

# Director's Report 2019-20

*Reviewed and Recommended by the IHS Executive Council Meeting on 06-02-2021 and Approved by the Annual General Body on 19-04-2021.*



**THE INSTITUTE OF HEALTH SYSTEMS**

## Table of Contents

Title	Page
Human Resources, Fellows & Interns:	1
Reporting Period (2019-20) Events and Activities:	2
A Research and Consultancy:	2
B Public Services:	3
C Training Activities:	5
D Academic Programs:	6
Taking Stock of the Institute's Financial Position:	6
Accounts and Audit Report:	7

## Tables and Figures

Tables	Page
Table 1: Overview of IHS Personnel.	1
Table 2: Overview of Internships at IHS, 2019-20.	5
Figures	
Figure 1: IHS Gross Revenue Trend Since 1999	7
Figure 2: IHS Revenue by Types of Activity	7

## Annexures

#	Annexures	Page
1A	Faculty and Personnel Profile	9
1B	Outgoing Faculty & Personnel in 2019-20 & 2020-21 (Ytd)	16
2	IHS Participation in Trg. Pgms, Workshops, Seminars & Conferences in 2019-20 & 2020-21(Ytd)	17
3	IHS Publications in 2019-20 & 2020-21(Ytd)	18
4A	Fellows & Interns in 2019-20 & 2020-21(Ytd)	19
4B	Outgoing Fellows, Interns and Apprentices in 2019-20 & 2020-21(Ytd)	22
5	Revenue from IHS Laboratory Services	23
6	IHS Revenue Trends by sources and activity	24

# The Institute of Health Systems, Director's Report, 2019-20.

Ladies and Gentlemen,

On behalf of the faculty and staff of the Institute, I welcome you all to this 25<sup>th</sup> Annual General Body meeting. During the reporting period, we continued work on Water Quality Monitoring (WQM), and the "Study of Consumer Complaints and Water Safety in Hyderabad" commissioned by the Hyderabad Metro Water Supply & Sewerage Board (HMWSSB). In addition, we provided accessible water quality testing & analytical services for public health (AWTASPH) to the general public. We continued to strengthen and improve quality of the laboratory services by adding the new equipment and for the new test services like Bacterial Endotoxin (LAL Assay), Chemical Oxygen Demand (COD) and Biochemical Oxygen Demand (BOD). The IHS Laboratory has been accredited by National Accreditation Board for Laboratories (NABL) in the field of chemical discipline and initiated process for biological discipline. We strengthened the human resources by recruiting a full-time Deputy Director Water Safety and Faculty. A modest improvement of the Institute's financial position enabled us to recruit a faculty, procure new lab equipment and clear most of the liabilities. However, we are yet to pay development charges for IHS land. The existing staff have worked hard and persevered to keep the Institute going. I gratefully acknowledge the support given by members of the Board, the Executive Council, and the General Body in sustenance of the Institute. I would like to use this opportunity to specially acknowledge the guidance of the IHS Chairman, Dr.G.N.Rao and continued contribution of Dr. Prasanta Mahapatra, President & Dean of the Institute as a volunteer and mentor in all aspects. I first present about the Institute's human resources.

## Human Resources, Fellows & Interns:

We are functioning with a small team mostly of water quality testing & laboratory staff (Table-1). Helped by a modest improvement in the Institute's financial position, we could recruit a Dy Director Water Safety and other staff to strengthen the research area and laboratory activities. The expansion in laboratory activities has allowed us to take in more interns and give them practical training in various aspects of laboratory services, field work and information technology support.

*Table 1: Overview of IHS Personnel.*

Category of Personnel	As on 31-03-20			As on 31-12-20		
	Full Time	Visiting / Consultant	Total	Full Time	Visiting / Consultant	Total
Faculty	3	1	4	3	1	4
Chemical Analysts / Sr. Microbiologists / Research Associates	2	0	2	1	0	1
Microbiologist / Joint Analysts / Research Assistants	2	0	2	1	0	1
Data Processing / System Admin / Software / Research Assistants	2	0	2	2	0	2
Lab Techs	1	0	1	1	0	1
Water Safety Surveyors	0	0	0	0	0	0
WQT Investigators	8	0	8	10	0	10
Lab Registration / Front Office / Admin / Accounts	1	0	1	1	0	1
All	19	1	20	19	1	20

Annexures-1A provides more detail about the current faculty and personnel profiles, of the Institute. A list of outgoing personnel is given in Annexures-1B. Our faculty and staff participated in a few workshops, seminars and conferences, details of which are provided in Annexure-2. As reported earlier, our academic and training programs are now limited to fellowship and internships. During the reporting period we guided one intern Dr. Madugula Nidhita who is a student of Masters in Public Health in Amity University, Noida on the Metro Consumer Complaints (MCC) surveillance project. In addition, we have given practical training to interns in various areas.

Now, I will give an overview of activities during the reporting period and also briefly touch upon recent developments during the current year. We will then review the time trend of the Institute's financial performance and consider possible directions for the future. Finally, I will seek your comments and approval of the audited accounts of the Institute.

## Reporting Period (2019-20) Events and Activities:

As you all are aware, the Institute pursues five broad type of activities towards improvement of public health. These are; (a) Research & Consultancy, (b) Public Services, (c) Training Services, (d) Academic Programmes, and (e) Publications.

### A. Research and Consultancy:

The following four projects / subprojects were implemented during the reporting period.

#### 1. Sanitary Inspection of Metro Water Service Reservoirs in Hyderabad:

The purpose of sanitary inspection is to check all aspects of a service reservoir (SR) to rule out vulnerabilities and pathways of contamination, if any. Purpose is to identify structural and/or operational deficiencies, if any and recommend measures to improve sanitary integrity and minimise risk of contamination of water stored and distributed from the SR. For example; SRs with unprotected air vents and/or open manholes would be vulnerable to bird droppings. Water safety surveyors are trained to inspect and gather information about air vents, manholes, inlet-outlet arrangements, state of roof & walls, surroundings, history of cleaning, and chlorination arrangements. Reports are prepared based on their initial inputs and follow-up visits for further clarifications. Each report provides actionable recommendations to address sanitary deficiencies, if any and improve operational integrity of the SR. During the reporting period 17 sanitary inspection of service reservoir (SISR) reports were submitted to the HMWSSB. Another 22 SISR reports have been submitted so far, during current year. This activity is a subproject under the Independent Water Quality Monitoring contract with the HMWSSB.

#### 2. Community Focus Groups for Water Safety in Slum Areas Hyderabad:

The objective of the community mobilisation is to develop strategies for water safety in slum areas of Hyderabad and build community awareness among the slum residents. Focus group discussions (FGDs) are conducted regularly in identified slum areas to gather information about consumer perceptions of metro water supply through domestic connections, public stand posts and tankers and to understand consumer concerns on water availability, regularity, and quantity of supply. FGDs also helps to understand community knowledge, attitudes and practices about water quality and related issues, usage, storage,

handling, hygiene, sanitation, and health status. In addition, the FGDs are used to inform & educate the target group on good hygiene practices and measures to prevent waterborne diseases. Community FGDs are a subproject of the independent water quality monitoring work by the Institute of Health Systems (IHS) for the MWB. Water safety surveyors, fellows/interns, research assistants, associates, faculties, and other personnel drawn from various sections of the Institute are trained in focus group methodology (Scrimshaw and Hurtado, 1987) and water sanitation and hygiene concepts (CAWST, 2017; WHO, 2015; UNICEF, 2011) to act as FGD resource persons. Two resource persons are drawn for each focus group, one to act as a facilitator and the other as recorder. Monthly about five FGDs are conducted in different slum areas of Hyderabad. 57 FGDs were conducted during the reporting period and reports were submitted along with monthly report to HMWSSB for follow up action.

### **3. Metro Water Board Consumer Complaints Surveillance For Water Safety:**

This is a research project to evaluate MWB's consumer complaints resolution and grievance redressal system for polluted water, water leakage and sewer chokage problems. Every month about 100 consumers were randomly selected from the metro consumer complaints (MCC) database for detailed study. Surveyors visited households and gathered detailed information about consumer satisfaction, their complaints resolution experience regarding water supply and sewerage services. Household samples of direct metro water supply and from corresponding service reservoirs were tested for quality & potability. Quarterly results have been furnished to the MWB and discussed with senior officers. The 2nd annual report for 2018-19 was furnished in Sep19. The 3rd Annual Report is in preparation.

### **4. Exploratory Survey of Bottled Water Plants in Hyderabad:**

This is an exploratory study to characterize commercial small Bottled Water Plants in Hyderabad and to document prevalent practices for disposal of reject water and potential for utilization & conservation. 35 BWPs are randomly selected from the list provided by the MWB. Survey work has been completed, data analysed and provisional report was submitted for comments and suggestions by the senior officers of HMWSSB.

## **B. Public Services:**

### **1. Water Quality Monitoring in Service Reservoirs and Urban Slums in Hyderabad:**

Water quality investigators (WQIs) regularly visit service reservoirs to monitor residual chlorine (RC) and collect samples for bacteriological analysis. No-RC findings are reported to operations personnel on the spot and related MWB Quality Assurance officers through WhatsApp messages. WQIs visit slum areas during water supply hours and monitor RC levels of direct metro water supply in households, and public stand posts (PSPs). Samples are also collected for bacteriological, and physicochemical analysis. Daily reports of RC levels are e-mailed to MWB-QAT officers. Weekly & monthly reports on RC levels, bacteriological analysis and physicochemical test results are furnished to the QAT officers as well as Director-Technical. The IHS Director and Dy Director attends regular review meetings with Director (Tech), CGM(E) Transmission Circle and GM QAT, shares independent monitoring test results and participates in discussion regarding assurance of water quality. The project is renewed up to July 2021.

## **2. Sustaining Water Quality Monitoring of Service Reservoirs During the Covid19 Pandemic:**

Amidst the circumstances surrounding the Covid19 and subsequent lock down from the last week of March 2020, initially the staff were panic and worried to attend the office and field work. Being the water quality monitoring is an essential service, we took it as a challenge treating as emergency service. Our focus remained on the continuance of water quality monitoring without compromising on the health and well-being of IHS field and laboratory staff. Till the first fortnight of April 2020, lot of problems were faced by the field staff, but overcame by coordinating with HMWSSB officers by obtaining passes (as essential service) and negotiating with police wherever they stopped and questioned. The MCC survey was suspended and diverted the surveyors to the water quality monitoring project. However, the RC testing was covered without any gap, but the laboratory was closed for about 10 days in first fortnight of April 2020. We organized to prepare and continue this emergency service through the pandemic period and began gradually resuming the laboratory operations. All field staff are taking necessary precautions like using sanitizers, masks, gloves, maintaining social distancing etc. Depending on the possibility, some of the data processing staff and senior officers facilitated to work from home. The field staff were given a hardship allowance for the working days during this critical time. Half pay leave was provided to those who were absent due to pandemic, but however, full salary was paid by commuting their leaves without putting any economic hardship. In the absence of public transport system, we allowed the conveyance allowance - Motor Cycles in place of city bus pass allowance for commutation by the staff. All the staff are responsive and responsible during this pandemic time in continuing the essential service and we ensured a balance of safety and health while also continuing.

## **3. Accessible Water Testing & Analytical Services for Public Health (AWTASPH):**

IHS Laboratory is listed in JustDial to facilitate online searches. We have clearly defined matrix of test codes and test parameters along with consumer guidance for selection of water quality testing service packages & test codes. IHS Water Quality Investigators visit client premises to collect sample for a modest fee. Reports are being scanned and sent by e-mail, held for pickup or couriered depending on client-options. Clients are appreciating IHS notes & recommendations regarding intended use.

## **4. Chemical Laboratory:**

We improved the human resources by recruiting an experienced Chemical Analyst and Joint Chemical Analyst. Laboratory personnel are conforming to Indian Standard Test procedures or American Public Health Association (APHA). New equipment has been added to the laboratory like BoD incubator and CoD Digester to take up the new tests -Chemical Oxygen Demand COD) and Biochemical Oxygen Demand (BOD). NABL has conducted annual onsite surveillance on 23rd Jun 2019 and then detailed assessment for was also done on 22-23 June 2020 and accreditation was renewed up to 05-08-2022.

## **5. Biology (Microbiology) Laboratory:**

Here, also we added the new equipment like high-capacity incubator, Bio freezer and Dee-freezer for taking up new test - bacteriological endotoxin (LAL) testing. We have reorganised the Institute's office space to provide Biology laboratory with space and work

flow path to meet NABL accreditation criteria. During the current year, we are planning to file application for NABL accreditation.

## 6. Registration of IHS Laboratory as Clinical Establishment:

Members are aware that, IHS Laboratory has been registered under the TS Allopathic Private Medical Care Establishments (Registration and Regulation) Act 2002 to provide "Diagnostic Type of Services" valid for a period of five years with effect from 30-11-2017.

## 7. Library:

The scope for proactive acquisition of bibliographic resources has been limited due to financial constraints. In addition, lack of space and a full-time librarian is a key constraint in developing the library services. To streamline the library, we have weeded out obsolete holdings.

## 8. Publications:

IHS and related publications in the reporting year are listed in Annex 3.

## C. Training Activities:

The Institute's training program is now limited to skill development internships in laboratory techniques, field testing, sample collection, sanitary inspection of service reservoirs, water safety, data processing activities. Table-2 shows an overview of internships offered by the IHS during the reporting period and current year.

*Table 2: Overview of Internships at IHS, 2019-20.*

Sl	Practice & Skill Development	Reporting Year, 2019-20			As on 31-03-20	Current Year 2020-21 Ytd			As on 31-12-20
		Intake	Drop outs.	Completed		Intake	Drop outs.	Completed	
1	Laboratory Technique	3	3	3	2	3	0	0	3
2	Water Safety Program	1	0	0	1	0	0	0	1
3	Field testing & sample collection (Water Quality Investigator)	6	5	2	6	5	0	1	6
4	Lab Registry & Front Office	0	0	2	0	0	0	0	0
5	Data Processing.	0	0	0	0	0	0	0	0
	<b>Total</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>9</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>10</b>

Intake: Interns joined during the reporting period. Dropouts: Number of interns who might have joined during the current/previous periods, and discontinued internship during the year, to pursue alternate career options, and/or due to personal constraints, completed: Number of persons who might have joined during the current/previous periods completed their internships during the reporting period.

Number discontinued and completed do not add up to the number joined because each of these figures are about join/drop/complete events during the year in respect of persons who might have joined as interns during the current as well as previous periods. An internship is usually of one year duration. Annex-4A gives short biographies of fellows and interns, and Annex-4B gives a list of fellows & interns who left the Institute for various reasons.



## D. Academic Programs:

### 1. Masters in Public Health (MPH):

There is no further development since the last meeting.

### 2. IHS Land-High Court case:

The members are aware that, the Public Interest Litigation (PIL) case was filed and the last listed date was on 31/8/2015. Sri D. Prakash Reddy, the Institute's advocate, did argue our case, however, no final order has been passed by the court and the case has not been listed, after 31/8/2015.

### 3. Land Development Charges:

The members are aware that, pending finalisation of the court proceedings, we initiated proposal with HMDA for conversion of land use from recreational zone to institutional zone. We paid an amount of Rs 9,90,000 towards 50% of the development charges on 24/03/2014. Payment of balance 50% of development charges to HMDA along with interest is pending. In March & Jun 2018, we requested HMDA to calculate the balance to be paid along with draft challan. HMDA has referred the issue to TS Govt and further there is no response.

## Taking Stock of the Institute's Financial Position:

### 1. Revenue from Laboratory Services:

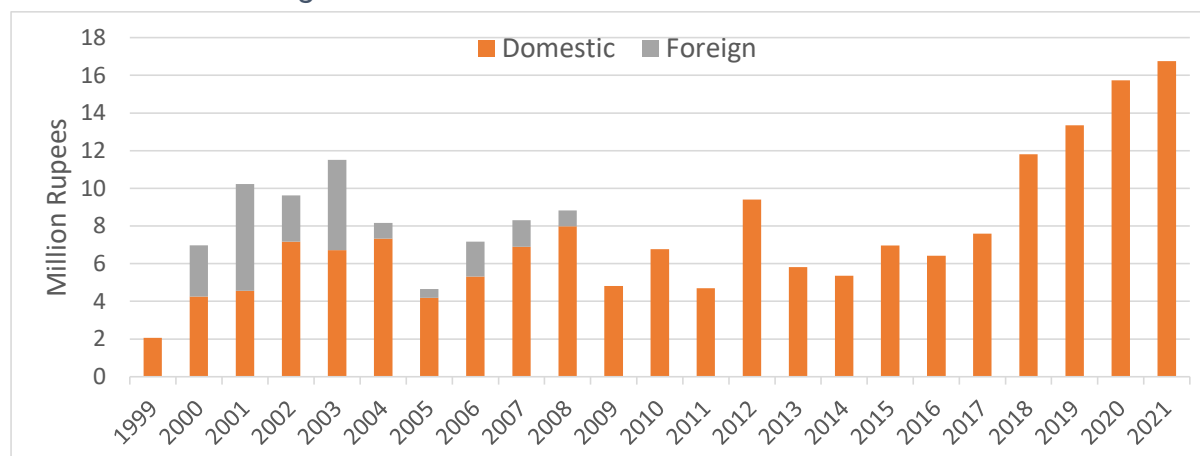
Since last five years, the laboratory has significantly increased its output and has also been a major source of revenue. An overview of revenue from IHS laboratory services is in Annex-5 which shows that, most of the revenue is being generated from HMWSSB for monitoring water quality at various points of water distribution system operated by them. We made efforts to increase revenue from general clients. We focussed on improving the IHS Laboratory facilities and streamlining the procedures and practices. We introduced new tests like Dialysis RO System Feed Water (DRF), Chemical Oxygen Demand (COD), Biochemical Oxygen Demand (BOD) and Bacteriological Endotoxin (LAL). We are giving interpretations and recommendations in the test reports which most of the clients are appreciating. However, revenue from general public reduced remained stagnant at Rs 4.41 lakhs during 2019-20 and has further reduced due to lockdowns on account of the Covid-19 pandemic.

### 2. Overall Revenue Trend:

Classification of the Institute's revenue from domestic and foreign sources as well as by activity is given in Annex-6. In Figure-1 the gross revenue generated by the Institute from the financial year ending in March 1999 has been summarized. The average revenue of the IHS has been around Rs 70 lakhs per annum from 2015 to 2017. From 2017 onwards, there is steady increasing in the revenue. During the reporting period, the receipts touched to Rs 157 lakhs.



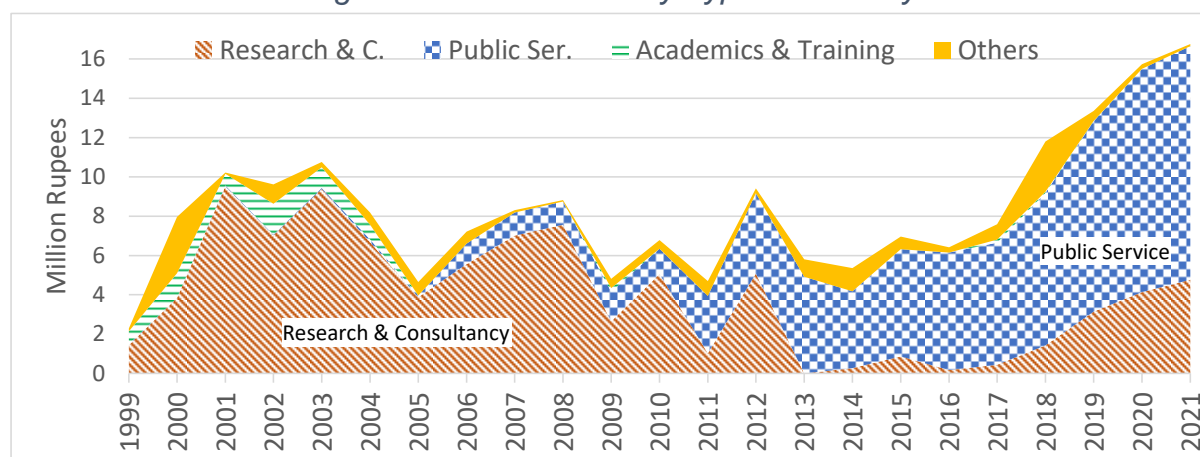
Figure 1: IHS Gross Revenue Trend Since 1999



During the current year, we are expecting further improvement in receipts to about 167 lakhs in view of continuation of the MCC research and Bottled water projects. The Institute needs to substantially upscale its activities and improve its finances for effective realisation of its goals.

As is evident from Figure-2, most of our revenue has been contributed by Research and Consultancy till 2012. There is not much revenue from research activities in the years 2013 to 2017. From 2018 onwards, there is modest increase in revenue from research and it touched to around Rs 41 lakhs during the reporting period. In recent years, receipts from public services have increased mainly on account of water quality monitoring project from HMWSSB.

Figure 2: IHS Revenue by Types of Activity



I look forward for your guidance in addressing these important issues.

## Accounts and Audit Report:

The audited accounts of the Institute for the year 2019 -20, as approved by the Executive Committee, have been enclosed. I now request you to consider the same and give your approval with suggestions if any.

Finally, I thank you for having spared the time to participate in this meeting. Your presence is a great inspiration to me, and my colleagues.

I would now request you to consider this report and give your valuable advice and guidance for further development of the Institute. We would like to assure you that we will do our best to translate your ideas and suggestions into action.

Date: 06/02/2021

  
G. Surendra, Director



## Annex -1A

### Faculty and Personnel Profile

#### Full Time Faculty

##### **G Surendra, Director**

Sri G. Surendra has rich experience in various areas of public administration, including; (a) Planning & Statistics, (b) Rural & Urban Development, (c) Information Technology, and (d) Hospital Management. Prior to IHS, he served as Associate Director & Chief Technology Officer of the LV Prasad Eye Institute, and before that he worked with Planning Department of the Government of AP in various capacities. He is a Certified Information Systems Auditor. He was involved in various health related activities such as Health Financing, Health accounts and Various Health related studies. He presented a Poster on Andhra Pradesh Civil Registration System at First Global Symposium on Health Systems Research at Montreux, Switzerland. Some of other publications to his credits are: Gap Analysis in Rural Health care Facilities in Mahabubnagar District, Drinking Water Quality Monitoring in Service Reservoirs and Urban Slums of Hyderabad City, A Study of Emergency Response Services in three districts of Andhra Pradesh, Andhra Pradesh Civil Registration System Study, Assessment of Doctor Availability in Primary Health centers and provide inputs for Human Resource Planning for Health, Medium Term Expenditure Framework for the years 2008-09 to 2012-13 for the Department of Health Medical & Family Welfare, Govt of Andhra Pradesh, Health Budget & Expenditure Tracking for the department of Health, Medical & Family welfare, for the Govt of Andhra Pradesh, Madhya Pradesh and Kerala. He is also implementing the projects on Independent water quality monitoring in service reservoirs and urban slums in Hyderabad city and Metro Consumer Complaints Surveillance on Water Safety in Hyderabad. To manage the IHS Laboratory, he also undergone training on Laboratory Quality Management System and Internal Audit as per ISO/IEC 17025:2005 and also attended the training in update version i.e ISO/IEC 17025:2017.

##### **Dr. Prasanta Mahapatra, Dean**

Dr. Prasanta Mahapatra, is a medical doctor, a Takemi Fellow in International Health and a PhD in International Health Policy & Economics from Harvard University. After practicing for some time as a Medical Officer in the Central Government Health Scheme, Dr. Mahapatra joined the Indian Administrative Service, in 1980. He served in various capacities in East-West Godavari, Nellore, Nalgonda, Krishna and Guntur districts. Dr. Mahapatra is experienced in revenue, general administration, disaster management, rural development, tribal welfare, women welfare, medical, health, information technology, irrigation and school education sectors. His experiences in the health field include, Registrar of the NTR University of Health Sciences, Director Medical Education, Commissioner Medical Services, Senior Faculty at the Administrative Staff College of India, Director Institute of Health Systems, and Director - Vice Chancellor of the Nizams Institute of Medical Sciences. Before his retirement from civil service, he was the Director General of the MCR Human Resources Development Institute and Ex-officio Special Chief Secretary to Govt. of AP. He has served as member of ICMR Scientific Advisory Group, and Core Group of the Department of Health

Research. He was a member of the steering group of the National Nutrition Mission. He was a member of the Scientific and Technical Advisory Group of the WHO - Alliance for Health Policy & Systems Research from 2009-15. Dr. Mahapatra has contributed to the Global Burden of Disease estimates published in the World Bank's World Development Report, 1993. He has published articles and books in the fields of general administration, rural development, and public health.

### **Dr. D. Neela Priya, Dy Director & Faculty**

Dr. D. Neela Priya is a Postdoctoral Fellow in Environmental Sciences from Indian Institute of Science (IISc), Bangalore. She worked at Indian Institute of Chemical Technology (IICT), Hyderabad for her doctoral thesis in Environmental Sciences. The doctoral degree was awarded by Osmania University, Hyderabad. She holds a Master's degree in Environmental Sciences from Osmania University, and a Master's degree in Chemistry from Dr. B. R. Ambedkar Open University, Hyderabad.

She worked as an Assistant Professor at Chaitanya Bharati Institute of Technology, Hyderabad, for four years during which she was involved in teaching, supervising student projects, organizing and attending conferences/workshops, delivering guest lectures, administrative duties etc. Later, she joined M/s Ramky Enviro Services Private Limited as Senior Assistant Manager. During her tenure, she was involved in providing consultancy services for several Environmental Impact Assessment (EIA) projects and non-EIA projects. She was also accredited as Functional Area Expert in Solid and Hazardous Waste Management and Water Pollution by National Accreditation Board for Education & Training (NABET).

She worked as Knowledge Management Expert at Administrative Staff College of India where she was associated with projects related to Faecal sludge & Seepage Management funded by the Bill & Melinda Gates Foundation (BMGF) and the Hyderabad Metropolitan water Supply & Sewerage Board (HMWSSB). She was the SPOC and team lead for these projects and supported activities related to pilot project implementation, preparation of detailed project reports, drafting project proposals, developing curriculum and training materials, organizing workshops and attending training programmes in India and abroad. Currently, she is working as Deputy Director & Faculty at the Institute of Health Systems, Hyderabad.

She is well versed with technical writing, research articles, project proposals, documentation/reports etc. As on date, she has published 24 articles which are a combination of both research articles and book chapters. She also presented her research work at various National and International Conferences. Her professional interests include teaching, providing training and consultancy services, research related to cost-effective and environmental friendly technologies/solutions for Water & Wastewater Treatment, Waste Management etc. Presently she is monitoring Water Quality Monitoring project and Bottled water Project at IHS.

## Visiting Faculty:

### **Prof Dayakar Thota**

Dr Dayakar Thota is an Ex-Armed Forces Medical officer and also holds his PG in Hospital Administration from University of Pune. He served the Indian Army from 1971 to 1994 and took part in 1971 Indo-Pak war as well as IPKF operations in Srilanka. He also possesses M.Sc (Defense Sciences) from Madras University. Dr Thota is a qualified Lead Quality Assessor and trained NABH assessor and also a Certified Six Sigma Black Belt.

Currently Prof (Lt. Col) Dayakar Thota is the Medical Director for Ramdevrao Hospital, a charitable hospital located in Kukatpalli, Hyderabad. Dr Thota's versatile experience includes; (a) Professor & Head of Department of Hospital Administration at Kamineni Institute of Medical Sciences, (b) Chief Learning Officer, Health Management & Research Institute, Hyderabad (104), (c) Director, Institute of Health Systems, Hyderabad, (d) Medical Director, Emergency Management & Research Institute (108), Hyderabad, (e) Management Consultant & Additional Director (Hospital Services), MGM Medical college Hospital, Aurangabad, (f) Medical Superintendent and Professor, Dept. of Hospital Administration, Nizam's Institute of Medical Sciences (NIMS), Hyderabad, (g) Additional Director, Dhirubhai Ambani Hospital, Lodhivali, Maharashtra, (h) CEO, Lokmanya Hospital, Chinchwad, Pune, (i) Professor of Hospital Administration & Deputy Medical Superintendent, Kasturba Hospital (MAHE), Manipal. He has audited of a number of HCEs for ISO certification. Dr Thota is a life member of professional bodies such as AHA, AHHA, AGE, ISHA, IAMI and IHS.

## Research, Laboratory and General Support Personnel:

### **L. Rakesh, Sr. Microbiologist:**

Mr. Rakesh did his Masters Degree in Microbiology and has varied experience in industries. He was Effluent Treatment Plant (ETP) Chemist in United Spirits Ltd, Nacharam Hyderabad, maintaining and managing the inflow-outflow to keep treated effluent parameters within regulatory guidelines. As Assistant Executive and a member of the Hazard Analysis and Critical Control Point (HACCP) Team in Pearl Beverages, he implemented sanitation and systems improvements to satisfy various internal quality audits such as American Institute of Baking (AIB) HACCP, Quality Assessment Service (QAS), Good Manufacturing Practices (GMP), Good Laboratory Practices (GLP), and ISO22000-2005. He is familiar with preparation of media for microbial analysis of packaged drinking water, cold-fill and hot-fill drinks. Before joining IHS, he was Quality Control Executive in Trinity Beverages Pvt Ltd, producing packaged drinking water and other beverages. His role was to manage & maintain plant hygiene in all areas and train shop floor people. He worked as a Senior Microbiologist and Research Associate in IHS from Sep2017 to Aug 2020.

### **P. Sravanthi Reddy, Chemical Analyst:**

P. Sravanthi Reddy graduated in Chemistry and then did a PG Diploma in Chemical Analysis & Quality Assurance from Osmania University. Her project work during the PG Diploma course was on "Detection and Estimation of Alcohol in Biological Fluids" by Means of Gas Chromatography at Central Forensic Science Laboratory (CFSL), Hyderabad. She worked as a Project Analyst (2005-07) in Telangana Pollution Control Board (TPCB -

Central Laboratory), Hyderabad. In 2008 she received Masters Degree in Chemistry from Nagarjuna University. She then worked (2008-09) as Analyst for Universal Enviro Associates Pvt Ltd, dealing with water analysis. Prior to joining IHS, she was Team Leader - Environment in Bhagavathi Ana Labs Pvt.Ltd., Hyderabad and received Internal Auditor training on integrated management systems. Presently she is Chemical Analyst at IHS since 1st Aug, 2017.

### **S. Pavan Kumar, Joint Chemical Analyst:**

Mr. Pavan Kumar has completed Masters degree in the field of Organic Chemistry in the year 2014 from Jawaharlal Nehru technological University of Hyderabad. He participated in seminars on organic reactions and mechanisms, organic synthesis, Protective groups, Stereochemistry. He worked in the Rural water supply and Sanitation department of A.P on water quality monitoring surveillance. He monitored chemical quality of all the drinking water sources once in a year and bacteriological quality of all the drinking water sources twice in a year (pre & post monsoon periods). He used to do water testing of 12 Parameters like pH, EC, Alkalinity, Hardness, Calcium, chlorides, Fluorides, Nitrates, Sulphates, Iron, Sodium, potassium for all 13 districts of Andhra Pradesh at state level lab and then compare sub division level lab water testing results with the state level lab testing results. He trained in ISO/IEC 17025:2005 and faced NABL audits. He is working at IHS as Joint Chemical Analyst from 16th Dec 2019.

### **K. Laxmi Prasanna, Microbiologist:**

K.Laxmi Prasanna, did her post-graduation in Microbiology from Jahnvi Degree & PG College, Hyderabad in 2016, affiliated to Osmania University. Her Internship in Microbiology Lab Technique at IHS was completed by Apr 2019. After completion of internship, she was appointed as Microbiologist and worked from Apr 2019 to 15-10-2020.

### **H. Swapna, Laboratory Technician:**

Ms Hanamkonda Swapna did her post graduation in Organic Chemistry, from SRPG College hanamkonda, warangal affiliated to the Kakatiya University, in 2017. She worked as a JL Lecturer in Narayana JR College in Kollur Hyderabad & worked My Rank as a Chemistry Faculty in Dilsukh Nagar. She completed internship in Laboratory Techniques at IHS by 07th June 20. After completion of internship, she was appointed as Laboratory Technician and worked from 08th June 2020 to 30th Sep 2020.

### **B.V.Victoria Biology Lab Technician:**

B.V.Victoria, did her postgraduation in Biotechnology in 2017, from University College of Science, Saifabad, Hyderabad, affiliated to Osmania University. She did the project "Isolation & Identification of E.coli & Lambda phage by Multiplex PCR" from Mahatma Gandhi National Institute of Research & Social Action, Hyderabad, that is published in International Journal of Applied Research 2017;3(5): 827-829. She attended the seminars related to DNA. Her Internship in Microbiology Lab Technique at IHS, started on 27-04-2018 and completed by 10th July 2019. She worked as Microbiologist in Vitro Labs from July 2019 to Sep 2019. Now, she is working as Laboratory Technician from 30th September 2019.



## **D Krishna Veni, Lab Registrar Cum Front Office Executive:**

Ms. Dasari Krishna Veni, graduated with Mathematics, Physics and Chemistry from A.V.College, affiliated to the Osmania University, in 2009. She completed an internship on Front Office Management at IHS by 31st March 2010. She is conversant with scope of various laboratory services, registration of laboratory test requests, tracking & delivery of test reports, procurement of office stationery & inventory management, maintenance of library catalogue in Procite, supporting events & meetings. She maintains contact with clients and follows-up to gather client feedback. She is working as Front Office Executive and Lab Registrar since 01st September 2010.

## **A. Vijayendra Mohan, Water Safety Surveyor:**

Sri Vijayendra graduated in Microbiology, Zoology and Chemistry (BSc MbZC) from New Science Degree College, Hanamkonda, affiliated to the Kakatiya University, in 2011. In 2015, he completed his Masters Degree in English from the University College, affiliated to Telangana University. He worked for some time as a Computer Operator in BPL. His internship on Back Office Management and Program Implementation, at IHS started from 13th July, 2017. He took leave from 12th Jul 2018 to 10th Oct 2018, to prepare for National Eligibility Test (NET) being conducted by University Grants Commission (UGC). He resumed the internship from 11th Oct 2018 and completed by 28th February 2019. After completion of internship, he has been appointed as Water Safety Surveyor and worked from 01st March 2019 to 29-02-2020. Then he resigned due to personal reasons. Again, he was appointed as Water Safety Surveyor and worked from 12th May 2020 to 30th Nov 2020.

## **Y. Shirisha, Data Processing Officer:**

Yeramalla Shirisha graduated from Ideal degree college for women. She took training course in Core Java from APEC Institute at Dilshuknagar, Hyderabad. Later, she worked as Software Trainer in the same Institute for 2 years. She trained students in Programming Languages like (C, C++, C#), Technologies (Asp.net, MVC), Database (ORACLE 9i & 11g, SQL, PL/SQL), Web Development (HTML, PHP, CSS). She also worked on projects using HTML and CSS and Dotnet. She has completed her 1-year internship at IHS in software development - EpiInfo by the end of August 2019. She is working as Data Processing Officer and Research Asst since 1st Sep 2019.

## **B. Hasanathi, Data Processing Intern:**

Ms. Hasanathi is holding BCA a degree from Nizam college, Basheerbagh. Her academic project during graduation was on "AUTOMOBILE EMI MANAGEMENT SYSTEM". After completion of degree, she trained in Hardware and Networking from SNIT institute at Dilsukhnagar and qualified as "Microsoft Technology Associate". Then she took training in "Multimedia and Animation" from Peers Technologies at Maithrivanam, provided by Ni-msme Entrepreneurship & Skill Development Programme (ESDP). She did internship on Data Processing in IHS from 04th Dec 2018 to 30th Dec 2019. After internship she was appointed as Data Processing Officer and Research Asst and worked up to 31st Dec 2020.

## **G. Jaya Krishna, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Nalanda Junior College, Hyderabad which is affiliated to the State Board of Intermediate Education. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection by 31st



Dec 2010. He worked as Water Quality Investigator / Field Surveyor for MCC from June 2011 to 30th Sep 2020.

### **K. Prabhakar, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Nava Chaitanya Junior College, Hyderabad affiliated to the State Board of Intermediate Education. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), by 31st Aug 2015. He is working as Water Quality Investigator / Field Surveyor for MCC since June 2017.

### **M. Ajay Kumar, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Gowtham Junior College, Hyderabad which is affiliated to the State Board of Intermediate Education. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection, by 31st Oct 2019. Water Quality Investigator / Field Surveyor for MCC since 01st July 2020.

### **T. Bharath, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Nava Chaitanya Junior College, Secunderabad which is affiliated to the State Board of Intermediate Education. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection, by 24th June 2020. Water Quality Investigator / Field Surveyor for MCC since 01st July 2020.

### **B. Venkateshwarlu, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Maharshi Junior College Cheril, which is affiliated to the State Board of Intermediate Education. Completed internship at IHS, on Field Testing of Residual Chlorine & Water Sample Collection, by 3rd Oct 2017. He is working as Water Quality Investigator from 01st Oct 2018.

### **D. Ashok Kumar, Water Quality Investigator:**

Graduate in B.Sc Botany, Bio-Technology and Chemistry from National Degree College, Palavanha which is affiliated to the Kakatiya University. Completed internship at IHS, on Field Testing of Residual Chlorine & Water Sample Collection, by 24th July 2017. He worked as Water Quality Investigator / Field Surveyor for MCC from 01st Aug 2018 to 07th March 2020.

### **K. Karthik, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Wesley Junior College, Hyderabad which is affiliated to the State Board of Intermediate Education. He did graduation in Bachelor of Commerce from RK Degree College, Hyderabad which is affiliated to the Osmania University. Completed internship at IHS, on Field Testing of Residual Chlorine & Water Sample Collection, by 5th August 2017. He is working as Water Quality Investigator from 01st Aug 2018.

### **Mohd. Afzaluddin, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Narayana Junior College, Hyderabad which is affiliated to the State Board of Intermediate Education. Completed internship at IHS, on Field Testing of Residual Chlorine & Water Sample Collection, by 4th July 2017. He is working as Water Quality Investigator from 01st Aug 2018.

### **S. Anil Kumar, Water Quality Investigator:**

Graduate in B.Sc Botany, Physics, and Chemistry from Vijaya Sai Degree College, Siddipet which is affiliated to the Osmania University. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection by 11th August 2017. After internship, he worked as Water Quality Investigator from 01st Aug 2018 to 1st Feb 2020. He also assisted in house keeping and accounts at IHS.

### **M. Pavan Kalyan, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from Gowtham Junior College, Hyderabad which is affiliated to the State Board of Intermediate Education. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection, by 31st Oct 2019. He is working as Water Quality Investigator from 01st Nov 2019.

### **M. Durga Prasad, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from New Chaitanya Junior College, Hyderabad affiliated to the State Board of Intermediate Education. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), by 31st March 2020. He is working as Water Quality Investigator from 01st April 2020.

### **N. Ravinder, Water Quality Investigator:**

Graduate in Bio Technology from Sri Indu College of Eng & Technology, Ibrahimpatnam which is affiliated to the JNTU. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection by 31st March 2020. He is working as Water Quality Investigator from 01st April 2020.

### **Mohammed Moiz Uddin Ahmed, Water Quality Investigator:**

Intermediate with Mathematics, Physics and Chemistry from MS Junior College, Hyderabad affiliated to the State Board of Intermediate Education. Completed internship at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), by 31st March 2020. He is working as Water Quality Investigator from 01st April 2020.

## Annex - 1B

### Outgoing Personnel in 2019-20 & 2020-21(Ytd).

#### Faculties & Associates:

Name	Designation	Join date	Leave date	Remarks
2019-20				
None				

#### Data Processing, Research Assistants & Investigators:

Name	Designation	Join date	Leave date	Remarks
2019-20				
None				
2020-21				
1 B. Hasanathi	Data Proc Officer & RA	01-01-2020	31-12-2020	Resignation due to personal reasons

#### Water Quality Lab Personnel:

Name	Designation /project	Join date	Leave date	Remarks
2019-20				
1 S.Anil Kumar	Water Quality Investigator	11-08-2017	01-02-2020	Resignation for better prospects
2 D.Ashok Kumar	Water Quality Investigator	24-07-2017	17-03-2020	Termination due to irregular attendance.
2020-21				
1 L. Rakesh	Sr. Microbiologist	01-09-2017	31-08-2020	Term Completion
2 G. Jaya Krishna	Water Quality Investigator	16-12-2009	30-09-2020	Resignation
3 H. Swapna	Lab Technician	26-12-2018	30-09-2020	Resignation due to personal reasons
4 K.Laxmi Prasanna	Microbiologist	07-03-2018	15-10-2020	Resignation due to health problems
5 A. Vijayendra Mohan	Water Safety Surveyor	01-03-2019	30-11-2020	Resignation for joining in Govt.

#### General Support

Name	Designation/Project	Join date	Leave date	Remarks
None				

Notes: Join date is the first day of the current spell of personal affiliation with Institute. However, the nature of initial affiliation might have been different from the status at the time of exit. For example, a person may join as an intern or apprentice and may then be employed by the Institute at the end of internship. Similarly, the designation of those employed may change from the date of entry to the date of exit.

## Annexure-2

### IHS Participation in Training Programs, Workshops, Seminars and Conferences in 2019-20 & 2020-21 (Ytd)

#### Dr. D. Neela Priya, Dy Director and Faculty

Course/Workshop Title	Institution	Dates
Laboratory System & Internal Audit Training as per ISO/IEC 17025:2017	Quality Council of India, New Delhi	2020 Nov 26-27

#### P. Sravanthi Reddy, Chemical Analyst and Research Associate

Course/Workshop Title	Institution	Dates
Refresher Training on ISO/IEC 17025 General requirements for the competence of testing laboratories	Internal training at The Institute of Health Systems by G. Surendra, Director	2019 Apr 05
Awareness training on ISO/IEC 17025	Internal training at The Institute of Health Systems by G. Surendra, Director	2020 Jan 10
Refresher training on ISO/IEC 17025	Internal training at The Institute of Health Systems by G. Surendra, Director	2020 Jun 17

#### M. Lavanya, Laboratory Technician

Course/Workshop Title	Institution	Dates
Refresher Training on ISO/IEC 17025 General requirements for the competence of testing laboratories	Internal training at The Institute of Health Systems by G. Surendra, Director	2019 Apr 05

#### H. Swapna, Intern in Laboratory Technique

Course/Workshop Title	Institution	Dates
Refresher Training on ISO/IEC 17025 General requirements for the competence of testing laboratories	Internal training at The Institute of Health Systems by G. Surendra, Director	2019 Apr 05
Refresher training on ISO/IEC 17025	Internal training at The Institute of Health Systems by G. Surendra, Director	2020 Jun 17

#### S. Pavan Kumar, Joint Chemical Analyst

Course/Workshop Title	Institution	Dates
Awareness training on ISO/IEC 17025	Internal training at The Institute of Health Systems by G. Surendra, Director	2020 Jan 10
Refresher training on ISO/IEC 17025	Internal training at The Institute of Health Systems by G. Surendra, Director	2020 Jun 17

## Annexure-3

### IHS Publications in 2019-20 & 2020 -21 (Ytd)

#### **Reports:**

#### **Working Papers:**

WP70/2019      Community Health Workers and Access to Primary Healthcare: A Qualitative Study of Accredited Social Health Activists (ASHAs) from a Primary Health Centre in Telangana State, India

#### **Books:**

NIL

## Annex -4A:

### Fellows & Interns, in 2019-20 & 2020-21(Ytd).

#### **Dr. Nidhita Madugula, Intern:**

Dr. Nidhita graduated with an M.B.B.S degree from Soochow University, China and then took up two years course of Masters in Public Health in Amity University, Noida. She requested for short term internship at IHS and it is accepted. She has been guided on Metro Consumer Complaints Surveillance Project. She trained in field work of MCC survey, Residual Chlorine testing, Sample Collection, data entry in EpiInfo and data analysis. She did her internship from 5th Feb 19 to 2nd Apr 19 and learned the household survey, water sample collection, data entry and analysis.

#### **A. Divya Jyothi, Intern in Laboratory Technique:**

A. Divya jyothi did her M.Sc. in Biotechnology in 2014, from Loyola Academic Degree and PG College, affiliated to Osmania University. She did a project "Optimization of Monoplex PCR for OXA-23 in Acinetobacter baumannii isolate" from Global Medical Education & Research Foundation, Lakdikapool, Hyd, and worked for 1 year in the same lab as a molecular lab technician. Her Internship in Microbiology Lab Technique at IHS, started on 16-04-2018 and completed by 10-07-2019.

#### **B.V. Victoria, Intern in Laboratory Technique:**

B.V.Victoria, did her post graduation in Biotechnology in 2017, from University College of Science, Saifabad, Hyderabad, affiliated to Osmania University. She did the project "Isolation & Identification of E.Coli & Lambda phage by Multiplex PCR" from Mahatma Gandhi National Institute of Research & Social Action, Hyderabad, that is published in International Journal of Applied Research 2017;3(5): 827-829. She attended the seminars related to DNA. Her Internship in Microbiology Lab Technique at IHS, started on 27-04-2018 and completed by 10th July 2019.

#### **B. Hasanathi, Intern in Data Processing:**

Ms. Hasanathi is holding BCA a degree from Nizam college, Basheerbagh. Her academic project during graduation was on "AUTOMOBILE EMI MANAGEMENT SYSTEM". After completion of degree, she trained in Hardware and Networking from SNIT institute at Dilsukhnagar and qualified as "Microsoft Technology Associate". Then she took training in "Multimedia and Animation" from Peers Technologies at Maithrivanam, provided by Ni-msme Entrepreneurship & Skill Development Programme (ESDP). She did internship on Data Processing in IHS from 04th Dec 2018 to 30th Dec 2019.

#### **H. Swapna, Intern in Laboratory Technique:**

H. Swapna did her M.Sc. in Organic Chemistry in 2017, from SRPG College in hanamkonda Warangal, affiliated to Kakatiya University. She worked as Junior Lecturer in Narayana JR College in Kollur Hyderabad. She also worked in My Rank as a Chemistry Faculty in Dilsukh Nagar. She did her Internship in Lab Technique in Chemical lab from 04-12-2018 to 7th Jun 2020.

### **D. Giridhar, Intern in Water Safety Program:**

Mr.D. Giridhar is an engineering graduate in B.Tech in EEE from Geethanjali College of Engineering & Technology. He worked as a Technical Support Associate in Genpact for Go-daddy process for 13 months. And he also worked in Senior Associate in Wipro BPS for the period of 15 months. He is doing internship in Water Safety Program at IHS from 01st January 2020.

### **B. Kumari, Intern in Laboratory Technique:**

B.Kumari did her B.Sc. in Microbiology, Zoology and Chemistry in 2011, from RBVRR Womens Degree College in Hyderabad, affiliated to Osmania University. She worked as Microbiologist for 1 year in Archeese Laboratories Hyderabad. And also worked in My Rank as a Chemistry Faculty in Dilsukh Nagar. Her Internship in Microbiology Lab Technique at IHS, started from 21-08-2019 , but left on 31-03-2020 due to health problems.

### **K. Kalyan Kumar, Intern in Field Testing and Sample Collection:**

Intermediate with Mathematics, Physics and Chemistry from Vivekanada Junior College, Hyderabad affiliated to the State Board of Intermediate Education. His internship started at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), from 13th March 2020.

### **N. Sandeep, Intern in Field Testing and Sample Collection:**

Intermediate with Mathematics, Physics and Chemistry from Shantiniketan Junior College, Hyderabad affiliated to the State Board of Intermediate Education. His internship started at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), from 15th May 2020.

### **Mohammed Jilani, Intern in Field Testing and Sample Collection:**

Intermediate with Mathematics, Physics and Chemistry from Sri Sai Vidya Vikas Junior College, Hyderabad affiliated to the State Board of Intermediate Education. His internship started at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), from 15th May 2020.

### **S. Nagaraju, Intern in Field Testing and Sample Collection:**

Intermediate with Mathematics, Physics and Chemistry from Nava Chaitanya Junior College, Hyderabad affiliated to the State Board of Intermediate Education. His internship started at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), from 15th May 2020.

### **M. Suresh, Intern in Field Testing and Sample Collection:**

Graduate in Maths, Physics & Computer Science from Santhosh Degree College in 2017. His internship started at IHS on Field Testing of Residual Chlorine & Water Sample Collection (Water Quality Investigation), from 15th June 2020.

### **K. Bhavani, Intern in Laboratory Technique:**

Ms K. Bhavani did her graduation in Life science microbiology, biochemistry and Chemistry, from Aurora Degree & PG College, Hyderabad affiliated to the Osmania University, in 2019. She is pursuing her M.Sc Microbiology from Mumtaz PG College in



Hyderabad. She is doing her internship in Laboratory Techniques at IHS-Biology Lab from 01st July 20.

### **M. Sai Chaitanya, Intern in Laboratory Technique:**

Ms M. Sai Chaitanya did her graduation in Microbiology, botany and Chemistry, from Sarojini Naidu Vanita Maha Vidyalaya, Hyderabad affiliated to Osmania University in 2018. She is pursuing her M.Sc Microbiology from Aurora Degree & PG College, Hyderabad affiliated to the Osmania University. She is doing her internship in Laboratory Techniques at IHS-Biology Lab from 14th Sep 2020.

### **A. Rajendra Mohan, Intern in Field Testing and Sample Collection:**

Intermediate with Mathematics, Physics and Chemistry from Narayana Junior College, which is affiliated to the State Board of Intermediate Education. His internship started at IHS on Water Quality Investigator / Field Surveyor for MCC since 01st Sep 2020

### **A. Nikitha, Intern in Laboratory Technique:**

Ms A. Nikitha did her Post Graduation in Microbiology, from Siddharrtha Degree & PG College affiliated to Osmania University in 2018. She is doing her internship in Laboratory Techniques at IHS-Biology Lab from 12th Oct 2020.

## Annex - 4B

### Outgoing Fellows, Interns and Apprentices, in 2019-20 & 2020-21 (Ytd).

#### Fellows:

Name 2019-20	Designation	Join date	Leave date	Remarks
Nidhita	Research Fellow	05-02-2019	02-04-2019	Fellowship Completion

#### Water Quality Lab Interns:

Name 2019-20	Practice & Skill	Join date	Leave date	Remarks
Jahangir	Field Testing & Sample Collection	01-4-19	31-04-19	Resignation as he could not cope up with the field work.
Rajendra Mohan	Field Testing & Sample Collection	25-02-19	30-06-19	Resignation due to long distance from home
Narendra Bhupathi	Field Testing & Sample Collection	06-10-18	06-07-19	Resignation due to family problems
A. Divya Jyothi	Lab Technique	16-04-18	10-07-19	Term Completion.
B.V.Victoria	Lab Technique	27-04-18	10-07-19	Term Completion.
S. Sowmya	Lab Technique	16-07-19	16-08-19	Termination for non-performance.
S. Rohit	Field Testing & Sample Collection	07-07-19	07-09-19	Continuous absence due to death of his father.
B. Kumari	Lab Technique	21-08-19	31-03-20	Resignation due to health reasons.
2020-21				
N. Pranay Bhaskar	Field Testing & Sample Collection	02-11-19	01-04-2020	Continuous absence to be with parents in Covid19 situation

#### General Support Interns:

Name 2019-20	Designation/Project	Join date	Leave date	Remarks
None				

#### Apprentices:

Name 2019-20	Designation	Join date	Leave date	Remarks
None				

## Annexure-5

*Revenue from IHS Laboratory Services*

Year	Source of Revenue				Total
	HMWSSB	EM-ResPj	IM-ResPj	Public	
2006-07	1,280,650	212,521	0	20,575	1,513,746
2007-08	1,263,000	450,000	0	34,465	1,747,465
2008-09	1,178,680	412,670	0	45,913	1,637,263
2009-10	1,519,475	100,800	0	75,375	1,695,650
2010-11	3,057,846	203,500	0	96,325	3,357,671
2011-12	3,966,215	8,400	0	92,700	4,067,315
2012-13	4,832,964	0	0	89,775	4,922,739
2013-14	3,670,530	132,750	0	90,000	3,893,280
2014-15	5,295,762	35,040	0	131,450	5,462,252
2015-16	6,347,591	16,000	0	245,925	6,609,516
2016-17	6,607,801	225,368	159,000	365,265	7,357,434
2017-18	8,238,634	171,269	600,000	465,252	9,475,155
2018-19	8,866,030	0	1,061,000	416,001	10,343,031
2019-20	9,424,789	117,350	1,511,400	323,200	11,376,739
2020-21 YTD	6,663,456	59,800	756,000	127,250	7,606,506

HMWSSB = Hyd Metro Water Supply & Sewerage Board - monitoring of residual chlorine in reservoirs, and slum area; ResPJ-EM = Water quality testing services for research projects in other (extramural) agencies, ResPj-IM = Water quality testing services for research projects in IHS, Public = Over the counter, water quality testing services to general public.

## Annex-6:

## IHS Revenue Trends by sources and by activity

Year	Gross Revenue			Revenue by Type of Activity			
	Domestic	Foreign	Total	Research & Consultancy	Public Services	Academics & Training	Others
1999	₹ 20,66,525	₹ 0	₹ 20,66,525	₹ 14,40,625	₹ 42,542	₹ 6,65,900	₹ 1,41,553
2000	₹ 42,49,243	₹ 27,20,925	₹ 69,70,168	₹ 38,34,275	₹ 21,569	₹ 12,37,020	₹ 28,65,737
2001	₹ 45,60,092	₹ 56,68,363	₹ 1,02,28,455	₹ 95,27,906	₹ 36,152	₹ 5,96,257	₹ 68,140
2002	₹ 71,62,946	₹ 24,51,095	₹ 96,14,041	₹ 70,29,835	₹ 37,236	₹ 15,56,105	₹ 9,90,865
2003	₹ 67,18,690	₹ 47,84,857	₹ 1,15,03,547	₹ 93,89,693	₹ 53,384	₹ 10,43,050	₹ 2,79,991
2004	₹ 73,29,734	₹ 8,26,363	₹ 81,56,097	₹ 66,76,243	₹ 1,42,190	₹ 7,44,408	₹ 6,20,288
2005	₹ 41,80,215	₹ 4,70,160	₹ 46,50,375	₹ 38,72,674	₹ 98,175	₹ 0	₹ 6,79,526
2006	₹ 53,19,507	₹ 18,45,761	₹ 71,65,268	₹ 55,55,979	₹ 10,45,095	₹ 0	₹ 6,12,519
2007	₹ 68,98,526	₹ 14,14,996	₹ 83,13,522	₹ 70,10,918	₹ 11,64,000	₹ 0	₹ 1,38,604
2008	₹ 79,85,882	₹ 8,40,277	₹ 88,26,159	₹ 75,64,690	₹ 11,74,555	₹ 0	₹ 86,914
2009	₹ 48,08,436	₹ 0	₹ 48,08,436	₹ 26,47,624	₹ 15,15,120	₹ 1,75,000	₹ 4,70,692
2010	₹ 67,74,122	₹ 0	₹ 67,74,122	₹ 50,54,076	₹ 12,85,368	₹ 0	₹ 4,34,678
2011	₹ 46,99,440	₹ 0	₹ 46,99,440	₹ 10,30,706	₹ 29,07,903	₹ 0	₹ 7,60,831
2012	₹ 94,08,422	₹ 0	₹ 94,08,422	₹ 50,88,933	₹ 40,77,380	₹ 0	₹ 2,42,109
2013	₹ 58,09,751	₹ 0	₹ 58,09,751	₹ 0	₹ 49,22,964	₹ 0	₹ 8,86,787
2014	₹ 53,56,163	₹ 0	₹ 53,56,163	₹ 2,72,700	₹ 38,95,080	₹ 0	₹ 11,88,383
2015	₹ 69,65,291	₹ 0	₹ 69,65,291	₹ 8,53,800	₹ 54,62,252	₹ 0	₹ 6,49,239
2016	₹ 64,19,805	₹ 0	₹ 64,19,805	₹ 1,68,000	₹ 59,80,642	₹ 0	₹ 2,71,163
2017	₹ 75,90,076	₹ 0	₹ 75,90,076	₹ 4,32,859	₹ 62,15,371	₹ 1,62,000	₹ 7,79,846
2018	₹ 1,18,02,862	₹ 0	₹ 1,18,02,862	₹ 14,27,577	₹ 77,47,882	₹ 70,000	₹ 25,57,403
2019	₹ 1,33,50,640	₹ 0	₹ 1,33,50,640	₹ 31,49,653	₹ 96,79,790	₹ 10,000	₹ 5,11,197
2020	₹ 1,57,34,668	₹ 0	₹ 1,57,34,668	₹ 41,27,949	₹ 1,13,76,739	₹ 0	₹ 2,29,980
2021	₹ 1,67,65,905	₹ 0	₹ 1,67,65,905	₹ 47,59,424	₹ 1,19,01,456	₹ 0	₹ 1,05,025

Institute's financial years are from April to March. Here each financial year is represented by the calendar year in which the financial year ends. For example, 1991 = FY 1990-91.

Figures for current financial year (2020-21) is an estimate based on year to date + anticipated receipts.

Date: 06/02/2021

G Surendra, Director



The Institute of Health Systems, HACA Bhavan, Hyderabad, TS 500004, India.

Page 24 of 24

