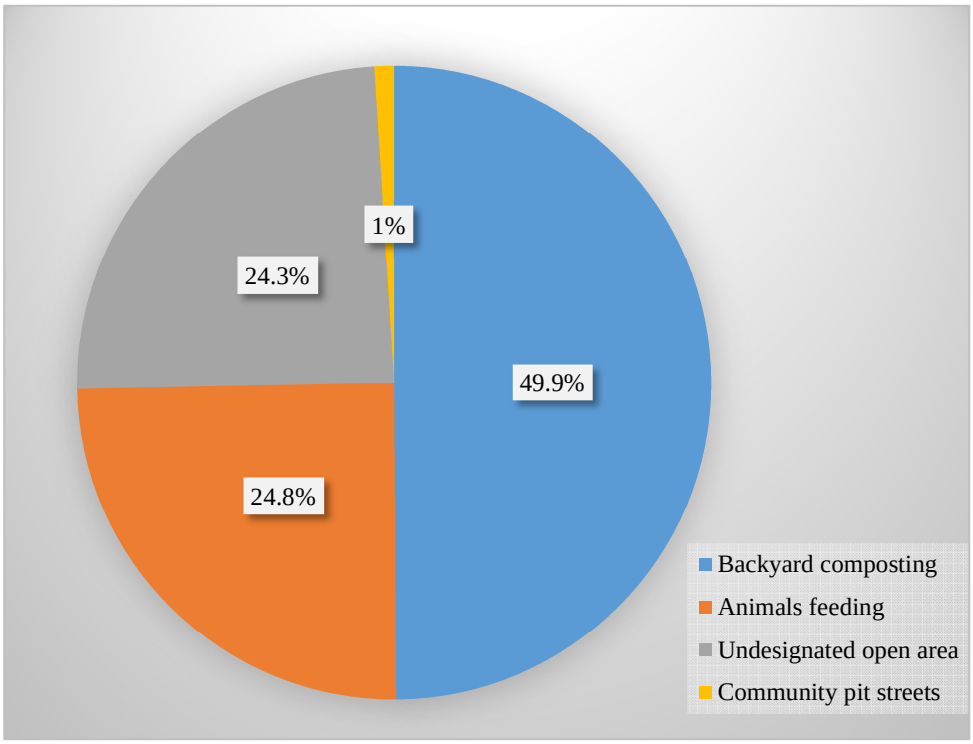
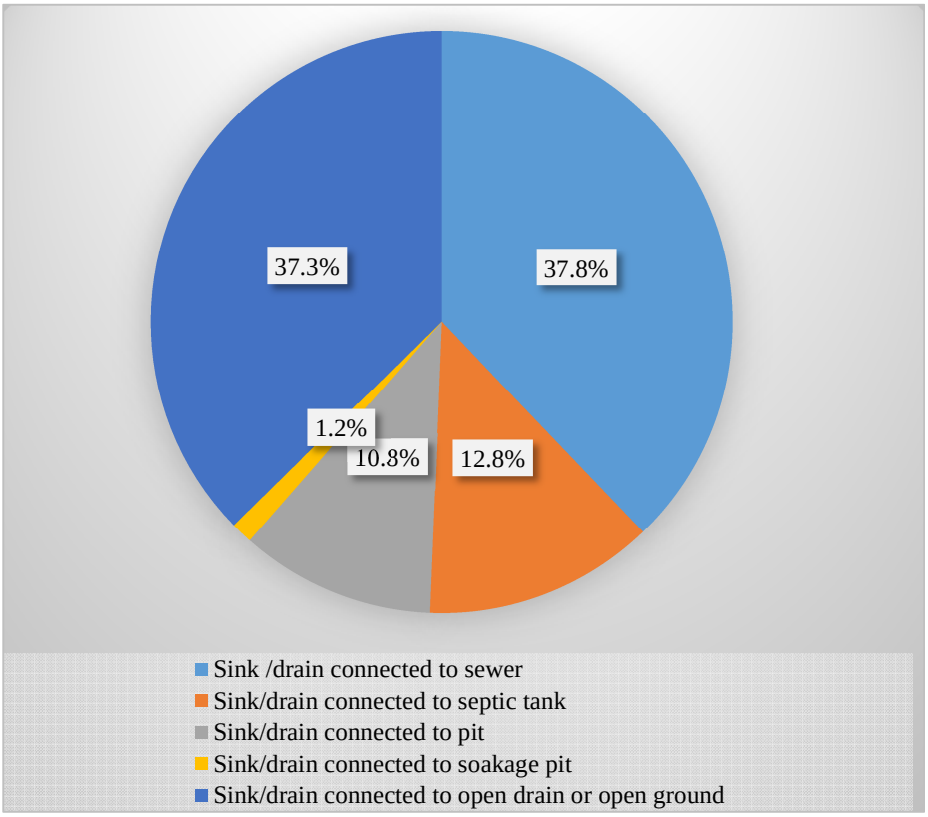


Table 20: Distribution of the study participants according to disposal of household liquid waste (n=415)

Household liquid waste disposal		
Liquid waste disposal	**Frequency**	**Percentage**
Sink /drain connected to sewer	157	37.8
Sink/drain connected to septic tank	53	12.8
Sink/drain connected to pit	45	10.8
Sink/drain connected to soakage pit	5	1.2
Sink/drain connected to open drain or open ground	155	37.3
Total	**415**	**100.0**

Among 415 households, 157 (37.8%) were disposing household liquid waste through sink/drain which were connected to sewer, 155 (37.3%) were disposing through sink/drain connected to open drain or open ground, 53 (12.8%) were disposing through sink/drain connected to septic tank, 45 (10.8%) were disposing through sink/drain connected to pit and only 5 (1.2%) were disposing it through sink/drain which were connected to soakage pit respectively.

Graph 14: Distribution of the study participants according to disposal of household liquid waste (n=415)



SECTION V: SEWAGE DISPOSAL

Table 21: Distribution of the study participants according to toilet facilities at home (n=415)

Toilet facilities at home		
Toilet built in home	**Frequency**	**Percentage**
Yes	320	77.1
No	95	22.9
Total	**415**	**100**

Among 415 households, 320 (77.1%) had toilet facility in their households and 95 (22.9%) did not have any toilet facility in their households.

Table 22: Distribution of the study participants according to practice of open-air defecation (n=415)

Open air defecation practice		
Open air defecation practice	**Frequency**	**Percentage**
Yes	95	22.9
No	320	77.1
Total	**415**	**100**

Among 415 households, 320 (77.1%) were not practicing open air defecation and 95 (22.9%) were still practicing open air defecation. Among 95 households, without toilets, 14 (14.75%) practiced open air defecation due to non-functioning of their toilet.

Table 23: Distribution of the study participants according to construction of toilet (n=415)

Toilet construction		
Toilet constructions	**Frequency**	**Percentage**
Self-built	177	55.3
Built under Swachh Bharat Mission	143	44.7
Total	**320**	**100**

Among 320 households with toilet, 177 (55.3%) had built their sanitation facility on their own, 143 (44.7%) had the sanitation facility built under Swachh Bharat Mission.

Among 95 households, who were not having their own toilets, 66 (69.5%) said 'Government did not build' and 29 (30.5%) told that they 'did not have enough space' for building toilet facility at their premises.

Table 24: Distribution of study participants according to accessibility of toilet

Able to access toilet all time (n=320)		
Able to access all time	**Frequency**	**Percentage**
Yes	289	90.3
No	31	9.7
Total	**320**	**100**

Among 320 households with toilets, 289 (90.3%) were able to access the toilet facility all the time, and only 31 (9.7%) were not able to access the toilet facility all the time, but remaining 95 (22.9%) did not have toilets in their households.

Table 25: Distribution of study participants according to kind of toilet built in their houses (n=320)

Kind of toilet in the household (n=320)		
Kind of toilet in the household	**Frequency**	**Percentage**
Indian toilet only	318	99.4
Both Indian toilet and western toilet	2	0.6
Total	**320**	**100**

Among 320 households with toilet, 318 (99.4%) had indian toilet for their sanitation and only two (0.6%) had both Indian toilet and western toilet for their sanitation in their household.

Table 26: Distribution of the study participants according to non -accessibility of toilet in their houses (n=31)

Main reason for not able to use the toilet among those having own toilet		
Reason	**Frequency**	**Percentage**
Latrine is too far away	16	51.6
Route to latrine is not safe	15	48.4
Total	**31**	**100.0**

31 households were not able to use toliet all the time in a day because 16 (51.6%) of them said that 'latrine is too far away' and 16 (48.4%) said that 'route to latrine is not safe.

Table 27: Distribution of the study participants according availability of septic tank in their houses (n=320)

Pit latrine/septic tank (n=320)		
Pit/septic tank	**Frequency**	**Percentage**
Yes	170	53.1
No	150	46.9
Total	**320**	**100.0**

Among 320 households, 170 (53.1%) had septic tank/pit latrine in their household, 150 (46.9%) did not have any septic tank in their household, but remaining 95 (22.9%) did not have toilets in their household.

Table 28: Distribution of the study participants according to years of septic tank built in their houses (n=170)

Years of septic tank built in their household		
Years built	**Frequency**	**Percentage**
1-5 Years	54	31.8
6-10 Years	48	28.2
>10 Years	24	14.1
Don't Know	44	25.9
Total	**170**	**100.0**

Among 170 households, 54 (31.8%) had built their septic tank since 1 to 5 years, 48 (28.2%) had built their septic tank since 6 to 10 years, 44 (25.9%) did not know when their septic tank was built and only 24 (14.1%) had built their septic tank since more than 10 years.

Table 29: Distribution of the study participants according to discharge of septic tank waste in their houses (n=170)

Discharge of septic tank wastage		
Discharge	**Frequency**	**Percentage**
To a leach field/soak pit	15	8.8
To a sewer	77	45.2
To an open drain	38	22.3
To open ground or water course	2	1.2
Don't know	38	22.3
Total	**170**	**100.0**

Among 170 households with septic tanks, 77 (45.2%) discharged their septic tank waste into sewer, 38 (22.3%) discharged their septic tank waste into open drain, 38 (22.3%) did not know where their septic tank was discharged, 15 (8.8%) discharged their septic tank waste into leach field/soakage pit and 2 (1.2%) discharged their septic tank waste into open ground or water course.

Graph 15: Distribution of the study participants according to discharge of septic tank waste in their houses (n=170)

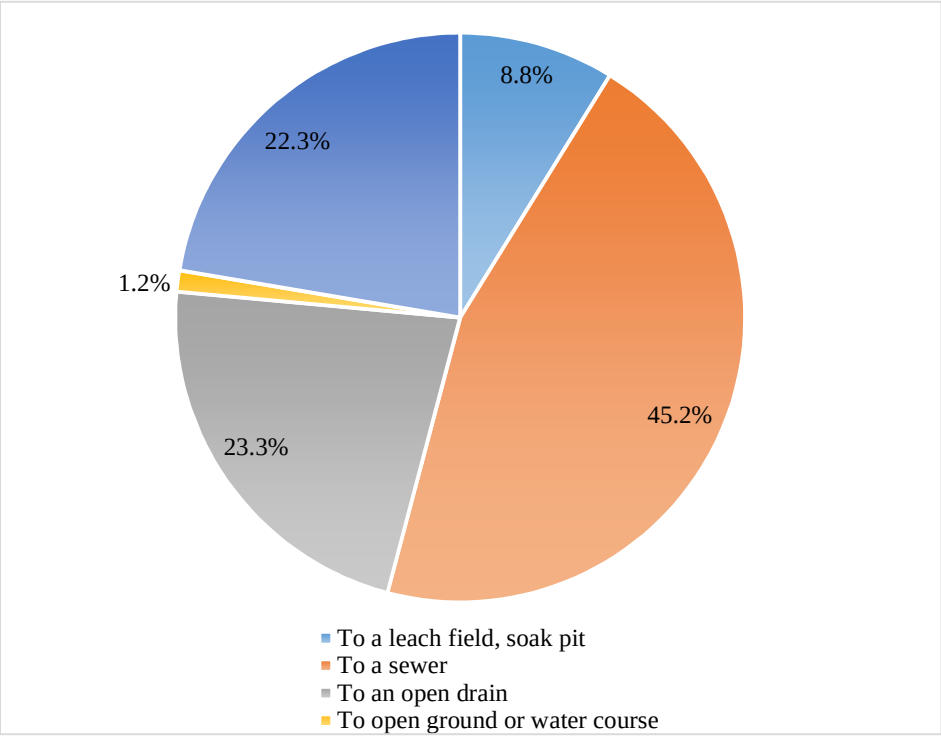


Table 30: Distribution of the study participants according to leak/overflow of septic tank in their houses (n=170)

Leak or overflow of septic tank		
Leak or over flow of septic tank	**Frequency**	**Percentage**
No, never	136	80
Yes, sometimes	14	8.3
Yes, frequently	5	2.9
Don't know	15	8.8
Total	**170**	**100.0**

Among 170 households with septic tank in their household, 136 (80.0%) never had any leak/overflow of septic tank in their households, 15 (8.8%) did not know whether their septic tank had leakage or not, 14 (8.3%) accepted that their septic tank leak/overflow sometimes and only 5 (2.9%) accepted that their septic tank overflow frequently.

Table 31: Distribution of the study participants according to years of emptying septic tank in their houses (n=170)

Years of emptying septic tank		
Years of emptying tank	**Frequency**	**Percentage**
1-2 Years	56	32.9
3-5 Years	31	18.2
6-10 Years	33	19.4
>10 Years	7	4.2
Don't Know	43	25.3
Total	**170**	**100.0**

Among 170 households, 56 (32.9%) were emptying their septic tank 1 to 2 years, 43 (25.3%) did not know when they were emptying septic tank, 33 (19.4%) were emptying septic tank once in 6 to 10 years, 31 (18.2%) were emptying septic tank once in 3 to 5 years and only 7 (4.2%) were emptying their septic tank more than 10 years.

Among 170 households with septic tank,73 (42.9%) septic tank waste were removed by the service provider, 69 (40.6%) did not know about the person who was emptying their septic tank and only 28 (6.7%) were emptied by the household members.

SECTION VI: HAND WASHING PRACTICES

Table 32: Distribution of the study participants according to hand washing practices (n=415)

Hand washing practices		Frequency	Percentage
Hand wash facility available	**Yes**	28	6.7
	No	387	93.3
Hand wash with soap before cooking	**Yes**	391	94.2
	No	24	5.8
Hand wash with soap before consuming food	**Yes**	388	93.5
	No	36	8.7
Hand wash with soap after using toilet	**Yes**	379	91.3
	No	36	8.7
Hand wash after coming from outside	**Yes**	391	94.2
	No	24	5.8

Among 415 households, 387 (93.3%) did not have any hand washing facility in their houses and only 28 (6.7%) had hand washing facility in their houses, 391 (94.2%) practiced hand washing with soap before cooking and only 24 (5.8%) did not practice hand wash before cooking, 388 (93.5%) practiced hand wash with soap/ detergent before consuming food and only 36 (8.7%) did not practice any hand wash

with soap/detergent before consuming food, 379 (91.3%) were washing hands with soap after defecation, 36 (8.7%) did not practice hand wash with soap after defecation, 391 (94.2%) were washing hands after coming from outside, and only 24 (5.8%) did not practice hand wash with soap after coming from outside. Almost all of the households had soap or detergent for their hand wash in their premises.

Graph 16: Distribution of the study participants according to hand washing practices (n=415)

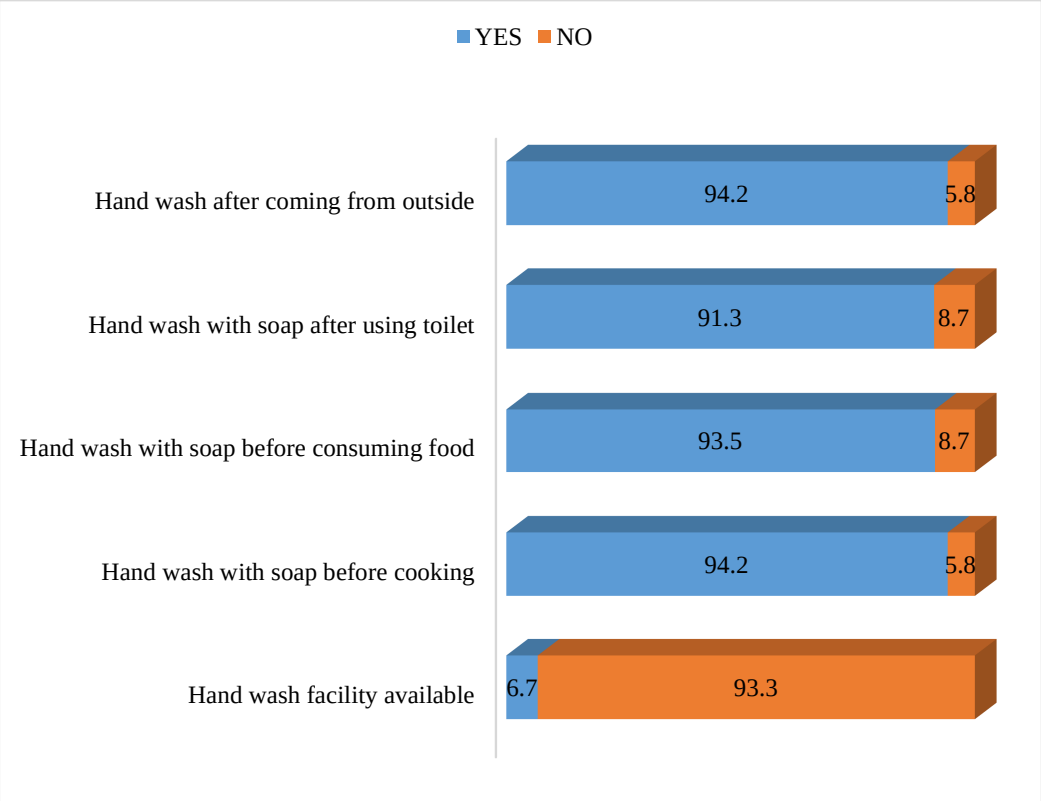


Table 33: Distribution of study participants according to hand washing Practices, having children at home (n=180)

Hand wash practices		Frequency	Percentage
Hand wash with soap after changing child diaper	Yes	171	95
	No	9	5
Hand wash after cleaning child faeces with soap and water (n=180)	Yes	163	90.6
	No	17	9.4
Hand wash before feeding their child	Yes	167	92.8
	No	13	7.2

Among 180 households who had children at their home, 171 (95%) practiced hand washing with soap after changing children diaper and only 9 (5%) did not practice hand washing with soap after changing children diaper, 163 (90.6%) practiced hand washing with soap after cleaning their child faeces and only 17 (9.4%) did not practice any hand wash with soap after cleaning their child faeces, 167 (92.8%) practiced hand washing with soap before feeding their child and 13 (7.2 %) did not practice any hand washing before feeding their child.

Table 34: Distribution study participants according to water sample analysis.

Sl. no	Places	No. of samples	Villages	Source	Report	Isolated organism
1	Kakati A	8	Desai galli	1. Filter water 2. Panchayat main source 3. Pipe water 4. House water	Fit Unfit Unfit Unfit	- Klebsiella Klebsiella Klebsiella
			Muslim galli	1. Pipe water 2. Common tank water 3. House of tank water 4. House of pipe water	Fit Unfit Unfit Unfit	Klebsiella Klebsiella Klebsiella
2	Kakati B	7	Marghai galli	1. House motor water I 2. Pipe water 3. House motor water II	Unfit Unfit Unfit	Klebsiella Klebsiella Klebsiella
			Sonatii	1. Street pipe water 2. House pipe water 3. House of motor water 4. House of tank water	Unfit Unfit Unfit Unfit	Klebsiella Klebsiella Klebsiella Klebsiella
3	Vantamuri	8	Ukkad	1. Tank water 2. Pipe water 3. House pipe water I 4. House pipe water II	Unfit Unfit Unfit Unfit	Klebsiella Klebsiella Klebsiella Klebsiella
			Main Vantamuri	1. Main pipe water 2. House pipe water 3. Public pipe water 4. Tanker trucker water	Unfit Unfit Unfit Unfit	Klebsiella Klebsiella Klebsiella Klebsiella
4	Bhutramanahatti	8	Bennali	1. Main tank water 2. House water 1 3. Pipe water 4. House water 2	Fit Unfit Fit Unfit	- Klebsiella - Klebsiella
			Gudihal	1. Main pipe water 2. House pipe water 1 3. Public pipe water 4. House pipe water 2	Unfit Unfit Unfit Unfit	Pseudomonas Pseudomonas Pseudomonas Pseudomonas

5	Gugrenhatti	3		1. Main pipe water 2. House pipe water 3. Public pipe wate	Unfit Unfit Unfit	Klebsiella E- coli Klebsiella
6	Honaga	6	Jyoti nagar	1. House pipe water 1 2. House pipe water 2 3. Main pipe water 1 4. Main pipe water 2	Unfit Unfit Unfit Unfit	Klebsiella Klebsiella Klebsiella Klebsiella
			Ambedkar galli	1. Main pipe water 2. House water	Unfit Unfit	Klebsiella Klebsiella

Total 40 water samples were collected for microbiological analysis. 20(50%) water samples from the main source and 20 (50%) from the household water samples, among them four samples (10%) were fit for human consumption, remaining 36 samples (90%) were unfit for human consumption and showed Klebsiella, Pseudomonas and E. coli as isolated organisms. (Table 34)

A total of eight water samples were taken from Kakati – A, among these samples, four from Desai galli and another four from Muslim galli. Filter water from one household in Desai galli was found to be fit for human consumption. Three samples collected from panchayat main source, piped water, and household water samples from Desai galli were unfit and Klebsiella was isolated from it. Water sample from piped water source from Muslim galli, was found to be fit, and remaining samples taken from households were unfit and showed Klebsiella.

Seven samples were taken from Kakati – B, among these samples, four from Marghai galli and another three from Sonnatti, samples were representing underground water as well as corporation water. All were found to be unfit and grew Klebsiella.

Eight samples taken from Vantamuri, among them four samples were taken from Ukkad and four samples from main Vantamuri, representing water vendor and household sources were unfit and grew Klebsiella as an isolated organism. Totally eight samples were taken from Bhutaramnahatti, among these samples, four samples were taken from Bennali and four samples were taken from Gudihal, two samples taken in Bennali from household source were unfit showed Klebsiella as an isolated organism, two samples taken from Bennali from main water source showed to be **fit.** From Gudihal, four samples were unfit and grew Pseudomonas on isolation culture.

Total three samples were taken from Gugrenhatti, two samples showed unfit with Klebsiella and one sample with E- coli as predominant isolate. In Honaga, water samples from two region, Jyoti nagar and Ambedkar Galli, were surveyed by collecting four and two samples respectively. All the samples were found to be unfit and grew Klebsiella.

Table 35: Association between socio demographic variables with availability of water (n=415)

Variables		Availability of water		Chi-square	Fisher's exact P- value
		Yes	No		
Age in years	18-20	58 (90.63%)	6 (9.38%)	12.464	0.026
	21-30	78 (92.86%)	6 (7.14%)		
	31-40	88 (88%)	12 (12%)		
	41 – 50	32 (78.05%)	9 (21.95%)		
	51 – 60	48 (85.71%)	8 (14.29%)		
	>60	53 (75.71%)	17 (24.29%)		
Occupation	Home maker	215 (84.65%)	39 (15.35%)	19.652	0.002
	Government employee	9 (100%)	0		
	Private employee	34 (87.18%)	5 (12.82%)		
	Agriculture	5 (83.33%)	1 (16.67%)		
	Labourer	45 (81.82%)	10 (18.18%)		
	Self employed	2 (40%)	3 (60%)		
	Un employed	47 (100%)	0		
SES Class	II	13 (86.67%)	2 (13.33%)	2.442	0.492
	III	49 (80.33%)	12 (19.67%)		
	IV	233 (87.59%)	33 (12.49%)		
	V	62 (84.93%)	11 (15.07%)		

In the present study, among the various socio-demographic variables, 78 (92.36%) participants who belonged to age group of 21-30 years, followed by 58 (90.63%) 18-20 years had continuous availability of water from their source every

day. This was found to be statistically significant with p = 0.026 (χ^2 - 12.464) using Fisher's exact test. 9 (100%) participants who worked in government sector had continuous availability of water from their source every day, which was statistically significant with p = 0.002 (χ^2 -19.652) using Fisher's exact test. Age, occupation had significant association with water availability.

Table 36: Association between socio demographic variables with availability of toilet in their households (n=415)

Variables		Availability of toilet in home		Chi-square	P- value
		Yes	No		
Age in years	18-20	58 (90.63%)	6 (9.38%)	42.182	<0.001***
	21-30	74 (88.10%)	10 (11.90%)		
	31-40	58 (58%)	42 (42%)		
	41 – 50	31 (75.61%)	10 (24.39%)		
	51 – 60	37 (66.07%)	19 (33.93%)		
	>60	62 (88.57%)	8 (11.47%)		
Educational qualification	Illiterate	11 (45.83%)	13 (54.17%)	39.765	**Fisher's exact** <0.001
	Primary/secondary school	133 (69.27%)	59 (30.73%)		
	High school	98 (92.45%)	8 (7.55%)		
	Diploma/ ITI	64 (81.01%)	15 (18.99%)		
	Graduates	14 (100%)	0		
Occupation	Home maker	205 (80.71%)	49 (19.29%)	20.561	**Fisher's exact** 0.001
	Government employee	8 (88.89%)	1 (11.11%)		
	Private employee	33 (84.62%)	6 (15.38%)		
	Agriculture	5 (83.33%)	1 (16.67%)		
	Labourer	29 (52.73%)	26 (47.27%)		
	Self employed	5 (100%)	0		
	Un employed	35 (74.47%)	12 (25.53%)		
SES Class	II&III	75 (98.68%)	1 (1.32%)	37.312	**Fisher's exact** <0.001
	IV	199 (78.81%)	67 (25.19%)		
	V	46 (63.01%)	27 (36.99%)		

In the present study, among the various socio-demographic factors. 18-30 years age group participants had toilet facility, which was statistically significant with $p < 0.001$ (χ^2 - 42.182) using Chi- square test. Participants who had completed graduation and post-graduation followed by who had completed high school had toilet facility at their households, which was statistically significant with $p < 0.001$ (χ^2 - 39.765) using Fisher's exact test. Participants who were self-employed followed by who had worked in government sector had toilet facility at their households, which was statistically significant with $p = 0.001$ (χ^2 - 20.561) using Fisher's exact test. Participants who were in higher socio-economic class had toilet facility at their households, which was statistically significant with $p < 0.001$ (χ^2 - 37.312) using Fisher's exact test. Age, educational qualification, occupation and socio-economic status had significant association with availability of toilet in their households.

Table 37: Association between socio demographic variables with hand washing before consuming food (n=415)

Variables		Washing hands before consuming food		Chi-square	Fisher's exact P- value
		Yes	No		
Age in years	18-20	64 (100%)	0 (0%)	37.480	<0.001***
	21-30	84 (100%)	0 (0%)		
	31-40	97 (97%)	3 (3%)		
	41 – 50	40 (97.56%)	1 (2.44%)		
	51 – 60	45 (80.36%)	11 (19.64%)		
	>60	58 (82.86%)	12 (17.14%)		
Educational qualification	Illiterate	15 (62.50%)	9 (37.50%)	27.102	<0.001***
	Primary/secondary school	185 (96.35%)	7 (3.65%)		
	High school	97 (91.51%)	9 (8.49%)		
	Diploma/ graduates	91 (97.85%)	2 (2.15%)		
Occupation	Home maker	243 (95.67%)	11 (4.33%)	9.586	0.096
	Government employee	9 (100%)	0 (0%)		
	Private employee	36 (92.31%)	3 (7.69%)		
	Agriculture	55 (90.16%)	6 (9.84%)		
	Self employed	5 (100%)	0 (0%)		
	Un employed	40 (85.11%)	7 (14.89%)		

In the present study, among the various socio-demographic variables, good practice in washing hands was seen by 64 (100%) participants who belonged to age group of 18-20 years, followed by 84 (100%) 21-30 years; this was found to be statistically significant with p <0.001 (χ^2 - 37.480) using Fisher's exact test. 91 (97.85%) participants who had completed Diploma/graduation had good practice in washing hands with soap before consuming food, which was statistically significant with p <0.001 (χ^2 -27.102) using Fisher's exact test.

Table 38: Association between socio demographic variables with hand washing after using toilet (n=415)

Variables		Washing hands after using toilet		Chi-square	P- value Fishers exact
		Yes	No		
Age in years	18-20	64 (100%)	0 (0%)	43.628	<0.001
	21-30	84 (100%)	0 (0%)		
	31-40	94 (94%)	6 (6%)		
	41 – 50	39 (95.12%)	2 (4.88%)		
	51 – 60	43 (76.79%)	13 (23.21%)		
	>60	55 (78.57%)	15 (21.43%)		
Educational qualification	Illiterate	14 (58.33%)	10 (41.67%)	24.360	<0.001
	Primary/secondary school	182 (94.79%)	10 (5.21%)		
	High school	95 (89.62%)	11 (10.38%)		
	Diploma/ graduates	88 (94.62%)	5 (5.38%)		
Occupation	Home maker	237 (93.31%)	17 (6.69%)	8.533	0.146
	Government employee	9 (100%)	0 (0%)		
	Private employee	35 (89.74%)	4 (10.26%)		
	Agriculture	4 (66.67%)	2 (33.37%)		
	Labourer	49 (89.09%)	6 (10.91%)		
	Self employed	5 (100%)	0 (0%)		
	Un employed	40 (85.11%)	5 (14.89%)		

In the present study, among the various socio-demographic factors. 18-30 years age group participants had good practice in washing hands with soap after using toilet. which was statistically significant with $p < 0.001$ (χ^2 -43.628) using Fisher's exact test. Participants who had completed primary/ secondary school followed by who had completed graduation and post-graduation had good practice in washing hands with soap after using toilet, which was statistically significant with $p < 0.001$ (χ^2 -24.360) using Fisher's exact test. Age, educational qualification had significant association with hand wash practices with soap after using toilet.

Table 39: Association between socio-demographic variables with hand washing hands after coming home from outside (n=415)

Variables		Washing hands after coming from outside		Chi-square	Fishers exact P- value
		Yes	No		
Age in years	18-20	64 (100%)	0 (0%)	31.974	<0.001***
	21-30	84 (100%)	0 (0%)		
	31-40	97 (97%)	3 (3%)		
	41 – 50	40 (97.56%)	1 (2.44%)		
	51 – 60	45 (80.36%)	11 (19.64%)		
	> 60	61 (87.14%)	9 (12.86%)		
Educational qualification	Illiterate	15 (62.50%)	9 (37.50%)	26.800	<0.001***
	Primary/ secondary school	186 (96.88%)	6 (3.13%)		
	High school	99 (93.40%)	7 (6.60%)		
	PUC/diploma	91 (97.85%)	2 (2.53%)		
Occupation	Home maker	244 (96.06%)	10 (3.94%)	8.374	0.151
	Government employee	9 (100%)	0 (0%)		
	Private employee	36 (92.31%)	3 (7.69%)		
	Agriculture	5 (83.33%)	1 (16.67%)		
	Labourer	51 (92.73%)	4 (77.27%)		
	Self employed	5 (100%)	0 (0%)		
	Un -employed	41 (87.23%)	6 (12.77%)		

In the present study, among the various socio-demographic factors. 18-30 years age group participants had good practice in washing hands with soap after coming from outside. which was statistically significant with p <0.001(χ^2 -31.974) using Fisher's exact test. Participants who had completed graduation and post-graduation had good practice in washing hands with soap after coming from outside, which was statistically significant with p <0.001(χ^2 -26.800) using Fisher's exact test. Age and educational qualification had significant association with hand wash practices with soap after coming from outside.

Table 40: Association between socio demographic variables with washing hands before cooking (n=415)

Variables		Washing hands before cooking		Chi - square	P- value Fisher's exact
		Yes	No		
Age in years	18-20	64 (100%)	0 (0%)	31.219	<0.001***
	21-30	84 (100%)	0 (0%)		
	31-40	97 (97%)	3 (3%)		
	41 – 50	40 (97.56%)	1 (2.44%)		
	51 – 60	46 (82.14%)	10 (17.86%)		
	>60	60 (85.71%)	10 (14.29%)		
Educational qualification	Illiterate	15 (62.50%)	9 (37.50%)	27.189	<0.001***
	Primary/secondary school	187 (97.40%)	5 (2.60%)		
	High school	99 (93.40%)	7 (6.60%)		
	PUC/diploma	90 (96.77%)	3 (3.23%)		
Occupation	Home maker	243 (95.67%)	11 (4.33%)	6.067	0.33
	Government employee	9 (100%)	0 (0%)		
	Private employee	36 (92.31%)	3 (7.69%)		
	Agriculture	5 (83.33%)	1 (16.67%)		
	Labourer	51 (92.73%)	4 (7.27%)		
	Self employed	5 (100%)	0 (0%)		
	Un employed	42 (89.36%)	5 (10.64%)		

Out of 415 study participants, association between socio-demographic variables with hand wash practices was studied, participants in the age group of 18-30 years were following washing hands with soap before cooking, which was statistically significant with $p < 0.001$ (χ^2 -31.219) using Fisher's exact test. Washing hands with soap before cooking was maximum in the participants who had completed graduation/post-graduation, which was found statistically significant with $p < 0.001$(χ^2 - 27.189) using Fisher's exact test. Participants who worked in government sector and participants who were home makers had good practice with washing hands with soap before cooking. Age, educational qualification had significant association with hand wash practices with soap before cooking.

Table 41: Association between socio demographic variables with open air defecation practices (n=415)

variables		OAD present	OAD absent	Chi - square	P – values
Age in years	>18-20	6 (9.38%)	58 (90.63%)	31.954	<0.001*** Chi- square
	21-30	10 (11.90%)	74 (88.10%)		
	31-40	42 (42%)	58 (58%)		
	41-50	10 (24.4%)	31 (75.6%)		
	>50	27 (21.43%)	99 (78.57%)		
Occupation	Home maker	49 (19.29%)	205 (80.71%)	18.353	0.002** Fisher's exact
	Govt employee	1 (11.11%)	8 (88.89%)		
	Private employee	6 (15.38%)	33 (84.62%)		
	Agriculture /Farmer	27 (44.26%)	34 (55.74%)		
	Self – employed	0	5 (100%)		
	Un employed	12 (25.53%)	35 (74.47%)		
Educational qualification	Illiterate	13 (54.17%)	11 (45.83%)	39.765	<0.001*** Fisher's exact
	Primary/secondary school	59 (30.73%)	133 (69.27%)		
	High school	8 (7.55%)	98 (92.45%)		
	PUC/diploma	15 (18.99%)	64 (81.01%)		
	Graduates/Post graduates	0	14 (100%)		
SES	2	0	15 (100%)	29.0723	<0.001*** Fisher's exact
	3	1 (1.64%)	60 (98.36%)		
	4	67 (25.19%)	199 (74.81%)		
	5	27 (36.99%)	46 (63.01%)		

*OAD – open air defecation

Among the various socio-demographic variables in the current study. 42 (42%) of them between the ages of 31 – 40 years, 10 (24%) of them between the ages of 41 – 50 years, and 27 (21.43%) of them over 50 years of age groups practiced open defecation, which was statistically significant with a 'p' value of <0.001 (χ^2 - 31.954). 27 (44.26%) belonged to agriculture sector and 12 (25.53%) of them were unemployed, this difference was found to be statistically significant using the Fisher's exact test with a p-value of 0.0017 (χ^2 - 18.353). The Fisher's exact test revealed that

among the participants who were illiterate, 13 (54.17%) illiterates were performing open air defecation followed by 59 (30.73%) who had completed primary or secondary school. This difference was found to be statistically significant with a 'p' value of <0.001 (χ^2 -39.765). Open air defecation was also being practiced by participants in the SES V 27 (36.99%) and SES IV 67 (25.19%) groups, which was statistically significant with 'p' <0.001 (χ^2- 29.0723) (Fisher's exact test). Age, occupation, educational qualification and socioeconomic status were found to be statistically significant with the practice of open defecation.

Table 42: Multiple logistic regression analysis between socio demographic profile of participants and hand wash practices. (n=415)

Variables	Unadjusted OR (95% CI)	P-value	Adjusted OR (95%CI)	P-value
Age				
18-40 years	10.69 (4.38-26.08)	<0.001	18.2 (5.88-56.31)	<0.001
≥ 41 years (ref)				
Qualification				
Primary/ Secondary, High school	7.70 (3.14 – 19.35)	<0.001	14.13 (4.132-48.34)	<0.001
PUC, Graduates/post graduates	10.35 (3.25 – 33.00)	<0.001	17.34 (4.0 – 75.17)	<0.001
Illiterate (ref)				
Occupation				
Unemployed	0.341 (0.144 – 0.810)	0.015	1.345 (90.288 – 6.272)	0.706
Government, private, self employed	0.990 (0.323 – 3.039)	0.987	0.502 (0.116 – 2.18)	0.305
Agriculture, Labourer	0.467 (0.20 – 1.091)	0.079	0.55 (0.144 – 2.108)	0.384
Homemakers (ref)				
Total members of the family				
≥6	1.99 (1.02 – 3.885)	0.043	3.508 (0.966 – 12.738)	0.056
≤5 (ref)				
SES				
SES II	1.542 (0.312 – 7.629)	0.595	0.682 (0.088-5.253)	0.713
SES III	1.572 (0.611 – 4.043)	0.348	3.071 (0.88 – 10.71)	0.078
SES IV	3.476 (1.622 – 7.442)	0.001	4.218 (1.629 – 10.91)	0.003
SES V (ref)				
Type of family				
Three generation family	1.714 (0.847 – 3.470)	0.134	3.692 (0.861 – 15.83)	0.079
Joint family	2.902 (0.795 – 10.597)	0.107	1.675 (0.34 – 8.25)	0.526
Nuclear family (ref)				

Multiple logistic regression analysis was done to identify the hand wash practices among various socio demographic variables. As compared to >41 years age participants, participants who belonged to 18- 40 years of age were 18.2 (adjusted OR: CI: 5.88 – 56.31) times more likely had better hand wash practices, which was statistically significant (p <0.001). As compared to the participants who were illiterates, participants who had completed PUC, Graduation and Post-graduation were 17.34 (adjusted OR: CI: 4.0 – 75.17) times more likely to have good hand wash practices, which was statistically significant (p <0.001). As compared to Socioeconomic status class V, participants who were in socioeconomic status class IV were 4.218 (adjusted OR: CI: 1.629 – 10.91) times more likely to have better practice, which was statistically significant (p - 0.003).

DISCUSSION

A community based cross – sectional study was conducted to assess the status of water, sanitation and hygienic practices among rural households and the microbiological quality of drinking water at selected sources was conducted in the rural field practice area of PHC Vantamuri, under the administrative control of JNMC in Belagavi district, Karnataka state, India. The study was conducted from 1st January 2021 to 31st December 2021 (12 months) with 415 households, residing since last 12 months preceding the survey.

Table 1: Distribution of the study participants according to their age (n=415)

In the present study, 24.1 % of the households were in the age group of 31 – 40 years.

Table 2: Distribution of the study participants according to their gender (n=415)

In the present study, 66.7 % of the households were females.

Table 3: Distribution of the study participants according to their education (n=415)

In the present study, 46.3% had completed primary/secondary level of education and 25.5 % had completed 10th Standard/High School.

Table 4: Distribution of the study participants according to their occupation (n=415)

In the present study, 61.2% were homemakers, 13.3% were daily labourers.

Table 5: Distribution of the study participants according to their residing area (n=415)

In the present study, 21% each were from Vantamuri and Honaga

Table 6: Distribution of the study participants according to types of family (n=415)

In the present study, 63.9% study participants belonged to three generation family, 23.1% study participants were from nuclear family

Table 7: Distribution of the study participants according to total number of members in their household (n=415)

In the present study, 43.1% had 3-5 total members in their household, 42.2% had 6-9 members in the household.

Table 8: Distribution of the study participants according to their socioeconomic status (n=415)

In the present study, more than half 64.1% of the participants belonged to Class IV socio – economic status and 14.7% belonged to Class III socio – economic status as per modified B G Prasad scale.

Table 9: Distribution of study participants according to availability of drinking water (n=415)

In the present study, 86.0% were having continuous availability of water from their source every day and the rest 14% were having intermittent water supply.

Table 10: Distribution of the study participants according to storage of containers (n=415)

In the present study, 78.8% used a cover for their storage containers for drinking water, 14.2% did not use any cover for their storage and 7.0% had both covered and uncovered containers for the purpose of storing drinking water. A cross sectional study was conducted among 152 households in urban and rural part of Delhi, 57% stored drinking water in closed containers, which was lesser when compared to present study. 30% stored drinking water in open containers.13% used mixture of open and closed containers. which was higher when compared to present study. [12]

Table 11: Distribution of the study participants according to capacity of storage tank/drums in litres in their houses (n=200)

In the present study, 55.5% had less than 100 litre storage tanks for storing the water, 21.5% had 100-500 litre capacity, 13.5% had 600-1,000 litre capacity and only 9.5% had more than 1,000 litre capacity of storage tanks for storing water.

Table 12: Distribution of the study participants according to their primary source of drinking water (n=415)

In the present study, 70.8% were using piped water as a primary source of drinking water, 11.8% were using Dug well water, 10.6% were using tube well/Borewell. A cross sectional study was conducted among 796 households in west Bengal, 71.1% used public tap water and 9.9% were used piped water as a source of drinking water, which was higher when compared to present study. 8.4% used tube well as a primary source of drinking water. 2.8% used protected dug well as a primary source of drinking water, which was lower than the present study. [10]

In present study, 75.2% were using public tap or stand pipe for purpose of drinking water, 11.6% were getting piped water connection into compound, 7.1% were having piped water connection into yard or plot/ dwelling and only 6.1% were collecting piped water from neighbourhood. A study was conducted in 2013 among 152 households in Delhi found that 51% used public hand pipe as the primary drinking water source, which was lesser when compared to present study. [12] A study was conducted in 2017 among 3,906 households in Kolkata reported that 47.75% used public tap water as a drinking water source, which was lesser when compared to present study. 44.44% were getting piped water connection into yard/plot, which was higher when compared to present study. [12] A study was conducted in Jammu and Kashmir in 2019 among 100 households found that 12% households used piped water into yard/plot as a primary source of drinking, which was higher when compared with present study. [17]

In present study, 47% were using protected dug well water source for drinking water, 53% were using unprotected dug well water. A study was conducted in 2016 among 796 households in West Bengal, 2.8% used protected dug well which was lesser compared with present study. [10] A study was conducted Nigeria in 2016 among 854 study participants. 44.8% used un protected dug well which was higher when compared to present study. [1]

In present study, 84.6% were using tanker – trucker for the purpose of drinking water, 15.4% were using cart with small tank or drum as a source of delivered drinking water. A study was conducted in 2016 among 796 households in West Bengal, 2.4% were using small drums from cart which was lesser compared with present study. [10]

In present study, 72.7% were using bore well/tube well which were present outside their compound, 27.3% were using tube well/bore well, which were present inside their compound**.**

Table 13: Distribution of the study participants according to the distance to fetch water from drinking water source (n=381)

In present study, 29.6% were taking 80 - 100 steps for fetching drinking water, 19.7% were taking >100 steps for fetching drinking water, 14.7% were taking 21-40 steps for fetching drinking water, 14.4% were taking less than10 steps for fetching drinking water, 11.6% were taking l1- 20 steps for fetching drinking water and only 10% were taking 41 – 80 steps for fetching drinking water.

Table 14: Distribution of study participants according to type of household containers used for storing drinking water (n=415)

In present study, 57.3% were using plastic containers for storing drinking water, 35.2% were using steel containers, 6.7% were using clay containers and 0.7% were using copper containers for storing drinking water in their households. A study was conducted in 2014 among 300 households in Chandigarh. 58% stored drinking water in plastic bottle containers or buckets, which was similar to the results of present study. [8]

In present study, 92.5% were washing their vessels used for drinking water storage containers daily, 5.3% were washing on alternative days and 2.2% were washing their storing containers weekly once. A study was conducted in Bangalore, Karnataka in 2016 from 480 households revealed that 89.2% households were cleaning their drinking water storage vessels on alternate days, which was higher

when compared with present study. [21] A study was conducted in Chittoor, Andhra Pradesh in 2013 among 500 households, 74.2% households used to clean the storing water vessels daily, which was lesser compared to the present study. [24] A study was conducted in 2013 among 40 urban households of south Delhi. 33% used to clean the water containing vessels daily which was lesser compared with present study. [25]

Table 15: Distribution of the study participants according to member of household to fetch water (n=378)

In the present study, 64.6% adult women > 18 years went to fetch water for their household and 28.6% adult men >18 years of age went to fetch water for their household and only 6.8% both adult women and men went to fetch water for their households.

A cross sectional study was conducted in 2016 among 796 households in west Bengal, 85.4% adult women went to fetch water for their household, which was higher compared to present study. [9] Another study was conducted in Jammu and Kashmir 2019, among 100 households found that 61% adult women went to fetch water for their households, which was almost similar compared to the present study. [17]

Table 16: Distribution of study participants according to number of trips/day for fetching water from the source (n=381)

In the present study, 30.2% were taking two trips a day for fetching drinking water, 24.7% were taking three trips for fetching drinking water, 17.6% were taking only one trip, 14.6% were taking > four times and 12.9% were taking four trips for fetching drinking water.

A cross sectional study was conducted in 2016 among 796 households in West Bengal, 85.4% were taking one trip for fetching drinking water, which was higher compared to present study. [9]

Table 17: Distribution of the study participants according to making drinking water safer (n=415)

In the present study, 74.2% did not use any method for making the water safe for drinking purpose and 25.8% used some method to make water safer for drinking purpose at the household level. A cross sectional study was conducted in 2014 among 300 households in Chandigarh, 68.6% did not do any method for making the water safe for drinking purpose and 31.4% used some method to make water safer for drinking purpose, which was slightly lesser compared to present study. [8] A study was conducted in 2013 among 100 households in Tamil Nadu, 45% did not follow any water treatment method and 55% followed some water treatment methods, which was lesser when compared to present study. [22]

Table 18: Distribution of study participants according to methods of making water safer for drinking (n=415)

In the present study, 14.2% used straining with cloth to make water safer for consumption, 13.3% used boiling method, 10.6% used tap filter, 7.7% used electronic RO purifier or Aqua guard filter and 0.7% were keeping water under sunlight to make safer for drinking. A cross sectional study was conducted in 2016 among 796 households in West Bengal, 35.9% used boiling method, which was higher compared to present study, 19.3% used straining with cloth to make safer for consumption, which was higher compared to present study. [9]

Table 19: Distribution of the study participants according to disposal of household kitchen waste (n=415)

In the present study, 49.9% were disposing kitchen waste in their backyard for composting, 24.8% were disposing kitchen waste by feeding domestic animals, 24.3% were disposing kitchen waste in undesignated open areas and 1.0% were disposing kitchen waste in street community pits.

Table 20: Distribution of the study participants according to disposal of household liquid waste (n=415)

In the present study, 37.8% were disposing household liquid waste through sink/drain which were connected to sewer, 37.3% were disposing through sink/drain connected to open drain or open ground, 12.8% were disposing through sink/drain connected to septic tank, 10.8% were disposing through sink/drain connected to pit and 1.2% were disposing it through sink/drain which were connected to soakage pit respectively. A study was conducted in 2016 in Karnataka among 300 households, 99% were disposing liquid waste through open drainage, which was higher when compared to present study. [20]

Table 21: Distribution of the study participants according to toilet facilities at home (n=415)

In the present study, 77.1% had toilet facility in their households and 22.9% did not have any toilet facility in their households. A cross sectional study was conducted in Karnataka among 259 households in 2015, 33.8% had toilet facility inside their premises, which was lesser compared to present study. [30] A cross sectional study conducted in Tamil Nadu among 275 households in 2017, 37.4% did

not have any toilet facilities inside their premises, which was higher compared to present study. [18]

Table 22: Distribution of the study participants according to practice of open-air defecation (n=415)

In the present study, 77.1% were not practicing open air defecation and 22.9% were still practicing open air defecation. A cross sectional study was conducted in Andhra Pradesh in 2013, 84.8% were practicing open air defecation which was higher compared to present study. [24] A cross sectional study was conducted in 2020 among 879 households Odisha, 39.4% were practicing open air defecation which was higher compared to present study. [29]

Table 23: Distribution of the study participants according to construction of toilet (n=415)

In the present study, 55.3% had built their sanitation facility on their own, 44.7% had the sanitation facility built under Swachh Bharat Mission.

In the present study 69.5% said 'Government did not build' and 29 (30.5%) told that they 'did not have enough space' for building toilet facility at their premises. A cross sectional study was conducted in 2014 among 300 households in Chandigarh, 3% had told that they 'did not have enough space' for toilet construction, which was lesser compared to present study. [8] A cross sectional study was conducted in Karnataka in 2015, 22% told that they 'did not have enough space' for building toilet facility at their premises. Which was slightly lesser compared to present study. [30]

Table 24: Distribution of study participants according to accessibility of toilet

In the present study, 90.3% were able to access the toilet facility all the time, and 9.7% were not able to access the toilet facility all the time.

Table 25: Distribution of study participants according to kind of toilet built in their houses (n=320)

In the present study, 99.4% had Indian toilet for their sanitation and 0.6% had both Indian toilet and western toilet for their sanitation in their household.

Table 26: Distribution of the study participants according to non -accessibility of toilet in their houses (n=31)

In the present study, 51.6% of them said that 'latrine is too far away' and 48.4% said that 'route to latrine is not safe for using toilet.

Table 27: Distribution of the study participants according availability of septic tank in their houses (n=320)

In the present study, 53.1% had septic tank/pit latrine in their household, 46.9% did not have any septic tank in their household, but remaining 22.9% did not have any toilets in their household. A cross sectional study was conducted in 2016 among 796 households in West Bengal, 2.6% had septic tank/ pit latrines in their household, which was lesser compared to present study. [9] A cross sectional study was conducted in Kaduna state, Nigeria in 2016 among 854 households, 76.5% had septic tank/pit latrines in their household, which was higher compared to present study. [1]

Table 28: Distribution of the study participants according to years of septic tank build in their houses (n=170)

In the present study, 31.8% had built their septic tank since 1 to 5 years, 28.2% had built their septic tank since 6 to 10 years, 25.9% did not know when their septic tank was built and only 14.1% had built their septic tank since more than 10 years.

Table 29: Distribution of the study participants according to discharge of septic tank waste in their houses (n=170)

In the present study, 45.2% discharged their septic tank waste into sewer, 22.3% discharged their septic tank waste into open drain, 22.3% did not know where their septic tank was discharged, 8.8% discharged their septic tank waste into leach field/soakage pit and 1.2% discharged their septic tank waste into open ground or water course.

Table 30: Distribution of the study participants according to leak/overflow of septic tank in their houses (n=170)

In the present study, 80.0% never had any leak/overflow of septic tank in their households, 8.8% did not know whether their septic tank had leakage or not, 8.3% accepted that their septic tank leak/overflow sometimes and only 2.9% accepted that their septic tank overflow frequently.

Table 31: Distribution of the study participants according to years of emptying septic tank in their houses (n=170)

In the present study, 32.9% were emptying their septic tank 1 to 2 years, 25.3% did not know when they were emptying septic tank, 19.4% were emptying

septic tank once in 6 to 10 years, 18.2% were emptying septic tank once in 3 to 5 years and only 4.2% were emptying their septic tank more than 10 years.

In the present study, 42.9% septic tank wastes were removed by the service provider, 40.6% did not know about the person who was emptying their septic tank and only 6.7% were emptied by the household members.

Table 32: Distribution of the study participants according to hand washing practices (n=415)

In the present study, 93.3% did not have any hand washing facility in their houses and only 6.7% had hand washing facility in their houses, 94.2% practiced washing hands before cooking and only 5.8% did not practice hand wash before cooking, 93.5% practiced washing hands with soap/ detergent before consuming food and only 6.5% did not practice washing of hands with soap/detergent before consuming food, 91.3% were washing hands with soap after defecation, 8.7% were not practicing hand wash with soap after defecation, 94.2% were washing hands after coming from outside, and only 5.8% were not practicing hand wash with soap after coming from outside. Almost all of the households had soap or detergent for their hand washing facility in the premises of their households. A cross sectional study was conducted in 2013 among 152 households in Delhi, 18% of the households had soap or detergent for their hand washing facility in the premises of their households. Which was lesser compared to present study. [12] A cross sectional study was conducted in Kaduna state, Nigeria in 2016, 65.4% were washing hands with soap after defecation, which was lesser compared to present study. [1] A cross sectional study was conducted in 2014 in Tamil Nadu among 300 households, 66% were washing hands with soap after defecation, which was lesser compared to present study. [19] A cross-sectional

study was conducted in Bangalore, Karnataka in 2016 among 480 households, 93.8% were practiced washing hands with soap/ detergent before consuming food, which was almost similar compared to present study. [21] A cross-sectional study was conducted in 2013 in South Delhi, 98% practiced washing hands with soap/ detergent before consuming food, which was similar compared to present study. [25] A cross-sectional study was conducted in Bhubaneshwar, Odisha in 2020 among 150 households, 85% practiced washing hands with soap/ detergent before consuming food, which was similar compared to present study. 72% were washing hands with soap after defecation, which was lesser compared to the present study. [26]

Table 33: Distribution of study participants according to hand washing Practices, having children at home (n=180)

In the present study, 95% practiced hand washing with soap after changing children diaper and only 5% did not practice hand washing with soap after changing children diaper, 90.6% practiced hand washing with soap after cleaning their child faeces and only 9.4% did not practice any hand washing with soap after cleaning their child faeces, 92.8% practiced hand washing with soap before feeding their child and 7.2% did not practice any hand washing before feeding their child. A cross-sectional study was conducted in urban Latur, Maharashtra in 2018, 93.63% practiced hand washing with soap after changing children diaper, which was almost similar compared to the present study. [28]

Table 34: Distribution study participants according to water sample analysis.

Total 40 water samples were collected for microbiological analysis in the present study, 20(50%) water samples from the main source and 20 (50%) from the household, among them four samples (10%-one from household and three from

primary source) were fit for human consumption and remaining 36 samples (90%) were unfit for human consumption.

Water samples in the surveyed areas were found to be grossly contaminated with coliform bacteria. The contamination was found in both underground sample and water vendor sample. Sample from one household that used RO filter was found to be fit, showing that filtration is the effective measure of obtaining safe drinking water. Main water source and piped water (main source) from two different areas were found to be fit, indicating that corporation water is fit for human consumption. The eventual finding of the same water being unfit at households indicates that contamination could have occurred either during the supply chain of water or unhygienic practices at households. Klebsiella, Pseudomonas, E. coli were the organisms isolated from these unfit water samples.

The unfit water samples were documented and reported to the PHC medical officer by the investigator and Male Health worker. The household members from respective villages and gram Panchayats were advised about alternative source of drinking water until the next sample was found fit. The medical officer submitted the report to the concerned gram panchayat and appropriate measures were taken like chlorination of water and giving health education to the respected community about the drinking safe water, sanitation and hygienic practices.

Klebsiella was found to be circulating in majority of water samples collected. The probable reasons could be because of resistance to routinely used disinfecting agents (chlorine, an ultraviolet to radiation) and modern preparations. Alternative methods such as filtration can be used. [38]

Pseudomonas was found in few samples as it is found commonly in food and water. Ro purification is recommended to remove the microorganisms.[39]

Table 35: Association between socio demographic variables with availability of water (n=415)

In the present study, among the various socio-demographic variables, 92.36% participants who belonged to age group of 21-30 years, had continuous availability of water from their source every day. This was found to be statistically significant with p = 0.026 (χ^2 - 12.464). 100% participants who worked in government sector also had continuous availability of water from their source every day, which was statistically significant with p = 0.002 (χ^2 - 19.652). Age and occupation had significant association with water availability.

Table 36: Association between socio demographic variables with availability of toilet in their households (n=415)

In the present study, 18-30 years age group participants had toilet facility. which was statistically significant with p < 0.001 (χ^2 - 42.182). Participants who had completed graduation and post-graduation had toilet facility at their households. Which was statistically significant with p < 0.001 (χ^2 -38.765). Participants who were self-employed followed by who had worked in government sector had toilet facility at their households. Which was statistically significant with p = 0.001 (χ^2 - 20.561). Participants who were in higher socio-economic class had toilet facility at their households, which was statistically significant with p < 0.001 (χ^2 - 37.312). Age, educational qualification, occupation and socio-economic status had significant association with availability of toilet in their households.

Table 37: Association between socio demographic variables with hand washing before consuming food (n=415)

In the present study, good hand wash practice was seen by 100% participants who belonged to age group of 18-20 years, followed by 100% belonged to the age group of 21-30 years. This was found to be statistically significant with p <0.001(χ^2 - 37.480). 97.85% participants who had completed Diploma/graduation had good practice in washing hands with soap before consuming food, which was statistically significant with p <0.001 (χ^2-27.102). Younger age group had higher hand washing practices and literates have good hand washing practices than illiterates.

Table 38: Association between socio demographic variables with hand washing after using toilet (n=415)

In the present study, 18-30 years age group participants had good practice in washing hands with soap after using toilet. which was statistically significant with p <0.001(χ^2 -43.628). Participants who had completed primary/ secondary school had good practice in washing hands with soap after using toilet. Which was statistically significant with p <0.001(χ^2 - 24.360). Age, educational qualification had significant association with hand wash practices with soap after using toilet.

Table 39: Association between socio-demographic variables with hand washing hands after coming home from outside (n=415)

In the present study, 18-30 years age group participants had good practice in washing hands with soap after coming from outside. which was statistically significant with p <0.001(χ^2 -31.974). Participants who had completed graduation and post-graduation had good practice in washing hands with soap after coming from

outside. Which was statistically significant with p <0.001(χ^2 - 26.800). Age and educational qualification had significant association with hand wash practices with soap after coming from outside.

Table 40: Association between socio demographic variables with washing hands before cooking (n=415)

In present study, participants in the age group of 18- 30 years were following washing hands with soap before cooking which was statistically significant with p <0.001 (χ^2 - 31.219). Washing hands with soap before cooking was maximum in the participants who had completed graduation/post-graduation, which was found statistically significant with p <0.001(χ^2 -27.189). Age, educational qualification had significant association with hand wash practices with soap before cooking.

Table 41: Association between socio demographic variables with open air defecation practices (n=415)

In the current study, 42% of those between the ages of 31 – 40 years, 24% of those between the ages of 41 – 50 years, and 21.43% of those over 50 years of age groups practiced open defecation, which was statistically significant with a 'p' value of <0.001 (χ^2 - 31.954). 44.26% belonged to agriculture sector and 25.53% of them were unemployed, this difference was found to be statistically significant with a p-value of 0.0017 (χ^2 - 18.353). The Fisher's exact test revealed that among the participants who were illiterate, 54.17% illiterates were performing open air defecation followed by 30.73% who had completed primary or secondary school. This difference was found to be statistically significant with a 'p' value of <0.001 (χ^2 - 39.765). Open air defecation was also being practiced by 36.99% participants in the

SES V and 25.19% SES IV groups, which was statistically significant with 'p' <0.001 (χ^2- 29.0723). Age, occupation, educational qualification and socioeconomic status all statistically significant with the usage of open defecation.

Table 42: Multiple logistic regression analysis between socio demographic profile of participants and hand wash practices. (n=415)

Multiple logistic regression analysis was done to identify the hand wash practices among various socio demographic variables. As compared to >41 years age participants, participants who belonged to 18- 40 years of age were 18.2 (adjusted OR: CI: 5.88 – 56.31) times more likely had better hand wash practices, which was statistically significant (p <0.001). As compared to the participants who were illiterates, participants who had completed PUC, Graduation and Post-graduation are 17.34 (adjusted OR: CI: 4.0 – 75.17) times more likely have good hand wash practices, which was statistically significant (p <0.001). As compared to Socioeconomic status class V, participants who were in socioeconomic status class IV were 4.218 (adjusted OR: CI: 1.629 – 10.91) times more likely have better practice, which was statistically significant (p - 0.003).

CONCLUSION

- Two third of the study participants were females, home makers and belonging to socio economic status IV.
- Seven out of ten households were using piped water as a primary source of drinking water.
- Half of the study participants were disposing kitchen waste by backyard composting. Eight out of ten households had the sanitation facility in their households.
- Majority of the study participants practiced hand washing with soap after using toilet. More than one – third of the study participants practiced hand washing with soap after coming from outside and after feeding the child
- Age, socioeconomic status and occupation were associated with availability of water. Sanitation facilities were associated with Age, Socioeconomic status, occupation and educational qualification. Hand wash practices were associated with age and educational qualification.

RECOMMENDATIONS

HOUSEHOLD LEVEL

1. People should be educated to use piped water supply only, wherever available.
2. Household members should close the water storage containers with the lid.
3. Drinking water should always be treated by any one of the household purification methods before consumption.
4. Those who practiced open-air defecation should get toilet facility from panchayat members for household toilet construction or use community toilets.
5. Hand washing with soap or any appropriate hand wash liquid should be done before and after toilet, before consuming food, before and after cooking.

PHC LEVEL

1. Male health worker should monitor the quality of drinking water at all sources regularly and report to gram panchayat for further action if required.
2. He /She should keep a watch for water related diseases in the community
3. Should interact with gram panchayat members for creating community awareness on water associated diseases, improving the hygienic practices and standard of living.

PANCHAYAT LEVEL

1. Should provide periodic disinfection of all sources of water in coordination with health workers
2. Provision of funding for construction of toilets under Swachh Bhrat Abhiyan, for those who do not have toilets
3. Create awareness during the group events like Village health sanitation coverage and gram sabha about the sanitation program such as and Nirmal gram puraskar in their houses.

COMMUNITY LEVEL

1. Involving and strengthening of various NGOs, Mahila samiti, Village health sanitation activities and encourage the people to discuss about the problems related to WASH.

DISTRICT LEVEL

1. Zilla panchayat should approve funds and sanction grants for construction of toilets at households and community level toilets.

STATE LEVEL

1. Use of mass media in local languages to sensitise public about the importance of WASH programme should be done
2. Awareness about the existing WASH related programmes and its benefits should be done for public.
3. Monitoring programmes such as Swachh Bharat mission (Gramin) should be done.

NATIONAL LEVEL

1. Periodic surveillance and monitoring of rivers, ponds, lakes, and look for any contamination
2. Periodic monitoring surveillance of programme such as national rural drinking water programme and national rural drinking water quality and surveillance programme should be done.
3. Build leadership, capacity, commitments and political will and innovations research to provide user friendly solutions that meet the needs of all groups of people.
4. Provide more funds to the area which lagging in the development with regard to WASH
5. Integrate with WHO, UNICEF and UN to strengthen the programme.

FURTHER RESEARCH

1. Large scale studies should be conducted to know the status of WASH across the State/Country.
2. Periodical assessment of Swachh Bharat Mission (Grammin) should be done by external agencies to know the progress /outcome/impact.
3. Qualitative studies can be taken up to know and solve the socio-cultural issues bothering the community.

STRENGTHS OF THE STUDY

- Population based study using population proportionate sampling covering all the areas under primary health centre.
- Our study involves all the (WASH) Water, Sanitation and Hygiene practices as compared to other studies which are based on only water or sanitation or hygiene practices.
- Assessment of Water, Sanitation and Hygiene practices (WASH) along with microbiological analysis of water sample analysis was done.

LIMITATIONS OF THE STUDY

- The present study was done in only one Primary Health Centre area.
- As the data was self-reported, practices could not be monitored directly.
- Qualitative data was not collected due to time limit

SUMMARY

A community based cross–sectional study was conducted to assess the status of water, sanitation and hygienic practices among rural households and the microbiological quality of drinking water at selected sources was conducted in the rural field practice area of PHC Vantamuri, under the administrative control of JNMC in Belagavi district, Karnataka state, India. The study was conducted from 1st January 2021 to 31st December 2021 (12 months).

24.1 % of the households were in the age group of 31 – 40 years. 66.7 % of the households were females. 46.3% had completed primary/secondary level of education and 25.5 % had completed 10th Standard/High School. 61.2% were homemakers, 13.3% were daily labourers. 63.9% study participants belonged to three generation family, 23.1% study participants were from nuclear family. 43.1% had 3-5 total members in their household, 42.2% had 6-9 members in the household. 64.1% belonged to Class IV socio – economic status and 14.7% belonged to Class III socio – economic status as per modified B G Prasad classification

86.0% were having the continuous availability of water from their source every day and the rest 14% were having intermittent water supply. 78.8% used cover for their storage of drinking water containers, 14.2% did not use any cover for their storage and 7.0% had both covered and uncovered containers for the purpose of storing drinking water. 70.8% were using piped water as a primary source of drinking water, 11.8% were using dug well water, 10.6% were using tube well/Borewell. 75.2% were using public tap or stand pipe respectively, 11.6% were getting piped water connection into compound, 47% were using protected dug well water source for

drinking water. 84.6% were using tanker – trucker, 15.4% were using cart with small tank or drum respectively.

57.3% were using plastic containers for storing drinking water and 35.2% were using steel containers. 92.5% were washing their storage container vessels daily, 5.3% were washing on alternative days and 2.2% were washing their vessels weekly once respectively.

25.8% used some method to make water safer for drinking purpose at the household level. 14.2% used straining with cloth to make water safer for consumption and 13.3% used boiling method.

49.9% were disposing kitchen waste in their backyard for composting, 24.8% were disposing kitchen waste by feeding domestic animals. 37.8% were disposing household liquid waste through sink/drain which was connected to sewer, 37.3% were disposing through sink/drain connected to open drain or open ground.

77.1% had toilet facility in their households. 22.9% were still practicing open air defecation. 55.3% had built their sanitation facility on their own, 44.7% had the sanitation facility built under Swachh Bharat Mission. 69.5% said 'Government did not build' and 30.5% told that they 'did not have enough space' for building toilet facility at their premises. 90.3% were able to access the toilet facility all the time, and 9.7% were not able to access the toilet facility all the time.

99.4% had Indian toilets for their sanitation. 51.6% of them said that 'latrine is too far away' and 48.4% said that 'route to latrine is not safe for using toilet. 53.1% had septic tank/pit latrine in their household.

45.2% discharged their septic tank waste into sewer, 22.3% discharged their septic tank waste into open drain. 32.9% were emptying their septic tank 1 to 2 years,

25.3% did not know when they were emptying septic tank, 19.4% were emptying septic tank once in 6 to 10 years. 42.9% septic tank wastes were removed by the service provider, 40.6% did not know about the person who was emptying their septic tank and only 6.7% were emptied by the household members.

93.3% participants did not have any hand washing facility in their houses and only 6.7% had hand washing facility in their houses, 94.2% practiced washing hands before cooking and only 5.8% did not practice hand wash before cooking, 93.5% practiced washing hands with soap/ detergent before consuming food and only 6.5% did not practice washing of hands with soap/detergent before consuming food, 91.3% were washing hands with soap after defecation, 8.7% were not practicing hand wash with soap after defecation, 94.2% were washing hands after coming from outside, and only 5.8% were not practicing hand wash with soap after coming from outside. Almost all of the households had soap or detergent for their hand washing facility in the premises of their households.

95% participants practiced hand washing with soap after changing children diaper and only 5% did not practice hand washing with soap after changing children diaper, 90.6% practiced hand washing with soap after cleaning their child faeces and only 9.4% did not practice any hand washing with soap after cleaning their child faeces, 92.8% practiced hand washing with soap before feeding their child and 7.2% did not practice any hand washing before feeding their child.

Total 40 water samples were collected for water sample analysis from main source water samples 20 (50%) and household water samples 20 (50%), four samples (10%) were fit for human consumption remaining 36 samples (90%) were unfit, they were advised about alternative source of drinking water until the next sample was found fit.

92.36% participants who belonged to age group of 21-30 years, followed by 90.63% 18-20 years had continuous availability of water from their source every day, this was found to be statistically significant with p = 0.026 (χ^2 - 12.464). 100% participants who worked in government sector had continuous availability of water from their source every day, which was statistically significant with p =0.002 (χ^2 - 19.652). Age, occupation had significant association with water availability.

18-30 years age group participants had toilet facility, which was statistically significant with p < 0.001 (χ^2 - 42.182). Participants who had completed graduation and post-graduation followed by who had completed high school had toilet facility at their households, which was statistically significant with p < 0.001 (χ^2 -38.765). Participants who were self-employed followed by who had worked in government sector had toilet facility at their households, which was statistically significant with p = 0.001 (χ^2 -20.561). Participants who were in higher socio-economic class had toilet facility at their households, which was statistically significant with p < 0.001 (χ^2 - 37.312). Age, educational qualification had significant association with hand wash practices with soap after using toilet.

Good practice in washing hands was seen by 100% participants who belonged to age group of 18-20 years, followed by 100% belonged to the age group of 21-30 years. This was found to be statistically significant with p <0.001(χ^2 -37.480). 97.85% participants who had completed Diploma/graduation had good practice in washing hands with soap before consuming food compared to illiterates which was statistically significant with p <0.001 (χ^2 -27.102).

18-30 years age group participants had good practice in washing hands with soap after using toilet, which was statistically significant with p <0.001(χ^2 - 43.628).

Participants who had completed primary/ secondary school followed by who had completed graduation and post-graduation had good practice in washing hands with soap after using toilet. Which was statistically significant with p <0.001(χ^2 - 24.360). Age, educational qualification had significant association with hand wash practices with soap after using toilet.

18-30 years age group participants had good practice in washing hands with soap after coming from outside. which was statistically significant with p <0.001(χ^2 - 31.974). Participants who had completed graduation and post-graduation had good practice in washing hands with soap after coming from outside. Which was statistically significant with p <0.001(χ^2 -26.800). Age and educational qualification had significant association with hand wash practices with soap after coming from outside.

Participants in the age group of 18- 30 years were following washing hands with soap before cooking which was statistically significant with p <0.001 (χ^2 - 31.219). Washing hands with soap before cooking was maximum in the participants who had completed graduation/post-graduation, which was found statistically significant with p <0.001(χ^2 -27.189). Participants who worked in government sector and participants who were home makers had good practice with washing hands with soap before cooking. Age, educational qualification had significant association with hand wash practices with soap before cooking.

42% of those between the ages of 31 – 40 years, 24% of those between the ages of 41 – 50 years, and 21.43% of those over 50 years of age groups practiced open defecation, which was statistically significant with a 'p' value of <0.001 (χ^2 - 31.954). 44.26% belonged to agriculture sector and 25.53% of them were unemployed

practiced open air defecation compared to other professionals, this difference was found to be statistically significant with a p-value of 0.0017 (χ^2 - 18.353). The Fisher's exact test revealed that among the participants who were illiterate, 54.17% illiterates were performing open air defecation followed by 30.73% who had completed primary or secondary school. This difference was found to be statistically significant with a 'p' value of <0.001 (χ^2 -39.765). Open air defecation was also being practiced by 36.99% participants in the SES V and 25.19% SES IV groups compared to SES II and SES III, which was statistically significant with p < 0.001 (χ^2- 29.0723). Age, occupation, educational qualification and socioeconomic status were associated and found to be statistically significant with the practice of open defecation.

Multiple logistic regression analysis was done to identify the hand wash practices among various socio demographic variables. As compared to >41 years age participants, participants who belonged to 18- 40 years of age were 18.2 (adjusted OR: CI: 5.88 – 56.31) times more likely had better hand wash practices, which was statistically significant (p <0.001). As compared to the participants who were illiterates, participants who had completed PUC, Graduation and Post-graduation are 17.34 (adjusted OR: CI: 4.0 – 75.17) times more likely have good hand wash practices, which was statistically significant (p <0.001). As compared to Socioeconomic status class V, participants who were in socioeconomic status class IV were 4.218 (adjusted OR: CI: 1.629 – 10.91) times more likely have better practice, which was statistically significant (p - 0.003).

BIBLIOGRAPHY

1. Sridhar M K C, Okarch O T, Mustapha M. Assessment of Knowledge, Attitudes, and Practices on Water, Sanitation, and Hygiene in Some Selected LGAs in Kaduna State, Northwestern Nigeria. Journal of Environmental and Public Health. 2020 Aug; 2020: 1-4 DOI: https://doi.org/10.1155/2020/6532512 [accessed on 25/10/2022]

2. World Health Organization.2019; Water, sanitation, hygiene and health: a primer for health professionals. available from https://www.who.int/publications/i/item/WHO-CED-PHE-WSH-19.149 [accessed on 22/10/2022]

3. International Institute for Population Sciences (IIPS) and ICF. Mumbai: IIPS; 2022. National Family Health Survey (NFHS-5), 2019-21: India. Available from http://rchiips.org/nfhs/factsheet_NFHS-5.shtml [accessed on 20/10/2022]

4. International Institute for Population Sciences (IIPS) and ICF. Mumbai: IIPS; 2022. National Family Health Survey (NFHS-5), 2019-21: Karnataka. Available from http://rchiips.org/nfhs/factsheet_NFHS-5.shtml [accessed on 28/10/2022]

5. International Institute for Population Sciences (IIPS) and ICF. Mumbai: IIPS; 2022. National Family Health Survey (NFHS-5), 2019-21: Belagavi. Available from http://rchiips.org/nfhs/factsheet_NFHS-5.shtml [accessed on 20/10/2022]

6. United Nations Development Programme (UNDP). Sustainable development Goal integration 2022. Available from https://www.undp.org/sustainable-development-goals [accessed on 22/10/2022]

7. World Health Organization and United Nations Children's Fund Joint Monitoring Programme for Water Supply Sanitation and Hygiene. Progress on household drinking water, sanitation and hygiene 2000–2017: New York. Available from https://www.unicef.org/media/55276/file/Progress%20on%20drinking%20water,%20sanitation%20and%20hygiene%202019%20.pdf [accessed on 22/10/2022]

8. Ravindra K, Mor S and Pinnaka V L. Water uses, treatment, and sanitation practices in rural areas of Chandigarh and its relation with waterborne diseases. Environ Sci Pollut Res 2019 May; 26: 19512-19522. DOI: https://doi.org/10.1007/s11356-019-04964-y [accessed on 26/08/2020]

9. Swachh Bharat Mission- Grameen. Ministry of drinking water and sanitation, Ministry of Jai Shakti. 2017: Government of India (GOI). Available from https://swachhbharatmission.gov.in/sbmcms/index.htm. [accessed on 26/08/2020].

10. Bhar D, Bhattacharjee S, Mukherjee A, Sarka T K and Dasgupta S. Utilization of safe drinking water and sanitatary facilities in slum households of Siliguri, West Bengal. Indian J Public Health 2017 oct; 61: 248 – 53. Available from https://doi.org/10.1007/s11356-019-04964-y [accessed on 26/08/2020]

11. Kundu A, Smith WA, Harvey D and Wuertz S. Drinking water safety: Role of hand hygiene, sanitation facility, and water system in semi-urban areas of

India. Am. J. Trop. Med. Hyg. 2018;99(4):889–98. Available from https://doi.org/10.4269/ajtmh.16-0819 [accessed on 26/08/2020]

12. Ssemugabo C, Wabula ST, Ndejjo R, oporia F, Osuret J and Musoke D, et al. Knowledge and practices of households on safe water chain maintenance in a slum community in Kampala city, Uganda. Environ. Health Prev. Med 2019 June; 24 (45): 1-9. Available from https://doi.org/10.1186/s12199-019-0799-3 [accessed on 26/08/2020]
13. Mukhopadhyay C, Vishwanath S, Eshwara VK, Shankaranayanan SK and Sagir A. Microbial quality of well water from rural and urban households in Karnataka, India: A cross sectional study. J. Infect. Public Health 2012; 5: 257-262. Available from http://www.elsevier.com/locate/jiph [accessed on 26/08/2020]
14. Huttinger A, Dreibelbis R, Kayigamba F, Ngabo F, Mfura L and Merryweather B, et al. Water, sanitation and hygiene infrastructure and quality in rural healthcare facilities in Rwanda. BMC Health Services Research. 2017 Aug 3;17(1). Available from DOI: 10.1186/s12913-017-2460-4 [accessed on 26/08/2020]
15. Water, Sanitation and Hygiene baseline assessment: Cox's Bazar, Rohingya refugee response- April 2018. Available from http://themimu.info/sites/themimu.info/files/documents/Preliminary_Report_SMART_Survey_Rakhine_ACF_2015.pdf [accessed on 26/08/2020]
16. Sangra S, Choudhary N and Narangyal A. Reporting of the core indicators on drinking water and sanitation from urban slums of Jammu: A cross-sectional study. J Family Med Prim Care 2020 June; 9 (6): 2747- 2750. DOI: 10.4103/jfmpc.jfmpc_134_20 [accessed on 22/10/2022]

17. Anuradha R, Dutta R, Dinesh Raja J, Lawrence D, Timsi J and Sivaprakasam P. Role of community in Swachh Bharat Mission. their knowledge, attitude and practices of sanitary latrine usage in rural areas, Tamil Nadu. Indian J Community Med 2017 Apr 1;42(2):107–10. DOI: 10.4103/0970-0218.205213 [accessed on 22/10/2021]
18. Pachori R. Drinking water and sanitation: household survey for knowledge and practice in rural area, Magudanchavadi, Salem district, India. Int J Community Med Public Health. 2016;1820–8. DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20162049 [accessed on 25/10/2020]
19. Reshma, Mamatha S. Pai & Manjula. A descriptive Study to assess the knowledge and practice regarding Water, Sanitation and Hygiene among women in selected villages of Udupi District. Nitte University Journal of Health Science. 2016; 6(1): 21-27. DOI: http://dx.doi.org/10.1055/s-0040-1708611 [accessed on 22/10/2022]
20. Mohd R and Malik I. Sanitation and Hygiene Knowledge, Attitude and Practices in Urban Setting of Bangalore: A Cross-Sectional Study. J Community Med Health Educ. 2017;07(04). DOI: 10.4172/2161-0711.1000540 [accessed on 22/10/2022]
21. Kanungo S, Chatterjee P, Saha J, Pan T, Chakrabarty ND, Dutta S. Water, Sanitation, and Hygiene Practices in Urban Slums of Eastern India. J Infect Dis. 2021 Nov 15; 224: S573–83. DOI: https://doi.org/10.1093/infdis/jiab354 [accessed on 26/08/2020]

22. Kuberan A, Singh A, Kasav J, Prasad S, Surapaneni KM and Upadhyay V, et al. Water and sanitation hygiene knowledge, attitude, and practices among household members living in rural setting of India. J Nat Sci Biol Med. 2015 Aug 1;6:S69–74. DOI: 10.4103/0976-9668.166090 [accessed on 22/10/2022]

23. Banda K, Sarkar R, Gopal S, Govindarajan J, Harijan BB and Jeyakumar MB, et al. Water handling, sanitation and defecation practices in rural southern India: a knowledge, attitudes and practices study. Trans R Soc Trop Med Hyg. 2007 Nov;101(11):1124–30. DOI: 10.1016/j.trstmh.2007.05.004 [accessed on 22/10/2022]

24. Reddy VB, Kusuma YS, Pandav CS, Goswami AK and Krishnan A. Water and Sanitation Hygiene Practices for Under-Five Children among Households of Sugali Tribe of Chittoor District, Andhra Pradesh, India. J Environ Public Health. 2017;2017. DOI: https://doi.org/10.1155/2017/7517414. [accessed on 22/10/2022]

25. Joshi A, Prasad S, Kasav JB, Segan M and Singh AK. Water and sanitation hygiene knowledge attitude practice in urban slum settings. Glob J Health Sci. 2014;6(2):23–34. DOI: http://dx.doi.org/10.5539/gjhs.v6n2p23 [accessed on 22/10/2022]

26. Pati S, Kadam SS and Chauhan AS. Hand hygiene behaviour among urban slum children and their care takers in Odisha, India. Vol. 55, J prev med hyg. 2014. DOI: 10.1186/1471-2458-13-89 [accessed on 22/10/2022]

27. Shrestha MV, Manandhar N and Joshi SK. Study on Knowledge and Practices of Water, Sanitation and Hygiene among Secondary School Students. Nepal Med Coll J 2018 Sep 30;14(3):160–5. DOI: 10.3126/jcmsn. v14i3.21158 [accessed on 22/10/2022]

28. Quazi S, Wadde SK and Nagaonkar AS. Hand washing practices amongst mothers of under-fives in an urban slum. Int J Community Med Public Health. 2019 Oct 24;6(11):4748. DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20195050 [accessed on 22/10/2022]

29. Palo SK, Kanungo S, Samal M, Priyadarshini S, Sahoo D and Pati S. Water, Sanitation, and Hygiene (WASH) practices and morbidity status in a rural community: Findings from a cross-sectional study in Odisha, India. J Prev Med Hyg. 2021 Jul 1;62(2): E392–398. DOI: https://doi.org/10.15167/2421-4248/jpmh2021.62.2.1503 [accessed on 22/10/2022]

30. Sheetal M P and Shashikantha S K. 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;1540–3. DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20161624 [accessed on 22/10/2022]

31. WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. Core questions on water, sanitation and hygiene for household surveys-2018: New York. Available from: https://washdata.org [accessed on 22/10/2022]

32. Guidelines for Drinking Water Quality. Volume 3. Surveillance and control of community supplies. 2nd ed. Geneva: World Health Organization; 1997: 182—188 [accessed on 22/10/2022]

33. Mackie & McCartney's Practical Medical Microbiology, 14th ed, Elsevier publication, 2020, 885-888. [accessed on 22/10/2022]

34. Census India by Government of India, Ministry of Home Affairs 2011. Available from: https://censusindia.gov.in/2011census/dchb/KarnatakaA.html [Accessed on 12/10/2022]

35. Debnath DJ and Kakkar R. Modified BG Prasad Socio-economic Classification, Updated – 2020. Indian J Comm Health. 2020;32(1):124-125. [accessed on 22/10/2022]

36. K. Park's Textbook of Preventive and Social Medicine, 24th ed, Banarsidas Bhanot publications, 2017, 715-765. [accessed on 22/10/2022]

37. World Health Organization.2022; Nutrition and nutrition-related health and development. Available from https://www.who.int/data/nutrition/nlis/info/improved-sanitation-facilities-and-drinking-water-source [accessed on 22/10/2022]

38. Rakhmanin YA, Ivanova LV, Artyomova TZ, Gipp EK, Zagaynova AV, Maksimkina T N, Krasnyak A V, Zhuravlev P V, Aleshnya V V and Panasovets O P. Distribution of bacteria of the klebsiella strain in water objects and their value in developing of the water caused acute intestinal infections. Gig Sanit. pubmed 2016; 95(4): 397-406. PMID: 27430075. [accessed on 06/12/2022]

39. Hardalo C and Edberg S C. Pseudomonas aeruginosa: Assessment of Risk from Drinking Water. Critical Reviews in Microbiology 1997; 23(1): 47-75, DOI: 10.3109/10408419709115130 [accessed on 06/12/2022]

ANNEXURE – I

ETHICAL CLEARANCE LETTER

K.L.E. ACADEMY OF HIGHER EDUCATION AND RESEARCH
(Deemed – to- be- University)
Accredited 'A' Grade by NAAC (2nd Cycle) Placed in Category 'A' by MHRD (GoI)
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
Website: http//www.jnmc.edu
E-Mail : dome@jnmc.edu
Phone: (+ 91-(0)831 Office : 2472550
Principal: 2471701
Fax No. +91 (0)831 – 2470759

Ref: MDC/DOME/ 78 **Date: 25/01/2021**

To.
(REG. NO. BD0120005)
PG student in Community Medicine,
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 **"WATER, SANITATION AND HYGIENE PRACTICES AMONG RURAL HOUSEHOLDS – A COMMUNITY BASED 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. Smita Sonoli)
Member Secretary
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

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

92

ANNEXURE – II

INFORMED CONSENT

KAHER J.N.Medical College, Belagavi

Department of Community Medicine

TITLE: "Water, sanitation and hygiene practices among rural households –A community based cross sectional study"

Guide: _____

Co-Guide: _____

Investigator: _____

Introduction:

Limited access to safe drinking water and poor sanitation can lead to under nutrition, water borne diseases like diarrhea, and water washed diseases like dysentery. Drinking improved water, sanitation and hygienic practices in your household makes you free from water related disease to lead a successful life. You are being invited to participate in this study, which will be conducted to know the status of water, sanitation and hygienic practices and also identifies the drinking water quality in the rural field practice area of PHC Vantamuri, Belagavi.

Objectives / Purpose of the study:

You are being invited to participate in the present study to assess the status of water, sanitation and hygienic practices and to identify the quality of drinking water from their primary sources and selected households. This study will be carried out in the rural field practice area of PHC Vantamuri in Belagavi.

Explanation of procedure:

In this study, you will have to answer a few pre-designed questions about your socio-demographic details and about practices of water, sanitation and hygiene practices in your household. Water samples will be collected from your household and sent for microbiological examination. Report of the same will be communicated with you later. The entire procedure may take 20-30 minutes. If you agree to participate, the required information will be collected**.**

Possible Benefits:

You will not be benefited individually during this study, but you will come to know about your drinking quality of your community.

Incentives:

You will not be eligible for any kind of monetary benefits.

Possible risks:

There are no risks involved in this study.

Cost of participation:

You will not bear any costs attached to your participation. All the cost will be borne by the investigator.

Legal rights:

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

Confidentiality:

All the data collected will remain confidential and only aggregated data will be presented and published in National/International conferences and journals. Your personal identity will not be revealed.

Withdrawal:

Your participation in this study is purely voluntary. You may decide to participate or not. Even though you decide not to participate later, you will not be deprived of the benefits of this study.

Authorization to present/publish the result:

The investigator may use the information gathered from this study for presentation in conferences or publication in scientific journals. Without revealing your personal identity.

Questions:

If you have any questions about rights as a research participant you can contact **Dr. Harsha Hegde,** Chairperson, Institutional Ethical Committee on Human Subject's Research, JNMC, KAHER, Belagavi-590010. Mob No: 9480422500 and **Dr. (Mrs.) N.S. Mahantashetti**, Principal, JNMC, KAHER, Belagavi-590010 on phone no :0831-2471350.

CONSENT STATEMENT

``I have been explained all the contents of this consent form in my local language and have understood and clarified all my queries about the study to the best of my knowledge. Furthermore, I recognize that I have the complete right to withdraw this consent at any point during the study. I understand that the information given by me will be confidential and will be used for research purpose only, further I am aware that the result of this research will be presented/published without disclosing any personal identification of the participants.

I hereby give my voluntary consent for participation in the study. I do sign the informed consent form in front of an eyewitness whom I recognize''

Name and Signature / left thumb impression of the participant: _____

Name and signature / left thumb impression of the witness: _____

Name and signature of the interviewer: _____

Place: _____

Date: _____

Signature of the guide: _____

ANNEXURE – III RESEARCH QUESTIONNAIRE

SECTION I: PERSONAL IDENTIFIERS

1.1) Name of the participant…….

1.2) Age in years: …….

1.3) Gender: Male/Female

1.4) Education: 1) Illiterate 2) Primary/Secondary school (completed 7th std) 3) High school (completed up to 10^{th} std) 4) PUC/Diploma 5) Graduate/Post graduate

1.5) Occupation: Home maker/Govt Employee/Private Employee/Agriculture/Labourer/Self-Employed/Unemployed.

1.6) Address: House No…… Galli……Village……..

1.7) Mobile no …….

SECTION II: SOCIO – DEMOGRAPHIC CHARACTERISTICS:

2.1) Name of the head of the household…….

2.2) How many members are there in your household? …….

2.3) Religion: Hindu/Christian/Muslim/Others, Specify……

2.4) Category: SC/ST/OBC/General

2.5) Type of family: Joint family/ Nuclear family/Three generation family/Broken family/Others

2.6) Household Assets: (as per NFHS-4): TV/Mobile/Two-wheeler/Tractor/telephone/LPG

2.7) Family size: Adults……. Children (1-10yrs) ……. Adolescents (11-18yrs) ……Total……

2.8) Per capita income _____/Month

2.9) SES class I/II/III/IV/V (as per modified BG Prasad's classification)

2.10) Do you have a ration card? APL/BPL/No Ration card

SECTION III: MAIN DRINKING WATER SOURCE

3.1) What is the main source of drinking water, cooking & handwashing for members of your household?

	PRIMARY SOURCE		SECONDARY SOURCE	
	DRY SEASON	WET SEASON	DRY SEASON	WET SEASON
PIPED WATER (skip to question no 3.2)				
DUG WELL (skip to question no 3.3)				
DELIVERED WATER (skip to question no 3.4)				
PACKAGED WATER (skip to question no 3.5)				
TUBE WELL/BOREWELL (skip to question no 3.6)				
OTHERS (SPECIFY)				

3.2)	PIPED WATER	PRIMARY SOURCE	SECONDARY SOURCE
1)	Piped into dwelling		
2)	Piped into compound		
3)	Piped into neighborhood		
4)	Public tap or stand pipe		

3.3)	DUG WELL	PRIMARY SOURCE	SECONDARY SOURCE
1)	Protected well		
2)	Unprotected well		

(IF it is unprotected well specify reasons) …….

3.4)	DELIVERED WATER	PRIMARY SOURCE	SECONDARY SOURCE
1)	Tanker-trucker		
2)	Cart with small Tank or drum		

3.5)	PACKAGED WATER	PRIMARY SOURCE	SECONDARY SOURCE
1)	Bottled water		
2)	Cane water		

3.6)	TUBE WELL/ BORE WELL	PRIMARY SOURCE	SECONADRY SOURCE
1)	Present inside the compound		
2)	Present outside the compound		

3.7) If present outside the compound, mention the distance to fetch water from your home…..steps

SECTION IV: RESPONSIBILITY OF WATER COLLECTION

4.1) What type of container is used to fetch water at principal source?

1) Clay 2) Plastic 3) Steel 4) Copper 5) others…….

4.2) How many times you will wash your water storage container with soap?

1) Never 2) Daily 3) Weekly 4) Monthly

4.3) Who usually goes to fetch water for your household?

1) Adult woman (>18 years) 2) Adult man (>18 years) 3) Girl (<18 years)/ 4) Boy (<18 years)

4.4) How many trips did that person make to collect water in the last week?

1) Number of times i) once ii) Twice iii) Thrice iv) Four-time v) > Four times (specify)

2) Don't know

4.5) Does your household store drinking water in covered container/uncovered container/mixture of both covered and uncovered container

SECTION V: AVAILABILITY OF WATER

5.1) Is water available from your main water source every day?

Yes/No/Don't Know

If no, (frequency)

1) No, water is available only alternative day

2) No, water is available only once a week or twice a week 3) Water is rarely available once in a month 4) Not applicable

5.2) If the water was not always available every day, what is the reason?

1) Water is not available from source 2) Water is too expensive 3) Source is not accessible 4) Not applicable 5) Others (specify) 6) Not applicable

5.3) In the past one month, for how many days was water from this source unavailable when needed?

1) No of days…. In dry season 2) No of days ……In wet season 3) Not applicable

5.4) Does your household have a large water storage tank? Yes/No/Don't know

5.5) If your answer is yes, how many liters does the storage tank hold?

1) No of liters …… 2) Not applicable

5.6) Has there been any time in the last week/month when you have not been able to store sufficient water to meet your needs?

Yes/No/Don't Know/Never

If yes mention the frequency

1) once 2) Twice 3) Thrice 4) Not applicable

WATER QUALITY AND SAFETY

5.7) Have you or any other household members done anything to this water to make it safer to drink?

a) Yes b) No c) Don't Know

5.8) If yes, what do you usually do with water to make it safer to drink?

1) Boiling 2) Adding bleach/Chlorine 3) Keep under sunlight 4) Use tap filter

5) Electronic RO Purifier or Aqua guard 6) Strain it through cloth

7) Let it stand and settle 8) Candle filter 9) Others (specify)…….

9) Not applicable

ACCEPTABILITY

5.12) Is the water supplied from your main source usually acceptable?

1) Yes acceptable, 2) No, Unacceptable taste, 3) No Unacceptable colour 4) No Unacceptable smell, 5) No contains materials, 6) others…..... 7) Don't know 8) Not applicable

SANITATION

SECTION VI: SOLID WASTE DISPOSAL

6.1) How does your household usually dispose of kitchen waste vegetables?

1)Backyard composting Yes/No/Don't know

2)Animals feeding Yes/No/Don't know

3)Undesignated open area Yes/No/Don't know

4)Used for farming Yes/No/Don't know

5) Communal pit streets Yes/No/Don't know

6) Burned or buried Yes/No/Don't know

7) Disposed elsewhere Yes/No/Don't know

8) Others…….

SECTION VII: LIQUID WASTE DISPOSAL

7.1) How do you dispose of household water used for cooking, laundry and bathing?

1) Sink /drain connected to sewer 2) Sink/drain connected to septic tank 3) Sink/drain connected to pit 4) Sink/drain connected to soakage pit 5) Sink/drain connected to open drain or open ground 6) Others…… 7) Not applicable

SECTION VIII: SEWAGE DISPOSAL

8.1) Do you have toilet inside in your home? Yes/No

Any members of your family practice open air defecation? Yes/NO

8.1c) What kind of toilet facility do members of your household usually use?

1) Western toilet 2) Indian toilet 3) Both

8.1a) If No, what was the main reason for not having toilet in your home?

Specify the reason:

8.1b) Toilet construction done by Self/ Swachh Bharat Mission/any others specify…….

If constructed by Swachh Bharat Mission, how much Funds received from govt?

Rs……...

8.2) Is everyone in the household able to access and use the toilet at all times of the day and night? Yes/ No/Don't know/NA

If yes, skip this

8.3) If No, what was the main reason that household members were unable to use the toilet at all times of the day and night?

1) Too many people using latrines 2) Latrine is too far away 3) Latrine is full 4) Latrine is not clean 5) No separation between men and women 6) Bad smell/ Many flies

7) Insufficient water 8) Route to latrine is not safe 9) Others ……10) NA

8.4) Do you have children in your home? Yes/No/Not applicable

8.4a) If yes, do they use the toilet independently?

If No 1) Child used toilet/latrine 2) Stool/feces is rinsed into latrine 3) Put/rinsed into drain/ditch 4) Thrown into dustbin (solid waste) 5) Buried 6) Left in the open 7) Others, Specify……./8) NA

SECTION IX: SHARED SANITATION

9.1) Do you share this facility with others who are not members of your household?

Yes/ No/Don't know/NA

9.1a) If Yes how many households in total use this toilet facility, including your own household? No of household……/don't know/Not applicable

9.2) Do you share this facility only with members of other households that you know or is the facility open to use of the general public?

1) Shared with known household (not public) 2) Shared with general public 3) Not applicable

CONTAINMENT OF WASTES

9.3) Does your sanitation facility leak or overflow wastes at any time of the year?

1) No, never 2) Yes, sometimes 3) Yes, frequently 4) Don't know 5) NA

SECTION X: DISCHARGE OF WASTE FROM SEPTIC TANK

10.1) Does your household has pit latrine/ septic tank Yes/N/NA if Yes,

10.1a) Where does your septic tank/ pit latrine discharge to?

1) To a leach field, soak pit 2) To a sewer 3) To an open drain 4) To open ground or water course 5) Others (specify) ……..…… 6) Don't know 7) NA

SECTION XI: EMPTYING OF SEPTIC TANK/PIT LATRINE

11.1) How many years ago was your septic tank/pit latrine built?

1) Number of years 2) Don't know 3) NA

11.2) Has your pit latrine or septic tank ever been emptied?

1) Yes emptied 2) Never emptied 3) Don't know 4) NA

11.2a) If yes, how many years ago was your pit latrine/ septic tank emptied?

1) No of years 2) Don't know 3) NA

11.2b) The last time it was emptied, who emptied

1) Removed by service provider 2) Emptied by household 3) Not applicable

11.2c) If it is emptied by household, where it is emptied

1) Buried in a covered pit 2) To uncovered pit, open ground or elsewhere 3) Don't know 4) NA

11.2d) Any domestic animal in your houses? Yes/No

If Yes Cow/Buffalo/Dog/Cat/Sheep/Hen/Not Applicable/ Others, specify

11.3) Any Gober gas plant installed in the household?

Yes/No/Don't Know

If Yes used for 1) Composting of Kitchen waste 2) Vermicomposting 3) Kitchen waste fed to Animals

SECTION XII: HYGIENIC PRACTICES QUESTIONNAIRE

12.1) Where do your and other members of your household most often wash your hands?

1) Fixed facility reported (sink/tap) 2) Mobile objects reported (bucket/jug/kettle) 3) No handwashing place in dwelling/ yard/ plot

SOAP OBSERVATION

12.2) Do you have soap or detergent in your household for washing hands?

Yes shown/ No not shown/ Others (Specify) …….

12.2a) If shown 1) Bar / liquid soap 2) Detergent (Powder/Liquid/Paste)

3) Ash/Mud/ 4) Others, Specify……

12.3) Do your household members

1) Wash vessels with soap/without soap before cooking? Yes/No/Don't know

2) Wash hands with soap/without soap before consuming any food? Yes/No/Don't know

3) Wash hands with soap/without soap after using toilet? Yes/No/Don't know

4) Wash hands with soap/without soap After changing diaper? Yes/No/Not applicable

5) Wash hands with soap/without soap after cleaning child feces? Yes/No/Not applicable

6) Wash hands with soap/without soap while feeding child? Yes/No/Not applicable

7) Wash hands with soap/without soap after coming from outside? Yes/No/Not applicable

ANNEXURE IV – KEY TO MASTER CHART

PERSONAL DETAILS

A – Serial number

B – AGE in years

1= >18 -20

2 = 21-30

3 = 31-40

4 = 41- 50

5 = 51-60

6 = >60

C - GENDER

1 = Male

2 = Female

D - EDUCATION

1= Illiterate

2=Primary/Secondary school (completed 7th std)

3=High school (completed up to 10^{th} std)

4=PUC/Diploma

5=Graduate/Post graduate

E - OCCUPATION

1= Home maker

2=Govt Employee

3=Private Employee

4=Agriculture

5=Labourer

6=Self-Employed

7=Unemployed.

F - ADDRESS

1=Vantamuri

2=Bhutramnatti

3=Honaga

4=Kakati – A

5=Kakati – B

G - TYPE OF FAMILY

1=Nuclear family

2=Three generation family

3=Joint family

4=Broken family

5=Others

H – TOTAL MEMBERS IN THE FAMILY

1=1-2

2=3-5

3=6-9

4=10-14

5=15 -18

I -SOCIO ECONOMIC STATUS

1=SES – Class I

2=SES – Class II

3=SES – Class III

4=SES – Class IV

5=SES – Class V

J -PRIMARY SOURCE

1=Piped water

2=Dug well

3=Delivered water

4=Packaged water

5=Tube well/Borewell

K- SECONDARY SOURCE

1=Piped water

2=Dug well

3=Delivered water

4=Packaged water

5=Tube well/Borewell

L - PIPED WATER

1=Piped into dwelling

2=Piped into compound

3=Piped into neighbourhood

4=Public tap or stand pipe

M - DUG WELL

1=Protected well

2=Unprotected well

N - DELIVERED WATER

1=Tanker-trucker

2=Cart with small Tank or drum

O - PACKAGED WATER

1=Bottled water

2=Cane water

P-TUBE WELL/ BORE WELL

1=Present inside the compound

2=Present outside the compound

Q –DISTANCE TO FETCH WATER

0 = Not - Applicable

1=<10 steps

2=11-20 steps

3=21-40 steps

4=40-80 steps

5= 80-100 steps

6=>100 steps

R -TYPES OF CONTAINERS

1= Clay

2=Plastic

3=Steel

4=Copper

S- TIMES OF WASHING

1= Never

2=Daily

3=Weekly

4=Monthly

T – WHO GOES TO FETCH WATER

1= Adult woman (>18 years)

2=Adult man (>18 years)

3=Girl (<18 years)

4= Boy (<18 years)

U – HOW MANY TRIPS DID THAT PERSON MAKE TO COLLECT WATER

1=Once

2=Twice

3=Thrice

4=Four-time

5= > Four times

V- STORE DRINKING WATER CONTAINER

1=covered container

2=uncovered container

3=mixture of both covered and uncovered container

W -AVAILABILITY OF WATER

1 = Yes

2 = No

X -IF NO, FREQUENCY

1=No, water is available only alternative day

2=No, water is available only once a week or twice a week

3=Water is rarely available once in a month

4=Not applicable

Y -REASON FOR NON-AVAILABILITY

1=Water is not available from source

2=Water is too expensive

3=Source is not accessible

4= Not applicable

Z- HOW MANY DAYS NON-AVAILABILITY OF WATER IN DRY SEASON

100= Not Applicable

1= 1 days

2= 2 days

3= 3 days

4= 4 days

5= 5-6 days

6= ≥7 days

AA-HOW MANY DAYS NON-AVAILABILITY OF WATER IN WET SEASON

100= Not Applicable

1= 1 days

2= 2 days

3= 3 days

4= 4 days

5= 5-6 days

6= ≥7 days

AB-WATER STORAGE TANK

1 =Yes

2 = No

AC-HOW MANY LITERS

1=<100

2=100-500

3=600-1000

4=>1000

5=Not Applicable

AD- HAS THERE BEEN ANY TIME NOT ABLE TO STORE SUFFICIENT WATER

1=Yes

2=No

AE -FREQUENCY

1=Once

2=Twice

3=Thrice

4=Not Applicable

AF- HOUSEHOLD MEMBERS DONE ANYTHING TO THIS WATER TO MAKE IT SAFER

1=Yes

2=No

AG- METHODS OF SAFE DRINKING WATER

1=Boiling

2=Adding bleach/Chlorine

3=Keep under sunlight

4=Use tap filter

5=Electronic RO Purifier or Aqua guard

6=Strain it through cloth

7=Let it stand and settle

8=Candle filter

AH-ACCEPTABILITY

1=Yes, acceptable

2=No, unacceptable taste

3=No, unacceptable colour

4=No, unacceptable smell

5=No, contains materials

6=No, others

AI-KITCHEN WASTE DISPOSAL

1=Backyard composting

2=Animals feeding

3=Undesignated open area

4=Used for farming

5=Communal pit streets

6=Burned or buried

7=Disposed elsewhere

AJ-LIQUID WASTE DISPOSAL

1=Sink /drain connected to sewer

2=Sink/drain connected to septic tank

3=Sink/drain connected to pit

4=Sink/drain connected to soakage pit

5=Sink/drain connected to open drain or open ground

AK-TOILET INSIDE IN YOUR HOME

1=Yes

2=No

AL-OPEN AIR DEFECATION

1=Yes

2=No

AM-CONSTRUCTION BUILD BY

1=Self

2=Swachh Bharat Mission

3=NA

AN-REASON FOR NOT HAVING TOILET

1=Govt not built

2=No enough space

3=Don’t know

4=NA

AO-KIND OF TOILET

1=Western toilet

2=Indian toilet

3=Both

4=NA

AP-ABLE TO ACCESS AND USE THE TOILET AT ALL TIMES

1=Yes

2=No

3=Don’t Know

4=Not Applicable

AQ- MAIN REASON THAT HOUSEHOLD MEMBERS WERE UNABLE TO USE THE TOILET

1=Too many people using latrines

2=Latrine is too far away

3=Latrine is full

4=Latrine is not clean

5=No separation between men and women

6=Bad smell/ Many flies

7=Insufficient water

8=Don’t know

9=NA

10=Route to latrine is not safe

AR-CHILDREN IN HOME

1=Yes

2=No

AS-METHOD OF CHILD EXCRETA

1=Child used toilet/latrine

2=Stool/faeces is rinsed into latrine

3=Put/rinsed into drain/ditch

4=Thrown into dustbin (solid waste)

5=Buried

6=Left in the open

7=Not Applicable

AT-SHARED SANITATION

1=Yes

2=No

AU- NO OF HOUSEHOLD SHARING THE SANITATION

1=1

2=2

AV-HOUSEHOLD HAS PIT LATRINE/ SEPTIC TANK

1=Yes

2=No

AW-PIT LATRINE DISCHARGE TO

1=To a leach field, soak pit

2=To a sewer

3=To an open drain

4=To open ground or water course

5=Others

6=Don’t know

7=Not Applicable

AX-LEAK OR OVERFLOW WASTES

1=No, never

2=Yes, sometimes

3=Yes, frequently

4=Don’t know

5=NA

AY-YEARS SEPTIC TANK BUILD

1=1-5 Years

2=6-10 Years

3=>10 Years

4=Don’t Know

5=Not Applicable

AZ-YEARS OF EMPTYING SEPTIC TANK

1=1-2 Years

2=3-5 Years

3=6-10 Years

4=>10 Years

5=Don’t Know

6=Not Applicable

BA-WHO EMPTIES THE SEPTIC TANK

1=Removed by service provider

2=Emptied by household

3=Don’t Know

4=Not Applicable

BB-WHERE HOUSEHOLD DISPOSE

1=Buried in a covered pit

2=To uncovered pit, open ground or elsewhere

3=Don't know

4=Not Applicable

BC-PRESENCE OF DOMESTIC ANIMAL

1=Yes

2=No

BD-TYPE OF DOMESTIC ANIMAL

1=Cow

2=Buffalo

3=Dog

4=Cat

5=Sheep

6=Hen

7=Not Applicable

BE-GOBER GAS PLANT INSTALLED

1=Yes

2=No

BF-USED FOR

1=Composting of Kitchen waste

2=Vermicomposting

3=Kitchen waste fed to Animals

BG-HAND WASHING FACILITY

1=Yes

2=No

BH-SOAP OR DETERGENT FOR HAND WASH

1=Yes

2=No

BI-WASHING HANDS WITH SOAP BEFORE COOKING

1=Yes

2=No

BJ-WASHING HANDS BEFORE CONSUMING FOOD

1=Yes

2=No

BK-WASHING HANDS AFTER USING TOILET

1=Yes

2=No

BL-WASHING HANDS AFTER CHANGING CHILD DIAPER WITH SOAP

1=Yes

2=No

3=Not Applicable

BM-WASHING HANDS AFTER CLEANING CHILD FECES WITH SOAP

1=Yes

2=No

3=Not Applicable

BN-WASHING HANDS WITH SOAP WHILE FEEDING CHILD

1=Yes

2=No

3=Not Applicable

B0-WASHING HANDS AFTER COMING FROM OUTSIDE

1=Yes

2=No

ANNEXURE V – MASTER CHART

SL.NO	AGE	GENDER	EDUCATIONAL QUALIFICATION	OCCUPATION	ADRESS	TYPE OF FAMILY	TOTAL MEMBERS IN THE HOUSEHOLD	SES	PRIMARY SOURCE	SECONDARY SOURCE	PIPED WATER	DUG WELL WATER	DELIVERED WATER	PACKAGED WATER	TUBE WELL/BORE WELL	DISTANCE TO FETCH WATER	TYPE OF CONTAINER	TIMES OF WASHING	GOES TO FETCH WATER	HOW MANY TRIPS	STORING CONTAINER	AVAILABILITY OF WATER	IF NO, FREQUENCY	REASON FOR NON AVAILABILITY	HOW MANY DAYS DRY SEASON	WET SEASON	LARGE STORAGE TANK	HOW MANY LITRES	NOT ABLE TO STORE WATER	IF YES, MENTION FREQUENCY	MAKING WATER TO SAFE	METHODS OF SAFE	ACCEPTABILITY OF WATER	KITCHEN WASTE DISPOSE
1	1	2	2	1	1	1	3	4	2	2	0	2	0	0	0	4	2	2	1	5	1	1	4	4	100	100	1	2	2	4	2	9	1	3
2	5	1	2	5	1	2	1	2	3	3	0	0	1	0	0	1	4	2	2	2	1	2	1	3	2	2	1	1	2	4	2	9	1	1
3	1	2	2	1	1	1	3	4	2	2	0	2	0	0	0	4	2	2	1	5	1	1	4	3	100	100	2	5	1	2	2	9	1	2
4	6	2	3	7	1	1	2	3	5	5	0	0	0	0	1	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	2	9	1	1
5	1	2	2	1	1	2	3	4	3	3	0	0	1	0	0	1	3	2	1	3	1	1	4	4	100	100	1	1	2	4	1	6	1	1
6	1	2	1	1	1	2	2	3	3	3	0	0	1	0	0	1	3	2	1	3	1	1	4	4	100	100	1	2	2	4	2	9	1	1
7	2	2	2	1	1	2	3	4	3	3	0	0	1	0	0	1	3	2	1	1	1	1	4	4	100	100	1	2	2	4	2	9	1	1
8	5	2	2	5	1	1	3	4	3	3	0	0	1	0	0	1	3	2	1	2	1	1	4	4	100	100	1	1	2	4	1	6	1	1
9	5	2	2	1	3	2	2	3	3	3	0	0	1	0	0	1	2	2	2	1	1	2	1	1	2	2	1	1	2	4	1	6	1	1
10	2	2	3	1	3	2	2	4	2	2	0	1	0	0	0	2	3	2	1	3	2	2	1	1	6	6	1	2	2	4	2	9	1	1
11	1	2	3	1	3	2	2	4	2	2	0	1	0	0	0	2	3	2	1	2	2	2	1	1	4	4	2	5	2	4	1	1	1	1
12	3	2	5	1	3	1	3	4	1	5	2	0	0	0	1	0	3	2	0	0	1	1	4	4	100	100	1	2	2	4	1	6	1	1
13	2	1	4	2	3	1	2	3	1	5	2	0	0	0	2	0	3	2	0	0	1	1	4	4	100	100	1	2	2	4	2	9	1	1
14	1	2	1	1	1	1	3	4	1	5	2	0	0	0	2	0	2	2	0	0	1	1	4	4	100	100	2	5	2	4	1	6	1	2
15	3	2	3	1	1	1	2	4	1	5	2	0	0	0	2	0	3	2	0	0	1	1	4	4	100	100	1	1	2	4	1	6	1	1
16	1	1	4	3	1	2	1	3	2	3	0	2	1	0	0	1	3	2	2	2	1	1	4	4	100	100	2	5	1	2	2	9	1	1
17	2	1	3	3	1	2	2	4	3	3	0	0	1	0	0	1	3	2	1	2	1	2	1	1	2	2	2	5	1	2	1	1	1	1
18	1	2	1	1	1	2	3	4	3	3	0	0	1	0	0	1	3	2	2	2	1	2	1	1	2	2	2	5	1	2	2	9	1	1
19	5	1	4	4	1	2	1	3	3	3	0	0	1	0	0	1	2	2	1	2	1	1	4	4	100	100	1	2	2	4	2	9	1	1
20	1	2	2	1	1	2	2	4	3	3	0	0	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	1	2	2	9	1	1
21	3	2	1	1	1	2	3	4	3	2	0	1	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	1	2	2	9	1	1
22	5	2	1	1	1	2	1	5	3	3	0	0	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	3	1	2	2	9	1	1
23	1	2	3	1	1	2	2	4	5	3	0	0	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	1	3	2	9	1	1
24	6	1	3	5	1	2	2	4	1	2	2	1	0	0	0	0	2	3	0	0	1	2	1	3	6	6	1	1	1	1	2	9	1	1
25	4	2	2	1	1	2	2	4	5	5	0	0	0	0	2	3	2	2	1	4	1	2	1	3	6	6	1	2	1	1	2	9	1	1
26	6	2	3	1	1	2	1	2	5	5	0	0	0	0	2	3	2	3	1	4	1	2	1	3	6	6	1	1	2	4	2	9	1	1
27	3	2	2	3	1	2	2	4	5	3	0	0	1	0	2	3	2	3	1	4	1	2	1	3	5	5	1	3	1	1	2	9	1	1
28	6	1	3	1	1	2	2	4	5	5	0	0	0	0	2	3	2	2	1	4	1	2	1	3	5	5	1	1	1	1	2	9	1	1
29	1	2	2	1	1	1	3	4	2	2	0	2	0	0	0	6	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2
30	6	2	3	7	1	1	2	3	5	5	0	0	0	0	1	5	3	2	2	2	1	1	4	4	100	100	1	1	2	4	1	6	1	1
31	1	2	4	1	1	2	3	4	5	5	0	0	0	0	2	5	3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1
32	1	2	2	1	1	2	2	3	5	5	0	0	0	0	2	4	3	2	1	3	1	1	4	4	100	100	1	2	2	4	2	9	1	1
33	2	2	2	1	1	2	3	4	5	3	0	0	1	0	2	5	3	2	1	1	1	1	4	4	100	100	1	2	2	4	2	9	1	1
34	5	2	2	5	1	1	3	4	3	3	0	0	1	0	0	1	3	2	1	2	1	2	1	3	5	5	1	1	2	4	2	9	1	1
35	5	2	1	1	1	2	2	3	3	3	0	0	1	0	0	1	2	2	2	1	1	2	1	3	5	5	1	1	2	4	2	9	1	1
36	2	2	3	1	1	2	2	3	2	2	0	1	0	0	0	5	3	2	1	3	2	2	1	1	3	3	2	5	1	2	2	9	1	1
37	1	2	3	1	1	2	2	3	2	2	0	1	0	0	0	5	3	2	1	2	2	2	1	1	3	3	2	5	1	2	2	9	1	1
38	3	2	5	1	1	1	3	4	1	5	2	0	0	0	1	0	3	2	0	0	1	1	4	4	100	100	1	2	2	4	2	9	1	1
39	2	1	2	2	2	1	2	4	1	5	2	0	0	0	2	0	3	2	0	0	1	1	4	4	100	100	1	2	1	1	2	9	1	1
40	1	2	2	1	2	1	3	4	1	2	1	2	0	0	2	2	2	2	1	5	1	1	4	4	100	100	2	5	2	4	2	9	1	2

SL.NO	LIQUID WASTE DISPOSE	TOILET IN HOME	OPEN AIR DEFECATION	CONSTRUCTION BUILD BY	REASON FOR NOT HAVING TOILET	KIND OF TOILET	ABLE TO ACCESS ALL TIME	MAIN REASON NOT ABLE TO USE	CHILDREN IN HOME	USING INDEPENDENTLY	SHARED SANITATION	NO. OF HOUSEHOLD SHARING	PIT LATRINE/ SEPTIC TANK	DISCHARGE TO	LEAK OR OVERFLOW	YEARS BUILT	YEARS OF EMPTYING SEPTIC TANK	WHO EMPTIES	WHERE HOUSEHOLD DISPOSE	DOMESTIC ANIMAL	TYPE OF DOMESTIC ANIMAL	GOBAR GAS INSTALLED	USED FOR	HAND WASHING FACILITY	SOAP OR DETERGENT FOR HAND WASH	WASHING HANDS AFTER WASHING VESSELS	WASHING HANDS CONSUMING FOOD	WASHING HANDS TOILET	WASHING HANDS CHANGING DIAPER WITH SOAP	WASHING HANDS AFTER CLEANING FECES WITH SOAP	WASHING HANDS WHILE FEEDING CHILD WITH SOAP	WASHING HANDS AFTER COMING FROM OUTSIDE
1	1	1	2	1	4	2	1	9	2	7	2	2	1	2	1	2	2	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
2	1	1	2	2	4	3	1	9	1	1	2	2	1	6	4	4	3	2	3	1	2,4,6	2	4	2	1	2	2	2	2	2	2	2
3	1	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
4	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	3	3	3	1
5	1	1	2	2	4	2	2	10	1	3	2	2	2	7	5	5	6	4	4	1	3,4,6	2	4	2	1	1	1	1	1	1	1	1
6	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	4,5,6	2	4	2	1	1	1	1	3	3	3	1
7	1	1	2	2	4	2	2	2	1	3	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	1	1	1	1
8	1	2	1	3	1	4	4	9	1	1	2	2	3	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	2	1	1	1	1
9	1	1	2	2	4	2	2	2	2	7	2	2	1	2	1	2	2	3	4	2	7	2	4	2	1	2	2	2	3	3	3	2
10	1	1	2	1	4	2	1	9	1	2	2	2	1	6	1	2	1	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
11	1	1	2	2	4	2	2	2	1	2	2	2	2	7	5	5	6	4	4	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
12	3	1	2	1	4	2	1	9	1	2	2	2	1	3	1	1	2	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
13	1	1	2	2	4	3	2	2	1	6	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
14	1	1	2	1	4	2	1	9	1	1	2	2	1	3	4	4	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
15	1	1	2	2	4	2	2	2	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
16	1	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	1	1	1	1
17	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	3.4.5	2	4	2	1	1	1	1	3	3	3	1
18	1	1	2	2	4	2	2	2	2	7	2	2	2	7	5	5	6	4	4	1	2,3,5	2	4	2	1	1	1	1	3	3	3	1
19	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	3	3	3	2
20	2	2	1	3	1	4	4	9	1	1	2	2	3	7	5	5	6	4	4	1	3,4,5	2	4	2	1	1	1	1	1	1	1	1
21	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,4,5,6	2	4	2	1	1	1	1	3	3	3	1
22	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	1,3,5	2	4	2	1	1	1	1	3	3	3	1
23	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
24	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	3	3	3	1
25	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,6	2	4	2	1	1	1	1	3	3	3	1
26	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	3	3	3	2
27	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,5,6	2	4	2	1	1	1	1	3	3	3	1
28	2	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	1	2,3,5	2	4	2	1	2	2	2	1	2	2	1
29	1	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
30	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	2	2	2	3	3	3	2
31	1	1	2	1	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	1	3,4,6	2	4	2	1	1	1	1	1	1	1	1
32	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	4,5,6	2	4	2	1	1	1	1	3	3	3	1
33	1	1	2	1	4	2	1	9	1	6	2	2	1	2	1	2	3	2	3	1	1,2,3	2	4	2	1	1	1	1	1	1	1	1
34	1	2	1	3	1	4	4	9	1	6	2	2	3	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	1	2	1	1
35	1	1	2	1	4	2	1	9	2	7	2	2	1	2	1	2	2	3	4	2	7	2	4	2	1	2	2	2	3	3	3	2
36	1	1	2	2	4	2	2	2	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
37	1	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
38	3	1	2	2	4	2	2	2	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
39	1	1	2	1	4	2	1	9	1	1	2	2	1	6	4	4	1	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
40	1	1	2	1	4	2	1	9	1	2	2	2	1	3	4	4	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1

41	3	2	2	1	2	2	3	5	1	5	1	0	0	0	2	3	2	2	1	1	3	1	4	4	100	100	1	1	1	1	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,4,5	2	4	2	1	1	1	1	3	3	3	1
42	5	2	2	1	2	2	1	5	1	1	2	0	0	0	0	0	2	2	0	0	3	1	4	4	100	100	1	1	1	1	1	1	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	1,3,5	2	4	2	1	1	1	1	3	3	3	1
43	1	2	3	1	2	2	2	4	1	1	3	0	0	0	0	3	2	2	1	1	1	1	4	4	100	100	1	1	1	1	2	9	1	1	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	3	3	3	1
44	6	1	3	5	2	2	2	3	1	1	2	0	0	0	0	0	2	3	0	0	3	2	1	3	5	5	1	1	1	1	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	1	6	4	4	3	3	4	1	3,4,6	2	4	2	1	1	1	1	3	3	3	1
45	4	2	2	1	2	2	2	4	5	5	0	0	0	0	2	2	2	2	1	4	3	2	1	3	5	5	1	2	1	2	2	9	1	1	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,5,6	2	4	2	1	1	1	1	3	3	3	1
46	6	2	3	1	2	2	1	5	5	5	0	0	0	0	2	2	2	3	1	4	3	2	1	3	5	5	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	1	3	1	2	2	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
47	3	2	2	3	2	2	2	5	5	2	0	1	0	0	3	2	2	3	1	4	3	2	1	3	5	5	1	2	1	2	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
48	6	1	3	1	2	2	2	4	5	5	0	0	0	0	2	2	2	2	1	4	3	2	1	3	5	5	1	1	1	2	2	9	1	1	2	1	2	2	4	2	2	2	1	1	2	2	1	6	2	3	1	1	1	1	3,5,6	2	4	2	1	1	1	2	1	2	1	1
49	1	2	2	1	2	1	3	4	2	5	0	2	0	0	3	6	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
50	6	2	3	7	2	1	2	4	5	5	0	0	0	0	1	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,5,7	2	4	2	1	1	1	1	3	3	3	1
51	1	2	3	1	1	2	2	4	5	1	2	0	1	0	0	0	2	2	0	0	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
52	2	2	4	1	1	2	3	4	1	1	2	0	0	0	0	0	1	2	0	0	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
53	2	1	4	3	1	2	3	4	2	2	0	1	0	0	0	6	2	2	1	1	2	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	2	2	3	4	1	1,4	2	4	2	1	1	1	1	1	1	1	1
54	2	2	4	1	1	2	2	2	2	1	2	1	0	0	0	0	1	2	0	0	3	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
55	4	2	3	1	1	2	3	4	2	2	0	1	0	0	0	6	2	2	2	4	1	2	1	3	1	1	1	1	1	2	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	1	1	1	1
56	1	1	3	5	1	2	3	4	2	2	0	1	0	0	0	6	1	2	1	4	1	1	4	4	100	100	2	5	1	2	1	1	1	1	5	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
57	1	2	3	1	1	2	3	4	2	2	0	1	0	2	0	6	2	3	1	3	3	1	4	4	100	100	1	1	1	1	1	6	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	2	3	3	1	1	1	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
58	6	2	2	1	1	2	2	3	1	1	2	0	0	0	0	0	1	3	0	0	1	2	1	3	6	6	1	3	2	4	1	6	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
59	6	1	5	1	1	2	3	4	1	3	3	0	1	0	0	5	1	3	2	2	1	1	4	4	100	100	1	1	1	2	2	9	1	1	5	1	2	1	4	2	1	9	1	1	2	2	1	6	2	2	1	1	3	1	1,3,5	2	4	2	1	1	1	1	1	1	1	1
60	2	1	1	5	1	2	3	4	1	1	2	0	0	0	0	0	1	2	0	0	1	1	4	4	100	100	1	2	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
61	3	1	2	6	1	2	2	4	2	2	0	2	0	0	0	6	3	2	2	1	1	2	1	3	6	6	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	3	3	3	1
62	2	2	2	1	1	2	2	4	2	2	0	2	0	0	0	4	3	2	2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
63	2	2	2	1	1	2	2	4	2	2	0	2	0	0	0	5	2	2	2	4	2	1	4	4	100	100	2	5	2	4	2	9	1	1, 3,7	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
64	3	1	2	3	1	2	3	5	2	2	0	2	0	0	0	5	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	1	2	2	4	2	1	9	2	7	2	2	1	3	1	4	2	3	3	2	7	2	4	2	1	1	1	1	3	3	3	1
65	3	2	1	1	1	2	2	4	3	3	0	0	1	0	0	1	2	2	2	1	1	2	1	1	8	8	2	5	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	4,5	2	4	2	1	1	1	1	3	3	3	1
66	6	2	4	1	1	2	2	4	2	2	0	2	0	0	0	5	2	2	2	3	2	1	4	4	100	100	1	1	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	2	1	1	3	3	3	1
67	3	2	3	1	1	2	3	5	2	2	0	2	0	0	0	5	3	2	2	4	2	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	1	2	1	4	2	1	9	2	7	2	2	1	4	1	4	2	1	3	2	7	2	4	2	1	1	1	1	3	3	3	1
68	3	2	4	1	1	2	3	4	3	3	0	0	1	0	0	1	2	2	2	4	2	2	1	1	12	12	2	5	2	4	2	9	1	1,3	5	1	2	2	4	2	2	10	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
69	3	2	2	1	1	2	2	5	3	3	0	0	1	0	0	1	2	2	2	5	1	2	1	1	12	12	2	5	2	4	2	9	1	2	5	1	2	2	4	2	2	10	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
70	4	2	3	2	1	3	3	4	2	2	0	2	0	0	0	5	3	2	2	4	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	3	2	2	1	1	1	1	5	1	3	2	7	2	4	2	1	1	1	1	1	1	1	1
71	2	1	5	3	1	2	2	3	1	1	1	0	0	0	0	1	3	2	2	2	1	1	4	4	100	100	1	3	2	4	1	5	1	5	3	1	2	1	4	2	1	9	2	7	2	2	1	1	1	1	2	2	1	2	7	2	4	2	1	1	1	1	3	3	3	1
72	3	2	4	1	1	2	2	3	5	5	0	0	0	0	2	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	1	4	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	3	5	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
73	2	2	3	1	1	1	4	5	3	3	0	0	1	0	0	1	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	1	1	3	5	1	2	1	4	2	1	9	1	2	2	2	1	3	1	4	4	3	4	1	5,6	2	4	1	1	1	1	1	1	1	1	1
74	3	2	4	1	1	1	4	5	3	3	0	0	1	0	0	1	3	2	2	1	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	2	2	2	1	3	1	4	4	3	4	1	5,6	2	4	2	1	1	1	2	1	1	1	1
75	2	1	3	3	1	2	2	4	2	2	0	2	0	0	0	5	3	2	2	5	2	1	4	4	100	100	2	5	2	4	1	4	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
76	1	2	5	3	1	2	2	3	5	5	0	0	0	0	1	1	2	2	2	1	1	1	4	4	100	100	1	3	2	4	1	5	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	1	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
77	2	2	2	1	1	2	1	4	5	5	0	0	0	0	2	2	3	2	1	3	1	1	4	4	100	100	2	5	2	4	1	1	1	1	4	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
78	2	2	4	1	1	2	2	3	1	1	1	0	0	0	0	1	3	2	1	1	1	2	1	1	12	12	1	2	2	4	1	4	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	6	1	2	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
79	5	2	3	1	1	2	1	4	1	1	1	0	0	0	0	1	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	5	1	1,5	1	1	2	1	4	2	1	9	2	7	2	2	1	6	1	1	5	1	4	2	7	2	4	1	1	1	1	1	3	3	3	1
80	4	2	2	1	1	2	2	4	1	1	1	0	0	0	0	1	3	2	1	2	1	1	4	4	100	100	2	5	2	4	1	1	1	3	3	1	2	2	4	2	1	9	2	7	2	2	1	6	1	4	5	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
81	5	1	2	7	5	1	3	4	1	1	3	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	4	2	4	1	4	1	3	1	1	2	2	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	1	1	1	2	1
82	6	1	2	7	5	1	4	4	5	5	0	0	0	0	2	5	2	2	2	2	1	1	4	4	100	100	1	1	2	4	1	4	1	3	2	1	2	2	4	2	1	9	1	2	2	2	1	1	1	1	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
83	5	1	3	3	5	2	2	3	5	5	0	0	0	0	1	3	3	2	1	2	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
84	3	2	3	1	5	2	2	2	1	1	1	0	0	0	0	1	2,3	2	1	2	2	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
85	5	2	4	1	5	1	3	4	1	1	3	0	0	0	0	2	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,5	2	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	3	3	3	1
86	6	1	2	7	5	1	3	4	1	5	1	0	0	0	2	2	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
87	4	1	2	1	5	2	2	3	2	2	0	2	0	0	0	3	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	2	2	1	2	1	4	2	1	9	1	2	2	2	1	2	1	2	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
88	5	2	2	1	5	2	2	3	1	1	1	0	0	0	0	1	3	2	2	2	2	1	4	4	100	100	2	5	2	4	1	5	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
89	4	2	4	1	5	2	2	4	1	5	2	0	0	0	2	0	3	2	0	0	2	1	4	4	100	100	2	5	2	4	2	9	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
90	6	2	4	1	5	2	2	3	5	5	0	0	0	0	2	3	3	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	3	2	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
91	6	2	2	1	1	3	3	4	1	1	2	0	0	0	0	0	2	2	0	0	1	1	4	4	100	100	1	3	2	4	2	9	1	3	1	1	2	2	4	2	2	10	2	7	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	3	3	3	1
92	5	2	4	1	1	2	2	5	2	2	0	2	0	0	0	5	2	2	1	5	2	1	4	4	100	100	2	5	2	4	2	9	1	3	3	1	2	2	4	2	2	10	1	2	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
93	1	2	2	1	1	1	3	4	2	2	0	2	0	0	0	6	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
94	6	2	3	7	1	1	2	4	5	5	0	0	0	0	1	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,5,7	2	4	2	1	2	2	2	3	3	3	2
95	1	2	3	1	1	2	2	4	5	3	0	0	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
96	2	2	4	1	1	2	3	4	1	1	4	0	0	0	0	3	1	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1

97	2	1	4	3	1	2	3	4	2	2	0	1	0	0	0	6	2	2	1	1	2	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	1	2	3	4	1	1,4	2	4	2	1	1	1	1	1	1	1	1
98	2	2	4	1	1	2	2	2	2	2	0	1	0	0	0	6	1	2	1	3	3	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
99	4	2	3	1	1	2	3	4	2	2	0	1	0	0	0	6	2	2	2	4	1	2	1	3	1	1	1	1	1	2	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	1	1	1	1
100	1	1	3	5	1	2	3	4	2	2	0	1	0	0	0	6	1	2	1	4	1	1	4	4	100	100	2	5	1	2	1	1	1	1	5	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
101	1	2	3	1	4	2	3	4	2	2	0	1	0	2	0	6	2	1	1	3	3	1	4	4	100	100	1	1	1	1	1	6	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	2	3	3	1	1	1	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
102	1	2	2	1	4	2	3	4	5	5	0	0	0	0	2	5	3	2	1	3	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	1	3,4,6	2	4	2	1	1	1	1	1	1	1	1
103	1	2	2	1	4	2	2	3	5	3	0	0	1	0	2	4	3	2	1	3	1	1	4	4	100	100	1	2	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	3	3	3	1
104	2	2	2	1	4	2	3	4	5	3	0	0	1	0	2	5	3	2	1	1	1	1	4	4	100	100	1	2	2	4	2	9	1	1	1	1	2	1	4	2	1	9	1	6	2	2	1	2	1	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
105	5	2	2	5	4	1	3	4	3	5	0	0	1	0	2	1	3	2	1	2	1	2	1	3	5	5	1	1	2	4	2	9	1	1	1	2	1	3	1	4	4	9	1	6	2	2	3	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	1	1	1	1
106	5	2	4	1	4	2	2	5	3	3	0	0	1	0	0	1	2	2	2	1	1	2	1	3	5	5	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	1	2	1	2	2	3	4	2	7	2	4	2	1	1	1	2	3	3	3	1
107	6	1	3	4	4	2	1	3	1	5	2	0	0	0	1	0	3	2	0	0	1	1	4	4	100	100	2	5	2	4	1	4	1	5	3	1	2	1	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	1	1	1	1	1	3	3	3	1
108	5	1	4	5	4	2	2	4	1	1	4	0	0	0	0	2	2	2	1	5	2	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
109	1	2	4	1	4	1	3	4	1	1	3	0	0	0	0	2	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	4	4	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
110	3	2	3	1	4	1	2	4	1	1	2	0	0	0	2	0	3	2	0	0	1	1	4	4	100	100	1	1	2	4	1	6	1	1	1	1	2	2	4	2	2	2	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
111	2	2	3	1	4	2	2	3	1	1	4	0	0	0	0	1	4	2	1	2	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	4	4	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
112	3	1	3	3	4	3	3	3	1	1	4	0	0	0	0	1	3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	1	2	1	4	2	1	9	2	7	2	2	1	4	1	4	2	1	3	2	7	2	4	1	1	1	1	1	3	3	3	1
113	4	1	4	4	4	3	3	2	1	1	1	0	0	0	0	1	3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	4,5	2	1	2	1	4	2	1	9	1	1	2	2	1	2	1	1	1	1	3	2	7	2	4	1	1	1	1	1	1	1	1	1
114	1	2	2	5	4	1	3	3	1	1	4	0	0	0	0	4	2	2	1	2	2	1	4	4	100	100	2	5	2	4	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
115	5	2	4	1	4	2	2	5	2	2	0	2	0	0	0	5	2	2	1	5	2	1	4	4	100	100	2	5	2	4	2	9	1	3	3	1	2	2	4	2	2	10	1	2	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
116	1	2	2	1	4	1	3	4	2	2	0	2	0	0	0	6	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
117	6	2	3	7	4	1	2	4	1	5	2	0	0	0	1	0	3	2	0	0	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,5,7	2	4	2	1	1	2	1	3	3	3	2
118	1	2	3	1	4	2	2	4	5	3	0	0	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
119	2	2	4	1	4	2	3	4	1	1	4	0	0	0	0	3	1	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
120	1	2	3	1	4	2	2	4	1	1	3	0	0	0	0	2	3	2	1	2	2	2	1	1	4	4	2	5	2	4	1	1	1	1	1	1	2	2	4	2	2	2	1	2	2	2	2	7	5	5	6	4	4	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
121	3	2	2	1	4	3	3	5	1	1	3	0	0	0	0	2	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	4	4	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
122	4	2	4	1	4	2	2	4	1	1	1	0	0	0	0	1	3	2	1	2	1	1	4	4	100	100	2	5	2	4	1	1	1	3	3	1	2	2	4	2	1	9	2	7	2	2	1	6	1	4	5	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
123	5	1	2	7	4	1	3	4	1	1	3	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	4	2	4	1	4	1	3	1	1	2	2	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	1	1	1	2	1
124	6	1	2	7	4	1	4	4	1	1	4	0	0	0	0	5	2	2	2	2	1	1	4	4	100	100	1	2	2	4	1	4	1	3	2	1	2	2	4	2	1	9	1	2	2	2	1	1	1	1	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
125	5	1	3	3	4	2	2	3	1	1	2	0	0	0	0	0	3	2	0	0	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	2	2	2	2	2	2	2
126	3	2	3	1	4	2	2	2	1	1	1	0	0	0	0	1	2,3	2	1	2	2	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
127	5	2	2	1	4	1	3	4	1	1	3	0	0	0	0	2	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,5	2	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	3	3	3	1
128	6	1	2	7	4	1	3	4	1	1	2	0	0	0	0	0	2,3	2	0	0	1	1	4	4	100	100	2	5	2	4	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
129	4	1	2	1	4	2	2	3	1	1	3	0	0	0	0	3	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	2	2	1	2	1	4	2	1	9	1	2	2	2	1	2	1	2	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
130	5	2	4	1	4	2	2	4	1	1	1	0	0	0	0	1	3	2	2	2	2	1	4	4	100	100	2	5	2	4	1	5	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
131	4	2	2	1	4	2	2	4	1	1	2	0	0	0	0	0	3	2	0	0	2	1	4	4	100	100	2	5	2	4	2	9	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
132	6	2	4	1	4	2	2	5	1	1	2	0	0	0	0	0	3	2	0	0	2	1	4	4	100	100	2	5	2	4	2	9	1	3	2	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
133	6	2	2	1	4	3	3	4	1	1	2	0	0	0	0	0	2	2	0	0	1	1	4	4	100	100	1	3	2	4	2	9	1	3	1	1	2	2	4	2	2	10	2	7	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	3	3	3	1
134	5	2	4	1	4	2	2	5	1	1	4	0	0	0	0	5	2	2	1	5	2	1	4	4	100	100	2	5	2	4	2	9	1	3	3	1	2	2	4	2	2	10	1	2	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
135	1	2	2	1	4	1	3	4	1	1	4	0	0	0	0	6	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
136	6	2	3	7	4	1	2	4	1	1	2	0	0	0	0	0	3	2	0	0	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	1	1	2	1	1	1	1
137	1	2	3	1	4	2	2	4	1	1	1	0	0	0	0	1	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
138	3	1	3	4	4	2	2	4	1	1	4	0	0	0	0	3	3	2	1	3	1	1	4	4	100	100	1	1	2	4	2	9	1	1	3	1	2	1	4	2	1	9	2	7	2	2	1	2	1	3	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
139	3	2	2	1	4	2	3	4	1	1	2	0	0	0	0	0	2	2	0	0	1	1	4	4	100	100	1	1	1	2	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,4,5,6	2	4	2	1	1	1	1	3	3	3	1
140	5	2	2	1	4	2	1	5	1	1	1	0	0	0	0	1	2	2	1	1	1	1	4	4	100	100	1	3	1	2	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	1,3,5	2	4	2	1	1	2	1	3	3	3	2
141	1	2	3	1	4	2	2	4	1	1	4	0	0	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	1	3	2	9	1	1	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
142	6	1	3	5	4	2	2	4	1	1	4	0	0	0	0	3	2	3	1	4	1	2	1	3	6	6	1	1	1	1	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	2	1	3	3	3	1
143	4	2	4	1	4	2	2	4	1	1	3	0	0	0	0	3	2	2	1	4	1	2	1	3	6	6	1	2	1	1	2	9	1	1	1	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,6	2	4	2	1	1	1	1	3	3	3	1
144	4	2	3	3	1	3	3	4	1	1	3	0	0	0	0	2	3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	2	2	2	1	2	1	3	2	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
145	6	2	3	7	1	1	2	3	1	1	4	0	0	0	0	5	3	2	2	2	1	1	4	4	100	100	1	1	2	4	1	6	1	1	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	3	3	3	1
146	1	2	2	1	1	2	3	4	1	1	4	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	1	3,4,6	2	4	2	1	1	1	1	1	1	1	1
147	1	2	4	1	1	2	2	3	1	1	3	0	0	0	0	4	3	2	1	3	1	1	4	4	100	100	1	2	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	4,5,6	2	4	2	1	1	1	1	3	3	3	1
148	2	2	2	1	1	2	3	4	1	1	4	0	0	0	0	5	3	2	1	1	1	1	4	4	100	100	1	2	2	4	2	9	1	1	1	1	2	1	4	2	1	9	1	6	2	2	1	2	1	2	3	2	3	1	1,2,3	2	4	2	1	1	1	1	1	1	1	1
149	5	2	2	5	1	1	3	4	1	1	2	0	0	0	0	0	3	2	0	0	1	2	1	3	5	5	1	1	2	4	2	9	1	1	1	2	1	3	1	4	4	9	1	6	2	2	3	7	5	5	6	4	4	1	3,4	2	4	2	1	2	2	2	2	2	2	2
150	6	1	2	7	1	1	4	4	1	1	4	0	0	0	0	3	5	2	2	2	2	1	1	4	100	100	1	1	5	2	4	1	1	1	3	2	1	3	2	4	4	9	1	1	2	2	3	7	5	5	6	4	4	1	2,3,5	7	4	1	1	1	2	1	1	1	1	1
151	6	2	2	4	1	3	3	5	1	1	3	0	0	0	0	2	2	3	1	3	1	2	2	1	2	100	2	5	2	4	2	9	1	3	5	1	2	1	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	2	1	2	1	1
152	1	1	3	5	1	2	3	4	2	2	0	1	0	0	0	6	1	2	1	4	1	1	4	4	100	100	2	5	1	2	1	1	1	1	5	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1

153	1	2	3	1	1	2	3	4	2	2	0	1	0	2	0	6	2	3	1	3	3	1	4	4	100	100	1	1	1	1	1	6	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	2	3	3	1	1	1	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
154	1	2	2	1	1	2	3	4	5	1	2	0	0	0	2	0	3	2	0	0	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	1	3,4,6	2	4	2	1	1	1	1	1	1	1	1
155	1	2	2	1	1	2	2	3	5	5	0	0	0	0	2	4	3	2	1	3	1	1	4	4	100	100	1	2	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	3	3	3	1
156	2	2	2	1	4	2	3	4	5	5	0	0	1	0	2	5	3	2	1	1	1	1	4	4	100	100	1	2	2	4	2	9	1	1	1	1	2	1	4	2	1	9	1	6	2	2	1	2	1	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
157	5	2	4	5	4	1	3	4	3	1	1	0	1	0	0	1	3	2	1	2	1	2	1	3	5	5	1	1	2	4	2	9	1	1	1	2	1	3	1	4	4	9	1	6	2	2	3	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	1	1	1	1
158	1	2	3	1	1	2	2	3	2	2	0	1	0	0	0	5	3	2	1	2	2	2	1	1	3	3	2	5	1	2	2	9	1	1	1	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	1	1	1	1
159	3	2	5	1	4	1	3	4	1	1	2	0	0	0	1	0	3	2	0	0	1	1	4	4	100	100	1	2	2	4	2	9	1	1	3	1	2	2	4	2	2	2	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
160	2	1	2	2	4	1	2	4	1	1	2	0	0	0	2	0	3	2	0	0	1	1	4	4	100	100	1	2	1	1	2	9	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	6	4	4	1	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
161	1	2	2	1	4	1	3	4	1	1	2	0	0	0	2	0	2	2	0	0	1	1	4	4	100	100	2	5	2	4	2	9	1	2	1	1	2	1	4	2	1	9	1	2	2	2	1	3	4	4	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
162	3	2	4	1	1	2	3	5	5	2	0	1	0	0	2	3	2	2	1	1	3	1	4	4	100	100	1	1	1	1	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,4,5	2	4	2	1	1	1	1	3	3	3	1
163	5	2	1	1	4	2	1	5	1	1	2	0	0	0	0	0	2	2	0	0	3	1	4	4	100	100	1	1	1	1	1	1	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	1,3,5	2	4	2	1	1	1	1	3	3	3	1
164	1	2	3	1	4	2	2	4	1	1	3	0	0	0	0	3	2	2	1	1	1	1	4	4	100	100	1	1	1	1	2	9	1	1	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	3	3	3	1
165	6	1	3	5	4	2	2	5	1	1	2	0	0	0	0	0	2	3	0	0	3	2	1	3	5	5	1	1	1	1	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	1	6	4	4	3	3	4	1	3,4,6	2	4	2	1	1	1	2	3	3	3	1
166	4	2	2	1	4	2	2	4	5	5	0	0	0	0	2	2	2	2	1	4	3	2	1	3	5	5	1	2	1	2	2	9	1	1	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,5,6	2	4	2	1	1	1	1	3	3	3	1
167	6	2	3	1	4	2	1	5	4	5	0	0	0	2	2	2	2	1	1	4	3	2	1	3	5	5	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	1	3	1	2	2	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
168	3	2	1	3	4	2	2	5	4	5	0	0	0	2	3	2	2	3	1	4	3	2	1	3	5	5	1	2	1	2	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
169	6	1	3	1	4	2	2	4	5	5	0	0	0	0	2	2	2	2	1	4	3	2	1	3	5	5	1	1	1	2	2	9	1	1	2	1	2	2	4	2	2	2	1	1	2	2	1	6	2	3	1	1	1	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
170	1	2	2	1	4	1	3	4	2	2	0	2	0	0	0	6	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
171	6	2	3	7	4	1	2	4	5	5	0	0	0	0	1	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,5,7	2	4	2	1	1	1	1	3	3	3	1
172	1	2	3	1	4	2	2	4	5	5	0	0	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
173	2	2	4	1	4	2	3	4	1	1	4	0	0	0	0	4	1	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
174	2	1	4	3	4	2	3	4	2	2	0	1	0	0	0	6	2	2	1	1	2	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	2	2	3	4	1	1,4	2	4	2	1	1	1	1	1	1	1	1
175	2	2	4	1	4	2	2	2	2	2	0	1	0	0	0	6	1	2	1	3	3	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
176	4	2	3	1	4	2	3	4	2	2	0	1	0	0	0	6	2	2	2	4	1	2	1	3	1	1	1	1	1	2	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	1	1	1	1
177	1	1	3	5	4	2	3	4	2	2	0	1	0	0	0	6	1	2	1	4	1	1	4	4	100	100	2	5	1	2	1	1	1	1	5	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
178	1	2	3	1	4	2	3	4	2	2	0	1	0	2	0	6	2	1	1	3	3	1	4	4	100	100	1	1	1	1	1	6	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	2	3	3	1	1	1	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
179	6	2	2	1	4	2	2	3	1	1	2	0	0	0	0	0	1	1	0	0	1	2	1	3	6	6	1	3	2	4	1	6	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
180	6	1	5	1	4	2	3	4	3	3	0	0	1	0	0	5	1	1	2	2	1	1	4	4	100	100	1	1	1	2	2	9	1	1	5	1	2	1	4	2	1	9	1	1	2	2	1	6	2	2	1	1	3	1	1,3,5	2	4	2	1	1	1	1	1	1	1	1
181	2	1	2	5	4	2	3	4	1	1	2	0	0	0	0	0	1	2	0	0	1	1	4	4	100	100	1	2	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
182	3	1	2	6	4	2	2	4	2	2	0	2	0	0	0	6	3	2	2	1	1	2	1	3	6	6	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	3	3	3	1
183	2	2	2	1	4	2	2	4	2	2	0	2	0	0	0	4	3	2	2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
184	2	2	2	1	4	2	2	4	2	2	0	2	0	0	0	5	2	2	2	4	2	1	4	4	100	100	2	5	2	4	2	9	1	1, 3,7	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
185	3	1	1	3	4	2	3	5	2	2	0	2	0	0	0	5	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	1	2	2	4	2	1	9	2	7	2	2	1	3	1	4	2	3	3	2	7	2	4	2	1	1	1	2	3	3	3	1
186	3	2	2	1	4	2	2	5	3	3	0	0	1	0	0	1	2	2	2	5	1	2	1	1	12	12	2	5	2	4	2	9	1	2	5	1	2	2	4	2	2	10	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
187	4	2	3	2	4	3	3	4	2	2	0	2	0	0	0	5	3	2	2	4	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	3	2	2	1	6	1	1	5	1	3	2	7	2	4	2	1	1	1	1	1	1	1	1
188	2	1	5	3	5	2	2	3	1	1	1	0	0	0	0	1	3	2	2	2	1	1	4	4	100	100	1	3	2	4	1	5	1	5	3	1	2	1	4	2	1	9	2	7	2	2	1	1	1	1	2	2	1	2	7	2	4	2	1	1	1	1	3	3	3	1
189	3	2	2	1	5	2	2	3	5	5	0	0	0	0	2	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	1	4	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	3	5	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
190	2	2	3	1	5	1	4	5	3	3	0	0	1	0	0	1	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	1	1	3	5	1	2	1	4	2	1	9	1	2	2	2	1	3	1	4	4	3	4	1	5,6	2	4	1	1	1	1	1	1	1	1	1
191	3	2	2	1	5	1	4	5	3	3	0	0	1	0	0	1	3	2	2	1	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	2	2	2	1	3	1	4	4	3	4	1	5,6	2	4	2	1	1	1	2	1	1	1	1
192	2	1	3	3	5	2	2	4	2	2	0	2	0	0	0	5	3	2	2	5	2	1	4	4	100	100	2	5	2	4	1	4	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
193	1	2	5	3	5	2	2	3	5	5	0	0	0	0	1	1	2	2	2	1	1	1	4	4	100	100	1	3	2	4	1	5	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	1	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
194	2	2	2	1	5	2	1	4	5	5	0	0	0	0	2	2	3	2	1	3	1	1	4	4	100	100	2	5	2	4	1	1	1	1	4	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
195	2	2	4	1	5	2	2	3	1	1	1	0	0	0	0	1	3	2	1	1	1	2	1	1	12	12	1	2	2	4	1	4	1	2	1	1	2	1	4	2	1	9	1	1	2	1	1	6	1	2	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
196	5	2	3	1	5	2	1	4	1	3	1	0	3	0	0	1	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	5	1	1,5	1	1	2	1	4	2	1	9	2	7	2	2	1	6	1	2	5	1	4	2	7	2	4	1	1	1	1	1	3	3	3	1
197	4	2	2	1	5	2	2	4	1	1	1	0	0	0	0	1	3	2	1	2	1	1	4	4	100	100	2	5	2	4	1	1	1	3	3	1	2	2	4	2	1	9	2	7	2	2	1	6	1	4	5	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
198	5	1	1	7	5	1	3	4	1	1	3	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	4	2	4	1	4	1	3	1	1	2	2	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	1	1	2	1	1
199	6	1	1	7	5	1	4	4	5	5	0	0	0	0	2	5	2	2	2	2	1	1	4	4	100	100	1	3	2	4	1	4	1	3	2	1	2	2	4	2	1	9	1	2	2	2	1	1	1	1	5	1	4	2	7	2	4	2	1	2	2	2	2	2	2	2
200	5	1	3	3	5	2	3	4	5	5	0	0	0	0	1	3	3	2	1	2	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
201	3	2	3	1	5	2	2	2	1	1	1	0	0	0	0	1	2,3	2	1	2	2	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
202	5	2	2	1	5	1	3	4	1	1	3	0	0	0	0	2	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,5	2	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	3	3	3	1
203	6	1	1	7	5	1	3	4	5	5	0	0	0	0	2	2	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
204	4	1	2	1	5	2	2	3	2	2	0	2	0	0	0	3	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	2	2	1	2	1	4	2	1	9	1	2	2	2	1	2	1	2	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
205	5	2	2	1	5	2	2	4	1	1	4	0	0	0	0	5	2	2	1	4	3	1	4	4	100	100	1	2	2	4	2	9	1	1	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,5,6	2	4	2	1	2	2	2	3	3	3	2
206	3	2	1	1	5	2	2	4	1	1	4	0	0	0	0	5	2	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,4,5,6	2	4	2	1	1	1	1	3	3	3	1
207	1	2	3	1	5	2	2	4	1	1	4	0	0	0	0	5	3	2	1	2	2	2	1	1	4	4	2	5	2	4	1	1	1	1	1	1	2	2	4	2	2	10	1	2	2	2	2	7	5	5	6	4	4	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
208	3	2	4	1	5	3	3	5	1	1	4	0	0	0	0	5	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	4	4	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1

209	4	2	2	1	5	2	2	4	1	1	4	0	0	0	0	5	3	2	1	2	1	1	4	4	100	100	2	5	2	4	1	1	1	3	3	1	2	2	4	2	1	9	2	7	2	2	1	6	1	4	5	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
210	5	1	2	7	5	1	3	4	1	1	4	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	4	2	4	1	4	1	3	1	1	2	2	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
211	6	1	4	7	5	1	4	4	1	1	4	0	0	0	0	5	2	2	2	2	1	1	4	4	100	100	1	2	2	4	1	4	1	3	2	1	2	2	4	2	1	9	1	2	2	2	1	1	1	1	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
212	5	1	3	3	5	2	2	3	1	1	4	0	0	0	0	5	3	2	1	2	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	2	2	2	2	2	2	2
213	3	2	3	1	5	2	2	2	1	1	4	0	0	0	0	5	2,3	2	1	2	2	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
214	5	2	2	1	5	1	3	4	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,5	2	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	3	3	3	1
215	6	1	2	7	5	1	3	4	1	1	4	0	0	0	0	5	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	2	3	3	3	1
216	4	1	2	1	5	2	1	3	1	1	4	0	0	0	0	5	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	2	2	1	2	1	4	2	1	9	1	2	2	2	1	2	1	2	1	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
217	5	2	2	1	5	2	2	3	1	1	4	0	0	0	0	5	3	2	2	2	2	1	4	4	100	100	2	5	2	4	1	5	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
218	4	2	4	1	5	2	2	4	1	1	4	0	0	0	0	5	3	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
219	6	2	4	1	5	2	2	4	1	1	4	0	0	0	0	5	3	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	3	2	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
220	6	2	2	1	5	3	3	4	1	1	4	0	0	0	0	5	2	2	1	2	1	1	4	4	100	100	1	3	2	4	2	9	1	3	1	1	2	2	4	2	2	10	2	7	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	3	3	3	1
221	5	2	4	1	5	2	2	5	1	1	4	0	0	0	0	5	2	2	1	5	2	1	4	4	100	100	2	5	2	4	2	9	1	3	3	1	2	2	4	2	2	10	1	2	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	2	1	1	1	1
222	1	2	2	1	5	1	3	4	1	1	4	0	0	0	0	5	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
223	6	2	3	7	5	1	2	4	1	1	4	0	0	0	0	5	3	2	1	2	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
224	1	2	3	1	5	2	2	4	1	1	4	0	0	0	0	5	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
225	3	1	3	4	5	2	2	4	1	1	4	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	1	2	4	2	9	1	1	3	1	2	1	4	2	1	9	2	7	2	2	1	2	1	3	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
226	3	2	2	1	5	2	3	4	1	1	4	0	0	0	0	5	2	2	1	1	1	1	4	4	100	100	1	1	1	2	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	3,4,5,6	2	4	2	1	1	1	1	3	3	3	1
227	5	2	2	1	5	2	1	4	1	1	4	0	0	0	0	5	2	2	1	1	1	1	4	4	100	100	1	3	1	2	2	9	1	1	2	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	1,3,5	2	4	2	1	1	1	1	3	3	3	1
228	1	2	3	1	5	2	2	4	1	1	4	0	0	0	0	5	2	2	1	1	1	1	4	4	100	100	1	1	1	3	2	9	1	1	1	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
229	6	1	3	5	5	2	2	4	1	1	4	0	0	0	0	5	2	2	1	4	1	2	1	3	6	6	1	1	1	1	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	1,2,3	2	4	2	1	1	1	1	3	3	3	1
230	5	2	3	1	5	2	1	3	1	1	4	0	0	0	0	5	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	5	1	1,5	1	1	2	1	4	2	1	9	2	7	2	2	1	6	1	2	5	1	4	2	7	2	4	1	1	1	1	1	3	3	3	1
231	4	2	2	1	5	2	2	4	1	1	4	0	0	0	0	5	3	2	1	2	1	1	4	4	100	100	2	5	2	4	1	1	1	3	3	1	2	2	4	2	1	9	2	7	2	2	1	6	1	4	5	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
232	5	1	2	7	5	1	3	4	1	1	4	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	4	2	4	1	4	1	3	1	1	2	2	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	1	1	2	1	1
233	6	1	4	7	5	1	3	4	1	1	4	0	0	0	0	5	2	2	2	2	1	1	4	4	100	100	1	3	2	4	1	4	1	3	2	1	2	2	4	2	1	9	1	2	2	2	1	1	1	1	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
234	5	1	3	3	5	2	2	3	1	1	4	0	0	0	0	5	3	2	1	2	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
235	3	2	3	1	5	2	2	2	1	1	4	0	0	0	0	5	2,3	2	1	2	2	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
236	5	2	2	1	5	1	3	4	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,5	2	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	3,4	2	4	2	1	1	1	1	3	3	3	1
237	6	1	2	7	5	1	3	4	1	1	4	0	0	0	0	5	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
238	4	1	2	1	5	2	2	3	1	1	4	0	0	0	0	5	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	2	2	1	2	1	4	2	1	9	1	2	2	2	1	2	1	2	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
239	5	2	2	1	5	2	2	3	1	1	4	0	0	0	0	5	3	2	2	2	2	1	4	4	100	100	2	5	2	4	1	5	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
240	4	2	4	1	5	2	2	4	1	1	4	0	0	0	0	5	3	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
241	6	2	2	1	5	2	2	3	1	1	4	0	0	0	0	5	3	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	3	2	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
242	6	2	2	1	5	3	3	4	1	1	4	0	0	0	0	5	2	2	1	2	1	1	4	4	100	100	1	3	2	4	2	9	1	3	1	1	2	2	4	2	2	10	2	7	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	3	3	3	1
243	5	2	4	1	5	2	2	5	1	1	4	0	0	0	0	5	2	2	1	5	2	1	4	4	100	100	2	5	2	4	2	9	1	3	3	1	2	2	4	2	2	10	1	2	2	2	1	2	1	1	3	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
244	1	2	2	1	5	1	3	4	1	1	4	0	0	0	0	5	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
245	6	2	3	7	5	1	2	4	1	1	4	0	0	0	0	5	3	2	2	2	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,5,7	2	4	2	1	1	1	1	3	3	3	1
246	1	2	3	1	5	2	2	4	1	1	4	0	0	0	0	5	2	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
247	2	2	4	1	5	2	3	4	1	1	4	0	0	0	0	5	1	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
248	2	1	4	3	5	2	3	4	1	1	4	0	0	0	0	5	2	2	1	1	2	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	2	2	3	4	1	1,4	2	4	2	1	1	1	1	1	1	1	1
249	2	2	4	1	5	2	2	2	1	1	4	0	0	0	0	5	1	2	1	3	3	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
250	4	2	3	1	5	2	3	4	1	1	4	0	0	0	0	5	2	2	2	4	1	2	1	3	1	1	1	1	1	2	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	1	1	1	1
251	1	1	3	5	3	2	3	4	1	1	4	0	0	0	0	5	1	2	1	4	1	1	4	4	100	100	2	5	1	2	1	1	1	1	5	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
252	3	2	5	1	3	1	3	4	1	1	4	0	0	0	0	2	3	2	2	2	1	1	4	4	100	100	1	2	2	4	2	9	1	1	3	1	2	2	4	2	2	2	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
253	2	1	2	2	3	1	2	4	1	1	4	0	0	0	0	3	3	2	1	3	1	1	4	4	100	100	1	2	1	1	2	9	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	6	4	4	1	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
254	6	2	4	1	3	3	3	4	1	1	4	0	0	0	0	6	2	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	1	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	1	2	2	1	1	1	1	1	1	1	1
255	4	2	2	1	3	1	4	5	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	1	1	2	1	4	2	1	9	2	7	2	2	1	2	1	3	1	1	4	2	7	2	4	2	1	1	1	2	3	3	3	1
256	3	2	2	1	3	2	3	3	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	1	1	2	1	4	2	1	9	1	1	2	2	1	1	1	3	2	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
257	6	1	2	7	3	2	3	5	1	1	4	0	0	0	0	6	2	3	2	4	1	1	4	4	100	100	1	4	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	1	2	2	1	2	2	2	3	3	3	2
258	2	2	4	1	3	2	2	2	1	1	4	0	0	0	0	3	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
259	3	2	3	1	3	3	3	5	1	1	4	0	0	0	0	6	2	3	1	4	1	1	4	4	100	100	1	4	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	1	2	2	1	1	1	1	3	3	3	1
260	4	1	2	3	3	2	3	3	1	1	2	0	0	0	0	0	2	3	0	0	3	1	4	4	100	100	1	1	1	1	2	9	1	1	1	1	2	2	4	2	1	9	2	7	2	2	1	6	4	4	3	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
261	3	2	2	3	3	2	3	4	1	1	4	0	0	0	0	5	2	3	1	3	1	1	4	4	100	100	1	2	2	4	1	4	1	3	2	1	2	2	4	2	1	9	1	2	2	2	1	1	1	1	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
262	6	1	2	7	3	2	3	4	1	1	3	0	0	0	0	4	3	2	1	3	1	1	4	4	100	100	1	4	2	4	1	4	1	3	1	1	2	2	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	1	1	2	1	1
263	3	2	2	1	3	2	3	4	1	1	4	0	0	0	0	6	2	3	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	2	2	2	1	2	1	3	2	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
264	2	1	3	3	3	3	3	4	1	1	4	0	0	0	0	4	3	2	2	5	2	1	4	4	100	100	2	5	2	4	1	4	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1

265	2	2	2	1	3	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,5	2	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	3,4	2	4	1	1	1	1	1	3	3	3	1
266	3	2	2	1	3	2	2	3	1	1	1	0	0	0	0	3	2	2	2	1	1	1	4	4	100	100	1	3	2	4	1	5	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	1	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
267	3	2	2	1	3	2	2	4	1	1	4	0	0	0	0	4	3	2	2	4	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	3	2	2	1	6	1	1	5	1	3	2	7	2	4	2	1	1	1	1	1	1	1	1
268	6	1	4	7	3	2	3	4	1	1	4	0	0	0	0	5	2	2	1	1	2	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	2	2	3	4	1	1,4	2	4	2	1	1	1	1	1	1	1	1
269	3	1	2	3	3	3	4	5	1	1	4	0	0	0	0	4	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	1	1	3	5	1	2	1	4	2	1	9	1	2	2	2	1	3	1	4	4	3	4	1	5,6	2	4	2	1	1	1	1	1	1	1	1
270	1	2	3	1	3	2	3	4	1	1	2	0	0	0	0	0	2,3	2	0	0	1	1	4	4	100	100	2	5	2	4	2	9	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	1	1	1	2	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
271	6	2	3	1	3	2	1	5	1	1	4	0	0	0	0	2	2	1	1	4	3	2	1	3	5	5	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	1	3	1	2	2	3	4	2	7	2	4	2	1	1	1	2	3	3	3	1
272	3	2	4	3	3	2	2	4	1	1	4	0	0	0	0	2	2	3	1	4	3	2	1	3	5	5	1	2	1	2	2	9	1	1	2	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
273	6	1	3	1	3	2	2	4	1	1	4	0	0	0	0	5	2	2	1	4	3	2	1	3	5	5	1	1	1	2	2	9	1	1	2	1	2	2	4	2	2	2	1	1	2	2	1	6	2	3	1	1	1	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
274	1	2	2	1	3	1	3	4	1	1	4	0	0	0	0	6	2	2	1	5	1	1	4	4	100	100	2	5	2	4	1	6	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	3	2	2	3	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
275	6	2	3	7	3	1	2	4	1	1	4	0	0	0	0	4	3	2	2	2	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,5,7	2	4	2	1	1	1	1	3	3	3	1
276	1	2	3	1	3	2	2	4	1	1	4	0	0	0	0	5	2	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
277	2	2	4	1	3	2	3	4	1	1	4	0	0	0	0	5	1	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
278	2	1	4	3	3	2	3	4	1	1	4	0	0	0	0	6	2	2	1	1	2	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	2	2	3	4	1	1,4	2	4	2	1	1	1	1	1	1	1	1
279	2	2	4	1	3	2	2	2	1	1	4	0	0	0	0	1	1	2	1	3	3	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
280	4	2	3	1	3	2	3	4	1	1	4	0	0	0	0	6	2	2	2	4	1	2	1	3	1	1	1	1	1	2	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	1	1	1	1
281	1	1	3	5	3	2	3	4	1	1	4	0	0	0	0	6	1	2	1	4	1	1	4	4	100	100	2	5	1	2	1	1	1	1	5	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
282	1	2	3	1	3	2	3	4	1	1	4	0	0	0	0	6	2	1	1	3	3	1	4	4	100	100	1	1	1	1	1	6	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	2	3	3	1	1	1	1	3,5,6	2	4	2	1	1	1	1	1	1	1	1
283	6	2	2	1	3	2	2	3	1	1	4	0	0	0	0	2	1	1	2	5	1	2	1	3	6	6	1	3	2	4	1	6	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
284	6	1	5	1	3	2	4	4	1	1	4	0	0	0	0	5	1	1	2	2	1	1	4	4	100	100	1	1	1	2	2	9	1	1	5	1	2	1	4	2	1	9	1	1	2	2	1	6	2	2	1	1	3	1	1,3,5	2	4	2	1	1	1	1	1	1	1	1
285	2	1	2	5	3	2	3	4	1	1	4	0	0	0	0	5	1	2	2	1	1	1	4	4	100	100	1	2	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
286	3	1	2	6	3	2	2	4	1	1	4	0	0	0	0	6	3	2	2	1	1	2	1	3	6	6	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	3	3	3	1
287	2	2	2	1	3	2	2	4	1	1	4	0	0	0	0	4	3	2	2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
288	2	2	2	1	3	2	2	4	1	1	4	0	0	0	0	5	2	2	2	4	2	1	4	4	100	100	2	5	2	4	2	9	1	1, 3,7	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
289	3	1	4	3	3	2	3	5	1	1	4	0	0	0	0	5	2	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	1	2	2	4	2	1	9	2	7	2	2	1	3	1	4	2	3	3	2	7	2	4	2	1	1	1	1	3	3	3	1
290	3	2	2	1	3	2	2	5	1	1	4	0	0	0	0	6	2	2	2	5	1	2	1	1	12	12	2	5	2	4	2	9	1	2	5	1	2	2	4	2	2	10	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
291	4	2	3	2	3	3	3	4	1	1	4	0	0	0	0	5	3	2	2	4	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	3	2	2	1	6	1	1	5	1	3	2	7	2	4	2	1	1	1	1	1	1	1	1
292	2	1	5	3	3	2	2	3	1	1	4	0	0	0	0	1	3	2	2	2	1	1	4	4	100	100	1	3	2	4	1	5	1	5	3	1	2	1	4	2	1	9	2	7	2	2	1	1	1	1	2	2	1	2	7	2	4	2	1	1	1	1	3	3	3	1
293	3	2	2	1	3	2	2	3	1	1	4	0	0	0	0	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	1	4	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	3	5	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
294	2	2	3	1	3	1	4	5	1	1	4	0	0	0	0	4	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	1	1	3	5	1	2	1	4	2	1	9	1	2	2	2	1	3	1	4	4	3	4	1	5,6	2	4	1	1	1	1	1	1	1	1	1
295	3	2	2	1	3	1	4	5	1	1	4	0	0	0	0	4	3	2	2	1	1	1	4	4	100	100	2	5	2	4	2	9	1	1	5	1	2	1	4	2	1	9	1	2	2	2	1	3	1	4	4	3	4	1	5,6	2	4	2	1	1	1	1	1	1	1	1
296	2	1	3	3	3	2	2	4	1	1	4	0	0	0	0	5	3	2	2	5	2	1	4	4	100	100	2	5	2	4	1	4	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
297	1	2	5	3	3	2	2	3	1	1	4	0	0	0	0	2	2	2	2	1	1	1	4	4	100	100	1	3	2	4	1	5	1	2	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	1	1	1	4	2	7	2	4	1	1	1	1	1	1	1	1	1
298	2	2	4	1	3	2	1	4	1	1	4	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	2	5	2	4	1	1	1	1	4	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
299	2	2	4	1	3	2	2	3	1	1	4	0	0	0	0	2	3	2	1	1	1	2	1	1	12	12	1	2	2	4	1	4	1	2	1	1	2	1	4	2	1	9	1	1	2	1	1	6	1	2	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
300	5	2	3	1	3	2	1	3	1	1	4	0	0	0	0	2	3	2	2	1	1	1	4	4	100	100	2	5	2	4	1	5	1	1,5	1	1	2	1	4	2	1	9	2	7	2	2	1	6	1	2	5	1	4	2	7	2	4	1	1	1	1	1	3	3	3	1
301	4	2	2	1	2	2	2	4	1	1	4	0	0	0	0	4	3	2	1	2	1	1	4	4	100	100	2	5	2	4	1	1	1	3	3	1	2	2	4	2	1	9	2	7	2	2	1	6	1	4	5	3	4	2	7	2	4	2	1	1	1	1	3	3	3	1
302	5	1	2	7	2	1	3	4	1	1	4	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	1	4	2	4	1	4	1	3	1	1	2	2	4	2	1	9	1	2	2	2	1	2	1	4	1	1	4	2	7	2	4	2	1	1	1	1	1	2	1	1
303	6	1	4	7	2	1	4	4	1	1	4	0	0	0	0	5	2	2	2	2	1	1	4	4	100	100	1	3	2	4	1	4	1	3	2	1	2	2	4	2	1	9	1	2	2	2	1	1	1	1	5	1	4	2	7	2	4	2	1	1	1	1	1	1	1	1
304	5	1	3	3	2	2	2	3	1	1	4	0	0	0	0	2	3	2	1	2	1	1	4	4	100	100	1	1	2	4	1	5	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	2	1	2	5	3	4	2	7	2	4	2	1	2	2	2	2	2	2	2
305	3	1	1	5	2	2	2	5	1	1	4	0	0	0	0	6	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
306	2	1	2	5	2	2	2	5	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	1	2	2	4	2	9	1	1,3	5	1	2	1	4	2	1	9	1	2	2	2	1	6	1	1	2	3	4	1	2,3,4,6,	2	4	2	1	1	1	1	1	1	1	1
307	2	2	2	1	2	2	2	5	1	1	4	0	0	0	0	3	3	2	1	1	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
308	3	2	2	1	2	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
309	2	2	2	1	2	2	2	4	1	1	4	0	0	0	0	2	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
310	2	1	2	5	2	3	3	5	1	1	4	0	0	0	0	5	3	2	1	1	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
311	6	1	2	7	2	2	2	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
312	2	1	3	5	2	3	3	5	1	1	4	0	0	0	0	6	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	1	2	1	4	2	1	9	1	2	2	2	1	6	1	1	2	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
313	3	1	2	5	2	2	2	4	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
314	2	2	3	1	2	1	3	5	1	1	4	0	0	0	0	3	2,3	2	1	4	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
315	3	2	2	1	2	2	3	4	1	1	4	0	0	0	0	6	3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	5	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
316	2	2	2	1	2	3	3	4	1	1	4	0	0	0	0	5	2,3	2	2	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
317	2	2	1	1	2	2	2	4	1	1	4	0	0	0	0	3	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
318	2	2	2	1	2	3	3	4	1	1	4	0	0	0	0	5	3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,4	5	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
319	3	2	2	1	2	3	3	5	1	1	4	0	0	0	0	6	3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,5	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
320	3	2	1	1	5	3	3	5	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	1	2	2	4	2	9	1	1,2,6	5	2	1	3	1	4	4	9	1	2	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	2	2	2	2

321	6	1	1	7	5	1	4	5	1	1	4	0	0	0	0	6	3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	3	3	3	2
322	4	1	2	5	5	3	3	4	1	1	4	0	0	0	0	6	2	2	1	2	1	1	4	4	100	100	1	2	2	4	2	9	1	1,2,3	5	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
323	3	2	2	1	5	3	3	4	1	1	4	0	0	0	0	5	2	2	2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
324	3	1	2	5	5	2	2	4	1	1	4	0	0	0	0	4	3	2	2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	5	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
325	5	2	2	1	2	2	2	4	1	1	4	0	0	0	0	4	3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
326	3	2	2	1	2	3	3	5	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	1	4	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	4,5	2	4	2	1	1	1	1	3	3	3	1
327	3	1	2	3	2	1	3	5	1	1	4	0	0	0	0	6	2	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	1	2	1	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
328	4	1	1	5	2	2	2	4	1	1	4	0	0	0	0	4	3	2	1	4	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,4	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	3	3	3	2
329	3	2	1	1	2	2	2	4	1	1	4	0	0	0	0	4	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	3	3	3	2
330	3	1	2	5	5	2	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
331	3	2	2	1	3	3	3	4	1	1	4	0	0	0	0	4	2,3	2	1	3	1	1	4	4	100	100	1	4	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
332	3	1	2	5	2	3	3	5	1	1	4	0	0	0	0	6	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,4	5	1	2	1	4	2	1	9	1	1	2	2	1	2	1	4	5	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
333	6	1	2	7	3	2	2	4	1	1	4	0	0	0	0	3	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,5	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
334	2	1	2	5	3	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1	2	1	1	4	4	100	100	1	3	2	4	2	9	1	1,2,6	5	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
335	5	1	2	5	3	2	2	4	1	1	4	0	0	0	0	3	2	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,7	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
336	3	1	2	5	3	1	4	5	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
337	3	1	4	5	3	3	3	5	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
338	2	1	4	6	2	2	2	3	1	1	4	0	0	0	0	3	2,3	2	1	2	1	1	4	4	100	100	1	4	2	4	1	1	1	1,2	3	1	2	2	4	2	1	9	1	2	2	2	1	6	1	1	5	3	3	2	7	2	4	2	1	1	1	1	1	1	1	1
339	2	1	2	5	3	2	2	4	1	1	4	0	0	0	0	5	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
340	3	1	2	5	3	1	3	4	1	1	4	0	0	0	0	5	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
341	3	2	2	1	3	3	3	4	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	2,3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
342	3	2	2	1	3	3	3	4	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
343	5	2	2	1	2	1	4	5	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	1	2	2	4	2	1	9	1	4	2	2	1	3	1	1	3	3	3	2	7	2	4	2	1	1	1	1	1	1	2	1
344	3	2	4	1	5	2	3	4	1	1	4	0	0	0	0	3	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
345	3	2	4	5	5	3	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
346	4	2	4	1	5	2	2	3	1	1	4	0	0	0	0	4	3	2	1	1	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
347	3	2	2	1	5	3	3	4	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
348	3	2	2	1	5	2	3	4	1	1	4	0	0	0	0	6	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	4,5	2	4	2	1	1	1	1	3	3	3	1
349	4	2	2	1	5	2	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
350	3	1	2	7	5	2	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
351	3	2	2	1	2	2	2	3	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	1	1	2	2	4	2	1	9	1	1	2	2	1	1	1	3	2	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
352	5	2	4	1	2	2	2	4	1	1	4	0	0	0	0	6	1,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
353	6	2	4	1	2	3	3	5	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,7	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
354	3	1	2	5	2	2	2	4	1	1	4	0	0	0	0	5	2,3	2	2	3	1	1	4	4	100	100	1	3	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
355	3	2	4	1	2	3	3	5	1	1	4	0	0	0	0	5	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	1	2	2	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
356	2	1	2	5	2	3	3	4	1	1	4	0	0	0	0	6	2,3	2	1,2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	1	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	4,5,6	2	4	2	1	1	1	1	3	3	3	1
357	2	2	3	3	2	1	5	5	1	1	4	0	0	0	0	6	3	2	1	5	1	1	4	4	100	100	2	5	2	4	2	9	1	2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
358	3	2	2	2	2	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	3	3	3	1
359	6	1	2	7	2	2	2	4	1	1	4	0	0	0	0	3	2,3	2	2	5	1	1	4	4	100	100	1	4	2	4	2	9	1	1,2	3	1	2	2	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	1	1	1	1
360	5	1	4	7	2	2	4	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
361	3	2	2	1	2	1	5	4	1	1	4	0	0	0	0	6	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	1	2	2	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	1	4,5,6	2	4	2	1	1	1	1	1	1	1	1
362	3	2	2	1	2	2	2	4	1	1	4	0	0	0	0	6	2,3	2	1,2	2	1	1	4	4	100	100	2	5	2	4	2	9	1	2	5	2	1	3	2	4	4	9	2	3	2	2	3	7	5	5	6	4	4	1	4,5,6	2	4	2	1	1	1	1	3	3	3	1
363	6	2	1	1	2	2	2	4	1	1	4	0	0	0	0	5	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	4	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	1	4,5,6	2	4	2	1	2	2	2	3	3	3	2
364	3	2	4	1	2	3	3	5	1	1	4	0	0	0	0	5	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	1	2	2	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
365	3	1	2	5	2	2	3	4	1	1	4	0	0	0	0	5	2,3	2	1,2	5	1	1	4	4	100	100	1	4	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
366	2	2	2	1	2	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	1	1	2	2	4	2	1	9	1	3	2	2	1	6	1	3	5	3	4	1	5,6	2	4	2	1	1	1	1	1	1	1	1
367	2	2	3	1	2	2	2	4	1	1	4	0	0	0	0	3	3	2	1,2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	2	1	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
368	3	2	2	1	2	1	4	5	1	1	4	0	0	0	0	6	2,3	2	1,2	5	1	1	4	4	100	100	1	3	2	4	2	9	1	1,2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
369	3	1	2	5	2	2	2	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	1	2	2	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
370	3	2	2	6	2	2	3	4	1	1	4	0	0	0	0	3	2,3	2	1,2	4	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	1	2	2	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
371	3	1	2	5	2	3	3	4	1	1	4	0	0	0	0	4	3	2	2	2	1	1	4	4	100	100	2	5	2	4	2	9	1	2	1	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
372	3	1	2	5	2	3	3	4	1	1	4	0	0	0	0	4	2,3	2	2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
373	2	1	2	5	2	1	5	5	1	1	4	0	0	0	0	6	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	5	1	2	2	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	1	4,5,6	2	4	2	1	1	1	1	1	1	1	1
374	3	1	4	5	2	1	5	5	1	1	4	0	0	0	0	6	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
375	3	1	4	5	2	3	4	4	1	1	4	0	0	0	0	3	2,3	2	1,2	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	4	1	2	2	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	5,6	2	4	2	1	1	1	1	3	3	3	1
376	6	1	2	7	2	1	5	5	1	1	4	0	0	0	0	6	2,3	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	3	1	2	2	4	2	1	9	2	7	2	2	1	2	1	4	5	3	4	1	3,5	2	4	2	1	1	1	1	3	3	3	1

377	3	2	2	1	2	2	3	4	1	1	4	0	0	0	0	4	2,3	2	2	2	1	1	4	4	100	100	1	3	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	1	3	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
378	6	1	4	7	2	3	4	4	1	1	4	0	0	0	0	6	3	2	1	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
379	4	1	2	5	2	1	4	5	1	1	4	0	0	0	0	6	2,3	2	2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
380	4	2	2	1	2	1	5	5	1	1	4	0	0	0	0	6	2	2	1,2	5	1	1	4	4	100	100	1	4	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	1	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
381	3	1	2	5	2	2	4	4	1	1	4	0	0	0	0	4	2	2	1	3	1	1	4	4	100	100	1	3	2	4	2	9	1	1,2,3	3	1	2	2	4	2	1	9	1	3	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
382	2	2	2	1	2	1	3	5	1	1	4	0	0	0	0	3	2	2	1	3	1	1	4	4	100	100	1	4	2	4	2	9	1	1,2,3	3	1	2	2	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
383	2	2	4	1	2	3	4	4	1	1	4	0	0	0	0	3	2	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	3	1	2	2	4	2	1	9	1	4	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
384	6	1	2	5	2	1	4	5	1	1	4	0	0	0	0	3	2	2	1	3	1	1	4	4	100	100	1	3	2	4	2	9	1	1,2,3	3	1	2	2	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
385	6	1	4	1	2	3	3	4	1	1	4	0	0	0	0	3	2	2	1	3	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2,3	3	1	2	2	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	2	2	2	2
386	3	1	2	5	2	1	5	5	1	1	4	0	0	0	0	6	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
387	5	1	2	7	2	2	4	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
388	2	2	2	1	2	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	1	1	2	2	4	2	1	9	1	3	2	2	1	6	1	3	5	3	4	1	5,6	2	4	2	1	1	1	1	1	1	1	1
389	4	2	2	1	4	2	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
390	3	1	2	5	4	1	5	5	1	1	4	0	0	0	0	6	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
391	3	1	2	7	4	2	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
392	5	1	2	7	4	2	2	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
393	2	2	2	1	3	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	1	1	2	2	4	2	1	9	1	3	2	2	1	6	1	3	5	3	4	1	5,6	2	4	2	1	1	1	1	1	1	1	1
394	4	2	4	1	3	2	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
395	3	1	2	7	3	2	3	4	1	1	4	0	0	0	0	4	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	3	5	2	1	3	1	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
396	5	1	4	7	3	2	3	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
397	2	2	2	1	3	3	3	4	1	1	4	0	0	0	0	3	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	1	1	2	2	4	2	1	9	1	3	2	2	1	6	1	3	5	3	4	1	5,6	2	4	2	1	1	1	1	1	1	1	1
398	3	1	1	5	3	1	4	5	1	1	4	0	0	0	0	6	2,3	2	1,2	5	1	1	4	4	100	100	2	5	2	4	2	9	1	1,2	5	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	2	2	2	3	3	3	2
399	2	2	2	1	3	3	4	4	1	1	4	0	0	0	0	3	2	2	1	3	1	1	4	4	100	100	1	4	2	4	2	9	1	2	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	4	5	3	4	1	3,4	2	4	2	1	1	1	1	1	1	1	1
400	2	2	3	3	3	1	5	5	1	1	4	0	0	0	0	6	3	2	1	5	1	1	4	4	100	100	2	5	2	4	2	9	1	2	3	2	1	3	2	4	4	9	2	7	2	2	3	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	3	3	3	1
401	6	2	3	7	3	1	2	4	5	5	0	0	0	0	1	2	3	2	2	2	1	1	4	4	100	100	1	1	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,5,7	2	4	2	1	1	1	1	3	3	3	1
402	1	2	3	1	3	2	2	4	5	5	0	0	1	0	0	1	2	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,3	2	4	2	1	1	1	1	3	3	3	1
403	2	2	4	1	3	2	3	4	1	1	4	0	0	0	0	3	1	2	1	1	1	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	1	2,4,6	2	4	2	1	1	1	1	3	3	3	1
404	2	1	4	3	3	2	3	4	2	2	0	1	0	0	0	6	2	2	1	1	2	1	4	4	100	100	1	1	2	4	2	9	1	1	5	1	2	2	4	2	1	9	1	1	2	2	1	3	1	2	2	3	4	1	1,4	2	4	2	1	1	1	1	1	1	1	1
405	1	1	3	5	3	2	3	4	1	1	4	0	0	0	0	5	1	2	1	4	1	1	4	4	100	100	2	5	1	2	1	1	1	1	5	1	2	1	4	2	1	9	1	1	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
406	3	2	5	1	4	1	4	4	1	1	4	0	0	0	0	2	3	2	2	2	1	1	4	4	100	100	1	2	2	4	2	9	1	1	3	1	2	2	4	2	2	2	1	2	2	2	2	7	5	5	6	4	4	2	7	2	4	2	1	1	1	1	1	1	1	1
407	2	1	2	2	3	1	2	4	1	1	4	0	0	0	0	3	3	2	1	3	1	1	4	4	100	100	1	2	1	1	2	9	1	1	1	1	2	1	4	2	1	9	1	1	2	2	1	6	4	4	1	2	3	2	7	2	4	2	1	1	1	1	1	1	1	1
408	6	2	2	1	3	3	3	4	1	1	4	0	0	0	0	6	2	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	1	1	2	1	4	2	1	9	1	2	2	2	2	7	5	5	6	4	4	2	7	1	2	2	1	1	1	1	1	1	1	1
409	4	2	2	1	3	1	4	5	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	1	1	2	1	4	2	1	9	2	7	2	2	1	2	1	3	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1
410	3	2	2	1	3	2	2	3	1	1	4	0	0	0	0	6	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1,3	1	1	2	1	4	2	1	9	1	1	2	2	1	1	1	3	2	3	4	2	7	2	4	2	1	1	1	1	1	1	1	1
411	6	1	2	7	3	2	3	5	1	1	4	0	0	0	0	6	2	3	2	4	1	1	4	4	100	100	1	4	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	1	2	2	1	1	1	1	3	3	3	1
412	2	2	4	1	3	2	2	2	1	1	4	0	0	0	0	3	2,3	2	1	2	1	1	4	4	100	100	2	5	2	4	2	9	1	1	2	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	2	4	1	1	1	1	1	3	3	3	1
413	3	2	3	1	3	3	3	5	1	1	4	0	0	0	0	6	2	3	1	4	1	1	4	4	100	100	1	4	2	4	2	9	1	1	1	1	2	1	4	2	1	9	2	7	2	2	2	7	5	5	6	4	4	2	7	1	2	2	1	1	1	1	3	3	3	1
414	5	2	1	1	3	2	2	3	1	1	4	0	0	0	0	5	3	2	2	2	2	1	4	4	100	100	2	5	2	4	1	5	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	2	2	2	3	3	3	2
415	4	2	2	1	3	2	2	4	1	1	4	0	0	0	0	5	3	2	2	3	2	1	4	4	100	100	2	5	2	4	2	9	1	3	1	1	2	2	4	2	1	9	2	7	2	2	1	2	1	1	1	1	4	2	7	2	4	2	1	1	1	1	3	3	3	1