

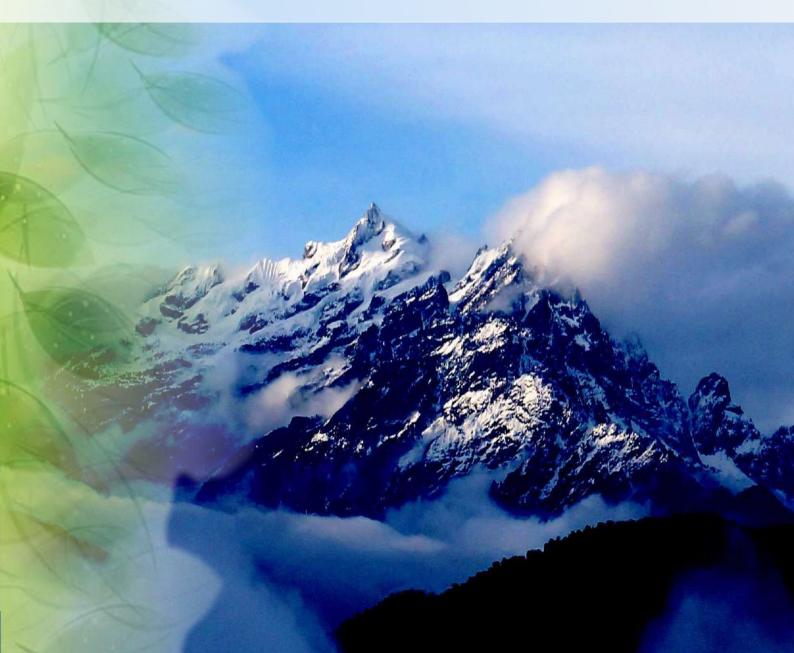
# IIPSAA

# E- Newsletter

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**IIPSAA Fraternity-Take Pride-Demographers Matter!** 

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Designed by: Chandrakala R.

Photography : The Majestic Himalaya, Sikkim by Aparajita C.

# **Editorial**



Time flies.....



We are fortunate to express our respect for our beloved Prof. Kanitkar before her last breath. She was reading that day "Being Mortal", and she remains immortal..... as Tagore says. "Death is not extinguishing the light; it is putting out the lamp because the dawn has come."

Archana and Aparajita.

02.03.16

#### Letters to the Editor

Hi Aparajita didi

Here is my interaction bit ......

Overall, the experience was positive and I was impressed:

On 11<sup>th</sup> December, I landed in Mumbai after having a few hectic weeks filled with deadlines that resulted in my typical sleep deprived look. Mumbai city with a poor air quality welcomed us with a thick layer of pollution and the Marine Drive pollution board advised Mumbaikar's to restrict their outdoor activity on that day. Yes, nothing is looking good from outside. However, I had a big smile on my face and none of these mattered as I was gearing up to contribute to a **workshop on Scientific Writing** at the International Institute for Population Sciences, the institute where I was trained as a demographer.

When creating the slides prior to the workshop, I wondered about the student quality as I wanted to align the quality of my lectures with the quality of the 49 PhD students attending the workshop and their enthusiasm. To find an answer to this question, I designed the first hour of the workshop to test the waters and identify the gaps that could be addressed during the lectures. The following conclusions were derived from the testing stage:

The PhD scholars are enthusiastic and love being challenged. If you don't challenge them, they are not interested in your lecture. They are the new world students. Without engaging with them in learning activities, any lecturer has to surrender. They were not introduced to systematic literature search, systematic way of identifying research questions and plagiarism. They were aware of these topics in bits and pieces but they required a proper training on these topics. Some of the students lacked confidence in expressing their views in English. I felt that these talented people required some push and confidence boosting.

Students focused heavily on datasets and were eager to run a regression analysis without conducting a proper literature search or designing a research question. They needed to be trained in research ethics. They had a lot of questions on definition of self-plagiarism and ways to avoid plagiarizing ideas of friends, colleagues and national and international researchers. They thoroughly enjoyed the group work and the competitive spirit. They needed a bit of appreciation along with challenges. They needed activities that inspired their minds. I felt that I needed to translate their needs into objectives of the workshop rather than presenting them as their weaknesses.

Very often the PhD scholars came with very broad questions rather than anything specific. When I asked them to create a research question and a few sub-research questions when teaching the qualitative methods, they created 7-8 broad sub-questions rather than a couple of specific questions. At times, these sub-questions did not align with the big research question. I felt that I needed to train them in framing research questions.

Finally, students were not familiar with the style of qualitative research and the need for qualitative research. They constantly conveyed numbers when discussing qualitative research. They needed a strong lecture on qualitative vs quantitative methods and the differences in the methodology.

Taking all these factors into consideration, the rest of my three-day workshop on Scientific Writing focused on making the students engage in activities related to the gaps identified above rather than forcing them to listen to dry long lectures. The other aim was to measure progress of students in filling the knowledge gaps.



The following activities were designed to fill the knowledge gaps:

Students were asked to form small groups and they were encouraged to come up with a research topic that excites the team that could be converted into a research paper. Later these groups were asked to frame qualitative and quantitative research questions on the topics they have selected. These questions received peer as well as expert feedback. Teams were encouraged to create a mind map of their research topic and peer and expert feedback was provided again.

Student teams were asked to conduct literature review on their topic by systematically selecting search terms and search engines. Tips were provided on improving their search and later feedback was provided on the team strategy. Research ethics were discussed thoroughly openly. Finally, students were asked to present their plan for creating a research paper. The aim of the presentation was to give feedback to students on the methods of research writing rather the content. I thoroughly enjoyed the teaching. Students were meticulously interactive and had several questions. Feedback throughout the workshop included both peer and expert advice. The highlight to me was the presentation of two shy students that never presented earlier due to confidence issues. On the third day of workshop they had confidence to present the views of the team. They told me that they felt encouraged and inspired by the activities I have designed. This response made my day!! As a teacher I want to reach all the students rather than the enthusiastic bunch only. The other highlight of my trip was interaction with IIPS staff and a warm welcome by the IIPS alumini group head Professor Arokiasamy and the director of IIPS Professor Ram. The other highlight was my stay in the hostel, which was very memorable. Thanks to staff and students for making this trip memorable. I can't thank enough Dr Dipti Govil and Dr Archana Roy for their 24/7 availability to ensure the smooth running of the workshop. I would love to repeat the workshop anytime any day!

Meera, 12.03.16

#### **Invited Biography**

#### My biographical links with India's population concerns : K. Srinivasan



I became an independent earning member of my family on 18 August 1954 when I was 19 years of age, officially after finishing my Honours Course in Mathematics from St. Joseph's college, Trichinopoly, now called Thriruchirapalli, in Madras state (now Tamil Nadu). Being the eldest of a family of seven children to my parents, my father being a middle level railway official of Southern Railway, we all grew up in railway quarters, always adjacent to the railway track and railway stations. Even the school fees of Rs 5 per month and college fees of Rs 50 per quarter were considerable share of my fathers' income from the railways. My father's dream about me was quite big; to become an IAS officer or an equivalent in the railways and show to his bosses how great his son is, since I was always a good student of my class and had passed my Honors' examination with a first class. According to him a

student good in mathematics should be good in every subject since he was very weak in mathematics and had barely passed in mathematics in his matriculation examination. My grandfather (mother's father) told me in private that my father had actually failed in mathematics and got a pass because of the minimum required in the aggregate as an alternative at that time! But to appear for this competitive examination, one should have completed 21 years of age at that time and I cannot be idle for two years with no income for the family when other brothers and sisters were growing up. My youngest sister at that time was one year old and we were living in a small sized railway quarters. I always felt the population pressure at home with no separate room or bed of my own!. My father and I searched for a job for me in many places including a possible recruitment in the army for which I was disqualified on the grounds of poor physique, a lecturer's post in mathematics that was usually given to students of one's own college and no vacancy



existed in St. Joseph's at that time. Finally, through an introduction of a friend of my father working in railway accounts, I applied for the post of an Upper Division Clerk (gloriously called an Auditor, among themselves) in the office of the Accountant General, Madras. I should say here that I was duly selected after an interview by the Accountant General himself. I was elated beyond belief and words, though my scale of pay was Rs 80 per month and with all allowances it was Rs 108 in the scale of Rs. 80-4-100 implying an annual increment of Rs 4 reaching a maximum of Rs 100 basic pay in just 5 years. Though the salary was nothing to write home about, everyone of my family was elated except my father who was a bit disappointed that his son is not entering the glorious IAS straightaway. The person who was most

thrilled was my maternal grandfather (who was an elementary school teacher in a private school and just retired). He was saying that if I continue in this office and pass some departmental examinations, I will definitely become an Assistant or Deputy Accountant General in the same office after 30 years and retire with a handsome pension. I was also a bit carried away with his line of argument. For the first time, I bought a full pant for going to the office and my grandfather paid for it and my grandmother (father's mother) bought me a new wrist watch from her meager savings. Earlier in my school and college days I used to go to school or college in half pants or a dhoti, if I wanted to hide my flocking hairs in my legs. I walked like a film hero to my job in the Office of the Accountant General, Madras which was at that time located in St. George's Fort in the barracks where many government offices were located. It was 18th August 1954, an auspicious day fixed by my father and grandfather. I reported to my Superintendent of the concerned section to whom I was supposed to report on joining duty. He checked my appointment order, my degree certificate and then asked me to work in the Provident Fund section. The superintendent of that section asked me to assist another senior auditor in that section who in his opinion was overworked; I reported to her (Lalitha was her name, if my memory serves me right) and she was the first woman in my life from whom I took any orders and from the beginning I did not like it. Being the eldest son of a seven sibling family, patriarchal out and out, no woman dares to hand down orders to me from childhood excepting occasionally, my paternal grandmother, who doted on me and used to give the sweets and snacks of my liking.

The first job given to me by Madam Lalitha to hand over was a bunch of sheets with payments of provident amount deducted from various government officials and deposited in government treasuries every month. The amount against each official was in the denomination of rupees, annas and paise. In those days, before the French system of dividing currencies on units of 10 or 100 at the lowest denomination was universally accepted, the British as a natural reaction to anything French had the Indian rupee consisting of 16 annas and each anna had 12 paise. Thus there were 192 paise for each rupee, consisting of 16 annas and each anna having 12 paise. The provident fund statements were a bunch of sheets with rupees, annas and paise marked against each individual with 30 to 35 individuals on each page, written on both sides of a sheet and a normal bunch consisted of 20 to 25 sheets. My duty was to add each page, give the total in rupees, annas and paisa, carry them forward to the next page, repeat it and finally get the grand total.

There was no calculator at that time and I had to add everything manually, first the paisa column, divide the total by 12, leave the residue, add the quotient to the anna columns and divide the total by 16 and leave the residue and add the quotient to the rupee column and get the rupees. The total of any page has to be carried forward to the next page and added with the individual items on the next page. Any error anywhere, the whole process has to be repeated again from the beginning! I complained to Lalitha madam on this laborious job the first day itself and she told me with a sarcastic smile in her face that I am a Maths Honors graduate and I should not grumble on this simple arithmetic work: I carried on this drudgery for many months and I was quite unhappy with my work. Luckily, I was shifted to an inspection team with an Accounts Officer as the head and I had an opportunity to go and inspect (help inspect) the accounts in many government treasuries near Madras. At the end of one year, there was a departmental examination on financial rules and regulations and with my sordid distaste of the whole system I flunked in the examination and the increment I was to get did not come through. I decided to change my job but the monthly salary of Rs100 and odd kept me going. I was looking for an opportunity to get out when 1956 the

Indian Statistical Institute, Calcutta announced a competitive test to select students for their three year advanced statisticians' course in Calcutta, (now called Kolkata). There was also a stipend of Rs 75 per month for the first three months and if one does well in the course in the first there months, he will be continued with an increased stipend of Rs 100 in the first year, 120 in the second year and Rs 140 in the third year. I did not tell anyone in the house about my taking the competitive test and desire to go to Calcutta. Lo and behold, one day in June 1956 I got a letter from ISI Calcutta that I have been selected for the course and I should join there by the first week of August. I jumped at the offer, went straight to my office, submitted my resignation from a permanent government job, came home and informed my mother and grandfather. Luckily my father was away on tour. My family was shocked that I am leaving a permanent job and going to distant Calcutta. I sent a telegram (available to a railway employee through the railway net-work free of cost in those days) and my father promptly turned up the next day. My father was not that unhappy as my grandfather who felt that was missing a pensionable job and going into unknown pastures in an unknown land.

On an auspicious day in August 1956, I boarded the Madras Mail to Calcutta with my parents, brothers and sisters coming to the Madras Central station to see me off. This is first time in my 20 years of life that I am leaving home, my parents to a far of distant city. The most distant town away from Madras that I have gone and that too with my parents was the temple town of Tirupathy for pilgrimage and on many such occasions to have my head shaved off as a token of my parents vow to Lord Venkateswara for some divine help that he had rendered or expected to render. As soon as the train whistled off from the Central station and when I saw my parents, brothers and sisters profiles fading in the distance an uncontrollable sadness enveloped me and I began to shed tears. It was a first class compartment and I had that privilege since my father was a railway official and he was entitled to six free passes in railways for himself and his family and I was availing that privilege. I thought I was going to a foreign land. When I sat in my set with my eyes red with tears, I saw an young girl in the opposite seat sportily reading a magazine and looking at my crying face with the corner of my eye. She put the paper down and asked me as to where I was going. I said to Calcutta. ... Calcutta where? And I said 'Indian Statistical Institute'. She said, she too was going there to join the three year advanced statisticians course. I said I was also going for the same course. She said, she was coming from Trivandrum; she had come the previous day, stayed in a relative's place at Madras one day and boarded the training to Calcutta. At that time, I felt shy having tears in my eyes seeing a girl coming from a more distant Trivandrum and sitting bravely on the train to Calcutta. She was Miss Grace from Kerala University and we became friends during the course. Here was a lady braving the longer trip to Calcutta without any feeling of separation from the family and here I am a man crying with the pangs of separation. Shame on you, I said to myself. The train trip went sharing all our details of family and studies. At Calcutta, I had a wide circle of friends and all studious as all students of statistics and mathematics are but we had our own fun in ISI, Calcutta which really introduced me to India as a country and the varieties of languages and culture that this great country is blessed with. I had friends from almost many states, Bengali, Andhra Pradesh, Punjab, Delhi and Maharashtra. Bengali's twisty of letters 'r" and "s" sometimes embarrassed me. On the second day of my joining ISI, I was going to my class at the Research and Training School (RTS) in the third floor of the building, climbing the stair case.

On the second floor I met Prof. D. Basu, a distinguished professor and I wished him politely "good morning, sir" He immediately responded "shame to you". I was so horrified with this response that I could not concentrate on my studies. What sin have I committed to deserve this response? When I came back to my hostel room in the evening, I told about this to my Bengali friend Dilip Baul. He laughed and said that the professor meant 'same to you' but 's' sometimes had a stronger accent in Bengali and sounds with a h, added as 'sh' and 'same' becomes 'shame'. Life at ISI was easily the best of my student life. The students company was good and I had an endearing friendship with a number of classmates



#### which had lasted for over fifty years.

I joined the Pilot Health Project in Gandhigram, in Madras State, now called Tamil Nadu on 14 May 1959 both as a Gandhian and a Statistician. This was the first professional job I had as a Statistician. I joined in their evening inter-religious prayers, ate hand pounded rice, wore Khadi dhothi and shirt and moved around the villages in bi-cycle. I shared an office room shared with another assistant. There was an aura of being hitched to a great cause of rebuilding rural India which was Gandhi ji's dream and for which purpose Gandhigram was established in 1947. The PHP with which I was associated was an action-research project funded by the Indian Council for Medical Research (ICMR) and the India office of the Ford Foundation to assess first , through a sample survey the health problems of the population in Athoor Block with a population of roughly 100,000 ((in which Gandhigram was located ), take appropriate measures through the Primary Health Centers and Sub-centers mainly with the government resources but with adds on from the Project funds when essential and evaluate the impact of the project after a five year period.

The first job I had to conduct a sample survey in Athoor Block in which Gandhigram was located to identify health problems, facilities and action taken by the people. It was a survey called the Base-Line Survey sponsored by the Ford Foundation and the ICMR; I had six investigators working with me to carry on the field work and I was the supervisor. I was responsible for the sample design and selection of the sample households and our consultant was Dr. C. Chandrasekaran who was at that time Professor of Bio-statistics at the All India Institute of Hygiene and Public Health in Calcutta and who later became the Director of the Demographic Training and Research Centre in Bombay. We had a stratified systematic sample design covering about 2000 households in the block which had about 100,000 populations and the questionnaire was prepared in consultation with him, pretested and copies taken. I had six retired Health Inspectors as field workers for data collection and I was supervising their work, visiting sample households and checking the quality of data collected. During these visits to the households in villages, I had such traumatic experiences of the abjectness of poverty and the miserable health conditions of the people that many days after the field work I was depressed. One particular event that still lingers in my mind after half a century is from a Muslim Household in Sithiancottai. There was a cholera epidemic during our survey and in that village in a sample household with six children four had died due to cholera and the bodies were wrapped up and kept outside the house. The mother was hardly 30 years of age and the children did not have the Cholera inoculation. This sight shook me so much that I became depressed for quite some time. After the field work was completed, the schedules were coded manually, checked again manually, punched into Hollerith 80 column cards and tabulated using laborious tabulation procedures. The baseline survey report was prepared in 1961 after scrutiny and discussions with Dr. C. Chandrasekaran. During the action-phase of the project, a major module added was Family Planning Communication Action Research (FPCAR) mainly funded by the Ford Foundation and similar FPCAR centers were set up in six locales in the country viz., Bombay, Lucknow, Najafgarh , Singur and Trivandram . The objective of this phase is mainly to promote intensive family planning program through education and motivation of eligible couples. This phase of the survey started in 1964 and Prof. Mindel Sheps of Columbia University was a consultant in designing the project and the surveys. She later became an examiner of my PhD thesis on birth intervals submitted to Kerala University in 1967 wherein I have used the data on intervals between the last and last one birth, called the closed birth interval and the interval since the last birth and date of survey, called the open birth interval.

My work in Gandhigram relating the economic and health conditions of the population with the number of children the housewife had heuristically revealed to me that many household problems of health, education and economic condition are aggravated by large family size. The book by Coale and Hoover that was just published in the early 'sixties convinced me that both at the empirical level as well as at macro level that limiting the family size was as much a public health measure as an economic development measure. Born as the eldest of a family of seven children to middle class parents, I was more than personally convinced of this need. My life in Gandhigram played a crucial role in my approach to life and its problems. The overriding importance of righteousness of means over the achievement of results, that was repeatedly emphasized by Gandhi ji appealed to me immensely. I read most of the books written on Gandhi ji. I had the privilege of seeing Gandhi ji in person in 1946 at Mayavaram (where I did my schooling) when my father was station master in railways and Gandhi ji who was touring the south by train had halted a few hours near the station for greeting the people, large crowd that had assembled to see him. The charisma of Gandhii ji lingered on with me for many decades and was partly responsible for my joining the post offered at Gandhigram, later in 1959.

In 1961, I was offered a Ford Foundation fellowship, who was the supporters of the project in Gandhigram, to do the Masters degree in Public Health at the Harvard University School of Public Health, USA. I went to Boston from Gandhigram and as fate would have it took ill and had to undergo two major surgeries and despite these I did fairly well in the school. In this program of Ford Foundation there were 10 fellows in my batch, 5 to Harvard and 5 to Berkley and this continued for 4 years. All the 40 odd fellows who were trained abroad returned to India to serve the country in their respective fields. Going to Boston, staying in the international aura of great scholarship in a developed society and returning back to Gandhigram for work in rural areas seemed traumatic for some time but the power and joy of serving one's own country helped in overcoming these frustrations. One scene that impressed me during my visit to USA during 1961-62 was our student's field visits to many cities in USA. One was our visit to Philadelphia on July 4,1962 when president Kennedy rang the liberty bell and gave the Sate of the Union address. His resounding voice "Ask not what the country can do to you but what you can do to the county", is still a forceful message for many Indians. I had the privilege of seeing and hearing him in person. Living in Gandhigram became a bit difficult economically after I got married in 1961 March. My mentor in Gandhigram, Dr. (Mrs) Soundaram Ramachandran founder of Gandhigram and Dr. Moye W Freymann with the Ford Foundation office in Delhi advised me to do my PhD from Kerala University. Part of their reason to motivate me to do a PhD degree from nearby Kerala University and to retain me in Gandhigram. I did the thesis on birth intervals that got me a number of publications in referred journals and professional reputation.

In 1968 United Nations were opening a Population Division in the Economic Commission for Asia and the Far East (ECAFE) a regional office of the United Nations at Bangkok and I was invited for a regular position in the United nations as Population Officer in the Population Division of the ECAFE, Bangkok and I took up the job in August 1969.. I was assigned my position in the "Fertility and family planning" section. Shifting from a rural area in south India to an international position with the United Nations in Bangkok was socially and psychologically demanding but the relative high income from the United Nations helped me solve many of my financial problems.



The work at The Population Division of ECAFE, Bangkok (later renamed in 1974 as UN Economic and social Commission for Asia and The Pacific- UNESCAP) was avidly promoting studies on fertility levels and trends in the developing countries and the importance of family planning programmes for spacing and limitation of children in these countries. I undertook a number of cross-cultural studies in many countries particularly in India, Pakistan, the Philippines, South Korea, Malaysia, Singapore, Indonesia and others. In addition, I conducted a number of training courses of 3-4 weeks duration on Fertility and family Planning in these countries at the country level or sub-regional level. Mainland China had not become a member of ESCAP at that time. The fertility levels in these countries were higher than that of India and in those years, India was considered as a pioneer or role model for family planning programmes. However, as history later proved these countries were faster in controlling their mortality and fertility levels than India and their high economic growth as a part of the East Asian Tigers is a part of economic history of the world. What went wrong with Indian family planning program? In my view the fault lay in the first step of the program in India that gave prime emphasis to sterilization, vasectomy until 1977 and female sterilization thereafter. Spacing between births as a primary need for the improvement of health and well being of children in all socio-economic strata and the methods of IUDs, oral pills and condoms were not that emphasized. Trying to have quick fix solutions to economic and social problems including public health was the major government strategy and in family planning this also given rise to major problems in the following years. While the other large developing countries of Asia started with spacing methods and meeting the needs of the couples in this field added sterilization to their armamentaria of contraception, India worked the opposite direction, placing sterilization as the top most method of choice for couples and now frantically trying to meet the needs of spacing by younger couples. Same criticisms can be leveled against our educational policy; placing undue emphasis on higher education in the first three decades after our independence and then late trying to fill the needs of primary, middle and secondary education. India also aimed to reach the skies without ensuring whether we are standing on solid grounds or not.

I got disillusioned with the UN system within two to three years because the spate of meetings, workshops and seminars which were overwhelming and the recommendations made in these get-togethers were scarcely read by the countries concerned and least acted upon. My Gandhian core started to rebel against these ostentations and I was looking for an opportunity to get back to India. When I completed five years of service in 1974, the search was intense since in the UN system one is entitled for a pension after 5 years of service, but receivable after 60 years of age. Though the pension is small for those who have completed five years of service, it was enough to make a decent living in India. As luck would have it there was a World Bank funded project called the India Population Project (IPP) just started in the sates of Karnataka and Uttar Pradesh and I applied for the post of Director of the project in Bangalore. I appeared for an interview at Bangalore and I was selected. Though the salary at Bangalore in dollar terms was just one fourth of the salary I was receiving at Bangkok, I took the offer resigning my permanent position in Bangkok against the desires of my family and friends. The chief of Division of Administration of ESCAP at Bangkok to whom I went and submitted my resignation from the UN job told me bluntly that I am a fool resigning a cushy job in the UN and going back to India. He said he would not resign a UN job to go back to England in active working life. Any way I took the decision like a man possessed and came to Bangalore in January 1975 and took up the position as Director, Population Center, India Population Project, Karnataka.

The job in Bangalore, Karnataka was entirely of a different nature and challenging. The area covered by the project was Bangalore division of Karnataka, consisting of six districts and we had to implement alternative strategies to improve maternal and child health and family planning use by the couples. We had a base line survey in these districts, six well planned strategies of program implementation and final evaluation. All the alternative strategies tested were more effective than government run programmes in terms of their outcomes. There were only marginally additional inputs of men and resources from the

project funds. But to upscale them to the state and district level was impossible because of bureaucratic strangleholds. One of the strategies was supervision of the government run primary and sub-centers by a non- governmental organization, in the IPP area it was Family Planning Association of India (FPAI) at Bangalore. Government paid field workers did not like supervision by non- governmental agencies initially but over time they knew that their outputs improved and they had job satisfaction. During the project period, after three years, I was disillusioned that government systems cannot be changed very much by external agencies or by role models of projects but can only be improved with strong political will and a tough monitoring and evaluation.

A few months after I joined the position at Bangalore with the project which was with the Government of Karnataka, the national emergency was declared in June 1975 and the powers of a head of a department of the government (which I was) was enormously increased and the long procedures of giving a written warning, followed by an enquiry by a recognized officer of the government after the reply from the erring officer is received, after informing the person of the proposed action to be initiated, taking the action and the authority facing the necessary consequences from the employees union or in the court of law. These procedures which hurt the action taking officers more than the erring employees are one of the major causes of inefficiency of all the government programmes. This is also one of the reason why there is scrambling for a government position, including large-scale corruption, nepotism and favoritisms because once an individual gets into service from day 1, his job is absolutory secure and it is as good as drawing pension without any work from day 1. There may be a small percentage of government officials who are committed to their work because of moral, ethical and other reasons but majority of them are less than their peak efficiency and outputs are minimal. However, during the emergency, the procedures for erring officials were cut short and all the government officials were made aware of them. Previously during the six months when I was Director from Jan to June efficiency, many staff members used to come at 1030, 1100 when the office starts at 10.00 am and I used to stand outside and ask each one of them why he/she was late. Most of the reasons were family health issues, in-law problems, non-availability of transport etc. The day, the emergency was announced in June 1976 and the Director had powers to suspend any employee for selected reasons, such as gross inefficiency or negligence of work etc. I was standing outside the office gate from 9.30 and all the employees came on time, many even before time. All the family problems, ill health and transport problems etc disappeared in the thin air in the fear of losing the job. It is sad that while we had inherited the iron structure of British bureaucracy in 1947 we had not imbued the British values of timeliness, honesty in work, efficiency and effectiveness. Only fear of losing the job seems to create these values. There is a need to inculcate these values especially among the government employees, at the time of joining duty and regular intervals of time in their career.

One of the shocks of emergency was the program of compulsory sterilization of men in reproductive ages with three or more and sometimes with two living children in shoddily set up sterilization camps. The targets were given to all the government departments especially the police, revenue in addition to health. The force of emergency was not that severe in the southern states of Karnataka, Tamil Nadu and Kerala. The targets on number of acceptors of sterilization given to each government employees of the these three departments were quite stiff and the government worked with renewed vigor in implementing this program and meeting the targets set for them. During my stay in Bangalore during the whole period of emergency June 1975 to March 1977, I have not personally witnessed any coercion or forced sterilization as reported in the states of Delhi, Uttar Pradesh and Maharashtra. The extent to which any authoritarian rule can alter government performance was evident in the number of sterilizations done during the years 1975-1977 compared to the earlier two years. The ratio of these two figures at the state level is grossly indicative of the susceptibility to coercive rule at the state level under an authoritarian structure. The number of sterilizations under a compulsive and coercive programme of family planning spearheaded by Mr. Sanjay Gandhi reached unbelievable levels in the state of Uttar Pradesh, Bihar, Rajasthan, Haryana and

Delhi and Maharashtra compared to the southern states. I wrote against compulsion in family planning to a limited extent but I could not write popular articles since I was a government servant and there was a gag on government servants. With the call for general elections in March 1977 and the total collapse of the Congress Government under Mrs. Indira Gandhi, the family planning programme also collapsed. Of course, the crude birth rate declined in the country by a clear 4 points between 1974 and 1978 but the steady decline that was occurring earlier has been stalled. It was like a golden goose that was laying a golden egg every day to get all the eggs at one time. One thing that reinforced in my mind by the experiences of the emergency period is that there are no shortcuts to demographic transition, that development if it is to be sustainable has to be a slow but painstaking process of good planning and efficient administration and compulsions on social issues are likely to boomerang. While I was just settling down to my life in Bangalore, Dr. Karan Singh the then Health Minister of Government of India visited Bangalore on an official work in June 1977 and chose to visit the Population Center at Bangalore and I made a presentation of the alternative programme implementation strategies that I was trying in the six districts of Bangalore division under the project. He sat through the meeting for an hour and at the end of the day he called me to his hotel room and asked me to apply for the post of Director at the International Institute for Population Studies, Bombay, the post of Director had just then fallen vacant. It was more of a command and I applied for the post, interviewed and got selected. I joined duty there in June 1978.

At IIPS in Bombay (later renamed as Mumbai), it was purely academic work, teaching and research in Population Studies. There was a one-year Certificate Course in Population Studies, a two-year Diploma in Population Studies and the Institute was earlier called Demographic Training and Research Center (DTRC) and was founded under the joint sponsorship of Government of India, United Nations and Sir Dorabji Tata trust. It was one of the five UN regional centers in Demographic training and research and was to cater to training of students from the Asian countries with fellowship from the United Nations. By the time I joined the Institute in 1978, it had gained good reputation in many Asian Countries as an excellent training center in Demography. Many of the researchers in Population Studies in Asian countries were trained at Mumbai center. It had also the benefit of reputed international population specialists such as Profs. Donald Bogue, William Seltzer, Parker Mauldin, Tim Dyson staying there and teaching the students and doing research involving the students for a year or more as United Nations Consultants. Many alumni had become senior demographers in their own countries after their training at Bombay. I was in touch with many of them and they wrote to me that the Certificate and Diploma courses conducted at the Bombay center/institute was of high standard and useful to them but the training did not help them in their career advancement since it was not a recognized degree of a university. Hence the first major thing I did at IIPS, Bombay was to initiate steps in 1978 to make into a Deemed University and the procedures were really long and arduous. I had to pass a resolution to this effect in the Executive Council, the General Council, and then write to Ministry of Education now called Human Resource Development, and UGC, a team from them should visit the institute and assess the suitability of it being made into a Deemed University and gain the Ministry of Health and Family Welfare which was the controlling ministry of IIPS should agree for the conditions before declaring it as a Deemed University. I started the chain of action in July 1978 and it took 7 long years before the Institute was declared as a Deemed University on 14 August 1985. My experience with the government systems at the state and the central level convinced me that the system works mainly to perpetuate the existing order of things and any change needed and felt even by most of the people within the system and outside is collectively resisted and it required enormous efforts and perseverance to make changes in the system. Anyhow, I consider making the IIPS a Deemed University with the collective efforts all the staff members and faculty of the Institute as one of my great achievements with Indian bureaucracy. The following year, we started the Masters of Population Studies (MPS) and there were many applicants.

The second major thing I did was to invite trainees from China to join the course. With the support of the United Nations and the Government of India, the first batch of two students from China were admitted to

the Certificate course in 1981, that included Jiang Zheng Hua, a very bright student, an engineer by basic training and who did a seminar paper directly under my guidance. He was from the communist party and after returning to China rose in position to become the Vice Chairman of the State Family Planning Commission of China, a high level ministerial position in Peoples Republic in China. From 1982 every year two or three students were admitted to IIPS until the program was discontinued by the UNFPA in 1995.

Another achievement that I consider worth mentioning is the commencement of the National Health Survey (NFHS) in India on parallel to the Demographic Health Survey (DHS) undertaken in many countries since the mid-eighties with financial assistance from USAID. The main objective of these surveys that have almost similar questionnaires and data collection procedures is to obtain cross-nationally comparable estimates of fertile and mortality, family planning practices and the levels and differentials in these parameters at periodical intervals of time. Before 1989, as far population and development data are concerned India was a closed country. No primary data in these dimensions could leave the shores of the country without specific permission from a number of Ministries. With liberalization of the economy in 1989, there was also liberalization of data sharing with other countries of the world. And NFHS-1 stared in 1990 and the actual; field work carried out during 1991-92 is a symbol of this liberalization policy of the government. We had also initiated a number of sate level surveys with government funds in the sates of Bihar, Goa and Gujarat, During my tenure of 14 long years at IIPS, I also had the opportunity to serve in many population related committees of the government and in the committee in 1983 I introduced the setting up population goals in terms of both fertility and mortality levels, combined in terms of net reproduction rates, as guidance for the program planners and policy makers. The most significant events that I still cherish from my memories of IIPS are the following.

By 1992, I was beginning to feel that I had served for a long time as the Director of the Institute and I was more involved in administrative work of the Institute and the surveys than on teaching and research that were my primary interest and passion. Luckily I was invited in early 1992 for the position of a Visiting Professor at the University of North Carolina at Chapel Hill in their Carolina Population Center and I accepted the position in October 1992 and left for the United States taking voluntary retirement from the services of the institute.

My experiences with the faculty and students at IIPS and my interactions with the bureaucracy in the Ministry of Health and family Welfare enriched my life in many ways. I realized that my innate desire in life was teaching and research, that the bureaucracy though basically difficult and at times irrational was most of the time helpful and supportive if they felt that I was doing things or instituting changes not for any personal benefit but in the cause of the growth and development of the institution. Without such cooperation from the bureaucracy it would have been impossible for a Director of an institute to make an autonomous Deemed University. Another land mark is my starting the National Family Health Survey (NFHS) which has continued in later years as a series of well conducted sample surveys on health and family planning across the country. Though NFHS is similar to the Demographic Health Survey carried out in many countries it has a stronger health component and hence christened as National Family Health Survey on assuring the quality of data collected is a hall mark of these surveys. All the steps of designing the schedule with all the skip patterns, pretesting the same, printing, training of trainers, training of investigators, supervisor have all been systemized to the extent that these steps can be a model for other surveys in the country.

While at Chapel Hill during 1992-93, I wrote the book "Regulating Reproduction in India: Efforts, Results and Recommendation" published by the Sage India in 1995. After coming back from Chapel Hill, I took part time teaching assignments at the Indian Institute of Health Management Research (IIHMR) at Jaipur for a

Executive Programme in Health towards their MPH degree of UNC Chapel hill, a modular course of two



weeks duration on Basic Demographic Techniques and I shifted my residence to Bangalore, a city I loved and wanted to lead a retired life reading philosophy books and enjoying the salubrious climate at Bangalore; but destiny had other plans. I was invited by the Chairman of the Population Foundation of India at Delhi to join as its Executive Director in August 1995. PFI is an organization set up by late JRD Tata in 1975 to promote family planning programs through non-governmental organizations through financial and technical support as supplementary

efforts to governmental programs already in vogue. JRD believed in the power and impact of NGOs in India and wanted to support and strengthen them. I served PFI as its Executive Director from 1995 to 2002 and these seven years gave me an opportunity to undertake, either directly or indirectly many programs to strengthen the capacities of NGOs to serve in the areas of reproductive and Child Health Programs including family planning. One of my major contributions during my tenure at PFI was to assist the Ministry of Health and Family Welfare, GOI to draft and successfully see through the 90<sup>th</sup> constitution amendment that extended the freeze in the number of seats in parliament and state legislatures frozen as per 1971 census population by an Act of Parliament in 1976 and that was to expire in 2001. If the freeze had been lifted in 2001 there would have been a major political turmoil in the country. I retired from PFI in 2002 to move back to Mumbai and took up the position as Emeritus Professor at IIPS. I was involved in overseeing the activities of IIPS as a member of its Executive and Governing council until recently in 2014.

# **Invited Commentary**

### Changing and Challenging the Role of the Demographer in Modern Health Research

#### Agnihotram V.Ramanakumar

Understanding the link between demography and health is a complex issue, considering that health is conceptually extensive and ever-evolving. Indeed defining the relation between two concepts like health and population, or any two disciplines such as demography and epidemiology is not very simple. Frequently, health researchers have a dilemma when choosing to classify themselves as a demographer, biostatistician, or epidemiologist. These three domains are so close that it can be hard to separate one from the others. Recently, the IIPS has started or is planning to start new curriculum in biostatistics and public health as separate streams. Many of the trained demographers in India are not theoretically using classic demographic methods or techniques in their regular research. This situation has led to an obvious question: is it necessary to train a new generation of health demographers or epidemiologists or biostatisticians separately, where one of them could just as well do the other jobs?

The early-cohort demographers like John Graunt, are known to be public health experts, while modern epidemiologists like Kenneth Rothman, are well-trained demographers. By comparison, most Indian demographers are predominantly Statistician and Social Scientist. Over the years, the community of demographers has grown in numbers, and their research interests have become progressively interdisciplinary. A majority of experts working in the health research have developed core competencies at the workplace rather than in academia. Over the past decade, an increasing number of research collaborations between developing and developed countries, coupled with an increased number of funding resources from newly established charities such as The Gates Foundation, have created an

incredibly high demand for health researchers. This phenomenon has driven all the trained demographers with diverse backgrounds – such as geographers, sociologists, economists, psychologists and statisticians – to develop their interest in the field of health research, particularly reproductive health. An abundance of recently collected data from nation-wide surveys such as the National Family Health Surveys (NFHS) or District Health Surveys (DHS) has also urged many demographers towards health research. This has created new demand for health researchers, and the gap was largely filled by trained demographers. However, this process has taken away the core set of principles that has traditionally defined the demographer's identity.

Any demographer is free to work in any new research area beyond his core discipline, but it poses a considerable challenge to develop a set of new skills. This will also penalize the opportunity to establish demography a field that is unique from the other disciplines. There are fewer and fewer core demographers interested in continuing conventional demographic methods such as life tables, migration estimates, and fertility/mortality models. In fact, the current situation demands more demographers to continue in their core fields. The world in general, and in particular the Indian population, is ever growing and age-distributions are rapidly changing; migration and urbanization trends are rapidly intensifying; family and financial support mechanisms for the elderly are changing with shifting patterns of family composition and behaviour; healthcare funding and management practices are also experiencing great transition. Thus, the research thrust of demographers has to be the study of all these components of society to help policy-makers understand changing needs.

As a nodal demographic training institution in India, IIPS stands at the intersection of old and new schools of thoughts. The IIPS is currently redefining the role of demographers into the next century both by preserving conventional standards and also by adopting modern competencies according to new demands. Indeed, demographic training needs some comprehensive changes geared towards future requirements, while also staying true to its own domain. One new area is the shift towards biodemography, which is based on a wide range of research designs, including ecological, developmental, behavioral and evolutionary research concepts supported by social, biological and demographic modeling and analysis.

**Bio-demography** is a newly evolving branch of classical demography that incorporates an understanding of both biological and demographic determinants of populations, cohorts, and individuals. This discipline can provide an analytical basis for comprehending the variable interactions and evolutions of various research principles for a single time span. Contrary to traditional demographers, bio-demographers design their research platforms to study individuals beyond their reproductive ages. In general, the research mechanisms of bio-demography are thus not as hierarchical as in classic demography but are more reciprocal in nature. In the past decade, this budding field has brought to light new attributes of aging and death that may very well alter the way demographers understand the human aging process.

Bio-demography is distinct from classic demography in two ways:

- 1) It has evolved from the social sciences that have embraced health sciences such as pharmacoeconomics, onco-psychology and medical anthropology; unlike the other health science disciplines, which focus mainly on biological topics such as the evolution of cells and tissues, bio-demography has no explicit boundaries.
- 2) It is free from the classical, hierarchical mechanisms of health sciences (cell, disease, individual) and classic demography (cohort, population, and subject).

Demographers have historically focused on the applied use of death statistics and mortality tables (to calculate insurance premiums, for instance) by projecting the expected survival statistics using certain

assumptions about human life. However, some aspects of this methodology may not be applicable when inquiring further into longevity or calculating the life expectancies of other species. Hence, biodemographers would examine humans and non-human death from different perspectives, and by incorporating recent developments in molecular biology, cell mechanisms, and organ transplantation, etc., that ultimately contribute to disease and death. Similarly, disease modification effects — such as smoking and lung cancer or obesity and diabetes — will change our understanding about mortality, particularly in middle and older ages. In the past few decades, the intensity of natural biological risk of population was reduced, largely because of the invention and accessibility of generic drugs and public health intervention programs (cancer screenings, regular medical checkups, etc.). For example, the increasing preventive use of lipid-lowering drugs is a probable cause of substantial mortality reduction.

Many researchers often use epi-demography and bio-demography interchangeably; however, these are two distinct areas of research. In epidemiology, the understanding of biology is not the main focus of epidemiologic practice, and most conclusions are based on biological plausibility. Another principal objective of epidemiologists is to understand the causal factors that contribute to a specific disease. Bio-demography extends beyond these boundaries to explain the complex interactions among these factors.

There are numerous benefits associated with expanding classical demography towards bio-demography:

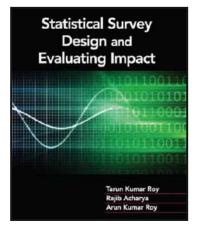
- The concepts, principles, and theories developed in bio-demography can enhance the overall exploratory power of demography, creating a higher-level conceptualization that views human life in a much broader context. Bio-demography has great potential, integrating biology into the framework of classical demography in the same way that basic biology has been integrated into medicine, i.e. biomedicine. Overall, the biological scope is expanded, and the demographic perspectives are broadened.
- 2) Bio-demography can provide better explanations for the life table patterns observed in human populations. For example, many new questions can be addressed: Why there are gender differentials in life expectancy? Why does the aging process slow down after a certain age? Are there any fundamental limits to the human lifespan? etc.

Though investigators will naturally benefit from this approach, the greatest beneficiaries are graduate students, who are exposed early on to the wider perspectives offered by this methodology. On other hand, research on bio-demography requires collaborations among many scientists across multi-disciplinary domains with mutual responsibilities, and mutual respect for each other. There may be issues with organization of funds, authorships, identifying principal investigators, the distribution of grant money and the distribution of work. Since they are very inter-disciplinary in nature, many bio-demographic research proposals may face unfavorable decisions on scientific panels, grant reviews and journals, as most peers are not trained in multi-disciplinarily to make correct decision. Manuscripts generally need some subject matter specific to a certain discipline, and the biological sciences have not historically shared theories, formulas, methodologies and technical jargons, as in the mathematical sciences. To some extent, then, it is a challenge to identify a journal that will be fully open to new bio-demographic concepts. Hence, in this budding stage of this domain only publically funded agencies such as the IIPS are the best resources for designing, developing and expanding bio-demographic programs for future needs of medical research.



Dr Ramana is the Co-Founder and Executive Director of Scientific Affairs and Research (2015-), Global Solutions for Research and Analytics; Adjunct Professor (2014-); Department of Oncology, McGill University, Montreal; Assistant Professor & Chief, Biostatistics (2007-2014) McGill University; Consulting Biostatistician (2014-) McGill University Health Center; Consultant, Analysis Group (2014-2015);Technical Advisor, World Health Organization (2000-2004); Monitoring and Evaluation Officer MDACS (1999-2000).

# **Upcoming book**



## Statistical survey design and evaluating impact Cambridge university press

#### BY TARUN KUMAR ROY, RAJIB ACHARYA, ARUN KUMAR ROY

This book describes two basic designs – sampling designs and evaluation designs. In the first part, it details the theory and practical guidelines for application of a variety of sampling designs that can be used in a number of situations in such a way that is easy to comprehend by everyone irrespective of one's proficiency in statistics. In part two, the book gives equal emphasis in discussing various evaluation designs. In addition to

their elaboration, it discusses how these designs may be used in different situations such as estimation of cause-effect relationship, allocation of units to achieve balance in treatment arms, or estimation of impact. Another important aspect covered in this book, is the issue of bias in a design, the sources of such biases and ways to overcome them. Finally, the book includes a chapter with a number of case studies from around the world in order to highlight application of the techniques discussed in the book.

Main features of the book:

The book proposes a new view of social science research and will appeal to those who are uncomfortable with 'soft' and 'hard' approaches. It avoids rigorous mathematical treatments so readers can understand the material without having to wade through complex mathematical formulae. The book provides an indepth treatment of statistical survey designs and evaluation designs for readers.

# **Forthcoming Workshops- Conferences**

- Population and Development: Issues and Challenges in 21st Century\_ IIPS national Seminar http://iipsindia.org/seminar2016.htm
- **2-3rd Annual International Conference on Demography and Population Studies, 13-16 June 2016,** Athens, Greece, http://www.atiner.gr/demography
- International Young Researchers 'Conference: The impacts and challenges of demographic changes
   Paris, France, 22-23 September 2016
   Deadline for submissions: 15 March 2016
   5- 5th Demographics 2016 Workshop
   Web: http://www.cmsim.net
- The Demography Workshop schedule for the 2016 Winter Quarter is now available http://popcenter.uchicago.edu/events/demography\_workshop.shtml
- The Asian Population Association (APA) Council is seeking proposals from APA members to form Scientific Groups on key or emerging issues in the population field in the Asian region. Scientific groups will be created for the period 2016-2018

http://www.asianpa.org/index.php?option=com\_content&view=article&id=407:call-for-proposals-to-form-scientific-groups&catid=87:apa-activities

## **IIPSAA Workshop Series - 07**

#### Monitoring and Evaluation Workshop (18-22 November 2015)

#### Conducted by

IIPS Alumni Association (IIPSAA) International Institute for Population Sciences (IIPS)

#### Sponsored by

United Nations Population Fund (UNFPA)

#### 1. Background:

The need for establishing appropriate, organized, and duly comprehensive Monitoring and Evaluation (M&E) systems, integrated into the programs and projects of population, health and education and development, is well-understood today. The aim is on the one hand, to inform the processes of policy formulation and policy analysis, and to enable an efficient and effective achievement of program objectives, on the other hand.

Establishing an M&E system is by no means a simple design-and-plug operation. Sufficiently comprehensive and effective M&E systems must evolve within a complex and continuous dialectic between what theory compels and what the experiential-empirical world of practice permits or prohibits.

In order to understand effect of an intervention either at micro or macro scale starting from its inception to intend impact requires the possession of fundamental knowledge of monitoring and evaluation. In specific to health and population development programme, monitoring and evaluation skills are critical at almost all stages including design, implementation and monitoring and evaluation. Policy makers, program managers, monitoring and evaluation officers and researchers need such skills to be update at regular basis as they are likely to face queries regarding the program. Therefore, a regular chain of capacity building exercise must continue as monitoring and evaluation process is a highly dynamic and evolving field in today's world. Since majority of young scholars and students in an empirical science like public health, population and development will most likely to take up professional career as monitoring and evaluation officers at the beginning of their career and remain core team member of monitoring and evaluation system throughout their professional life. In this right background, IIPSAA brought this opportunity to serve young professionals in population studies through a five-day workshop aiming to refresh, enhance and update the skills in this important area.

#### 2. Objectives:

Through this workshop, participants learnt:

- 1. Basic Concepts in Monitoring and Evaluation
- 2. UN Sustainable Development Goals (SDGs) and Monitoring Indicators
- 3. Study Design and Respective Evaluation Tools
- 4. Propensity Score Matching: Concept and Utility in Monitoring and Evaluation Program

5. Difference in Differences: Concept and Exercises

#### 3. Resource Persons (Designations and topics thought by them)

#### Dr. Sanjay Kumar, National Programme Officer (M&E) UNFPA

- Session-1 Basic Concepts of Monitoring & Evaluation and examples
- Session-2 Exercise and Group Work

Dr. Vishal Dev Shastri, Senior Advisor - Monitoring & Evaluation William J. Clinton Foundation, New Delhi

Session-3 Developing Result Based Monitoring & Evaluation System for Donor Funded Intervention Project(s):

Session-4 Exercise and Group Work

#### Dr. Rajat Adhikari, Associate II Population Council, New Delhi

- Session-5 4-g HIV Surveillance, Size Estimation of HRG (M&E System Assessment)
- Session-6 Group Work & Group Work Presentation

#### Dr. Hanimi Reddy Modugu, Monitoring & Evaluation Expert Palladium (formerly: Futures Group) Gurgaon - Haryana

- Session-7 Guidelines for Use of Commercial Sector M&E/MIS tools in Social Franchising projects: Social Franchising, Social Marketing, Capacity building and quality assurance, Demand Generation, Impact evaluation of complex intervention projects
- Session-8 Group Work & Group Work Presentation

#### Dr. Virupax Ranebenur, Technical Advisor, FHI360

- Session-9 Validating Using Size estimations and Monitoring outreach programs, Monitoring of the Clinical interventions and monitoring of structural interventions
- Session-10 Group Work & Group Work presentation

#### 4. Participants

A total of 65 Ph.D./M. Phil scholars having IIPSAA membership applied for the participation in the workshop. Of these 55 Ph.D/M.Phil scholars with UNFPA sponsorship and two Ph.D. scholars from TISS on self sponsorship were selected for the workshop.

#### Table-1

Participant's scores for different topics (measured in 1-10 and converted into %)

Srn.	Topics	% of score
1	Basic Concepts of Monitoring & Evaluation and examples	90
2	Developing Result Based Monitoring & Evaluation System for Donor Funded Intervention Project(s)	85
3	4-g HIV Surveillance, Size Estimation of HRG (M&E System Assessment)	83
4	Guidelines for Use of Commercial Sector M&E/MIS tools in Social Franchising projects: Social Franchising, Social Marketing, Capacity building and quality assurance, Demand Generation, Impact evaluation of complex intervention projects	90
5	Validating Using Size estimations and Monitoring outreach programs, Monitoring of the Clinical interventions and monitoring of structural interventions	87
6	Group work , exercise and presentations	85

The impact of workshop on understanding various issues is given in Table-2. The participants were asked to about state of their knowledge and understanding of the topics that they had before and after workshop.

#### Table-2

Participants score (%) on state of knowledge and understanding of topics before and after the workshop

Topics	Before workshop Good Very good %	After workshop Good Very good %
Basic Concepts of Monitoring & Evaluation and examples	47	100
Developing Result Based Monitoring & Evaluation System for Donor Fund Intervention Project(s)	led 21	98
4-g HIV Surveillance, Size Estimation of HRG (M&E System Assessment)	25	98
Guidelines for Use of Commercial Sector M&E/MIS tools in Social Franchising projects: Social Franchising, Social Marketing, Capacity buildin and quality assurance, Demand Generation, Impact evaluation of comple- intervention projects	•	93
Validating Using Size estimations and Monitoring outreach programs, Monitoring of the Clinical interventions and monitoring of structural interventions	21	97

#### 6. Way Forward:

IIPSAA is looking forward to continue organizing M&E workshop for capacity building of young demographers at IIPS and other institutions in the year 2016.



# **IIPSAA Workshop Series - 08**

Scientific Writing Workshop

(11 -15 Dec 2015)

**Conducted & Funded by** 

**IIPS Alumni Association (IIPSAA)** 

IIPSAA organized it 8th workshop on Scientific Writing during 11-15 December 2015. The workshop was coordinated by Dr. Archana K Roy, Dr. Dipti Govil, and Mr. Prakash Fulpagare. The prime objective of the workshop was to build capacity of the young demographers in scientific writing. The workshop was comprised of 18 sessions which were taken by five resource persons from various fields. All the sessions were interactive and cocktail of both theoretical concepts and practical exercises in the class. A total of forty-six participants completed the workshop.

The first day started with inaugural session followed by three technical sessions. Professor N. Jayaram, a professor from TISS, Mumbai and Managing Editor of the prestigious journal Sociological Bulletin, addressed all the technical sessions of the day. He emphasized on nitty-gritty of research and publication. He started his talk with conceptual framework of the academic writing in which he explained the role of researcher in knowledge transaction. He particularized the differences between survey of literature and review of literature; explained the ways of writing the review of literature and thesis; avoiding plagiarism. Besides, he explained the various stages in publication of a research paper and criteria of acceptance in a journal from editor's perspective.

The second day of the workshop was started by Dr. S. Niranjan, Senior Programme Officer, India Country Office, Bill & Melinda Gates Foundation, New Delhi. He talked about the principles of writing, logical formula for developing the research idea into a paper and issue of authorship. He elaborated the different ways and stages of writing papers from research and programmatic learning. His classes comprised of guidelines on the content and length of the introduction, writing scientifically correct methodology, reporting results precisely and discussions using quantitative data followed by various related exercises. Participants were asked to participate in rewriting/pointing out mistakes in various exercise on abstract, title, introduction, methodology, results and discussion.

Dr. Aravinda Meera, Associate Professor, Open University, United Kingdom took session of the third and fourth day. Initially, she divided the participants into several small groups (3-4 participants). Groups were asked to select topics and frame research questions for qualitative and quantitative studies and instructed to present them on fifth day of workshop. She started her lectures with steps involved in conducting and writing qualitative research work. The concept of '*Mind Map*' in research was discussed at length, and each group was asked to prepare and present their mind map on the chosen topic. The use of *Endnote software* for literature review and citation was discussed in details. Discussion took place on the process of publishing an article, starting from selection of journal to communicating with publishing houses, responding on reviewer's comments and standard ethical norms. Dr. Meera specially explained the process of scanning of the papers from reviewer's perspective followed by delicacy of responding the reviewer's comment. The session was followed by group presentations on the strategy for paper publication.

On fifth day, the workshop started with the group presentations on the strategy for paper publication followed by comments and suggestions by participants and resource person to improve the paper. The last two technical sessions were taken by Prof T.V. Sekher and Dr. Amar Jesani. Dr. Sekher, Professor at IIPS, oriented participants on writing policy brief. He discussed the intricacies of writing policy briefs in details. The policy brief documents should emphasize upon major findings and proposed action rather than methodology and detailed results in concise and crisp language. The policy brief is supposed to be SMART in nature; S: Specific, M: Measurable, A: Attainable, R: Realistic/Relevant and finally T: Time-bound.

Dr. Amar Jesani, an eminent medical practitioner, and Editor of Indian Journal of Medical Ethics. The talk was on 'Research and Publication Ethics'. In his session, he pointed out the probable mal-practices in the field of research and publication with a detailed discussion on the benchmark of ethical practices that researchers are supposed to follow. Issues like plagiarism, false attribution of authorship, ghost authorship, no harm principle, conflict of interest were discussed, and participants were made aware of the ethical norms through some audio-visual clips as well.

The workshop ended with the valedictory session, in which, a brief report on workshop activities by coordinators and feedback of participants were presented. The certificates were awarded to the participants who completed the workshop. Participants found the workshop very relevant and suggested for increase in duration of the workshop The Director, IIPS and the IIPSAA President congratulated the participants and organizers for successful completion of the workshop and assured a constant support in future.

Take home messages from the workshop:

- 'Every newcomer should take the rejection of the papers positively, and see it as an opportunity of improvement.'
- 'Publication is a game, and everyone has to play.'
- 'Don't let the research finding go waste, use them in making difference.'
- 'Research should be done in proper ethical frame.'

## Workshop on Scientific Writing (11-15 December)







# Student's corner

Students have organised and actively participated in many programmes during 2015 June to 2016 February. Have a glance of some such events:



Independence day speech by Director Prof. F. Ram.



Distributing Prizes, on foundation day, 2015.



*Prof. David Bloom at P.N. Mari Bhat memorial lecture, 2015.* 



**Evening Prayers on Ganesh Chaturthi 2015** 



Ravan of Dusshera, 2015



Glamour Queens of IIPS, New years Eve





Celebration of Diwali 2015



Students' Picnic at Bandrdara



*Distributing study materials to school students at Mankhurd slum in the occasion of birthday of* "A. P. J." Abdul Kalam.



Ph.D scholars taking part in Pop-Envis endeavour in educating slum women.





Sports Week, 2016

#### Rahaman's visit to the London School of Economics

I got a chance to visit London School of Economics and Political Science (LSE) as a part of celebrating Babasaheb Dr Ambedkar's 125th birth anniversary.



Dr Ambedkar studied at LSE during 1916 and 1923 and was awarded a master's and Ph.D. in economics. During the visit, which took place from November 21-28, I was given access to the LSE library and archival resources linked to their research. As a part of the study tour, I also visited the British Library, Oxford University, Westminster, the British parliament, Greenwich, Commonwealth office where roundtable conference took place and Dr Ambedkar's house where he was staying while studying in LSE. Recently this house has been acquired by the Government of India and converted into Dr. Ambedkar Memorial Centre.

Before visiting London, particularly LSE, it was my fantasy to spend some time in the LSE. I have heard a lot about London School of Economics and Political Science in the context of its excellence in academia. Moreover, LSE transformed Dr. Bhimrao Ramji Ambedkar from a common man to one of the greatest global leaders who propagated the prophetic values of equality and justice.

This study tour came to me as angels that fulfilled my biggest wishes. Among all those places that I visited during London trip, the LSE library inspired me a lot, so I am explaining here some beauties of it. The facilities for students in the Library of LSE were incredible for me. Library was so exhaustive in facilities that after entering once in the library, one will not feel to come out from the library. The library environment was very conducive to different ways of studies such as group discussion, reading books and Internet surfing. There were different sections in the library for means mentioned above of studies. Here, mainly, I want to mention the facilities available for group discussion as a discussion is the crucial part of the study. There were many rooms with the capacity of 3 people, four people, six people and eight people primarily designed for group discussion.

The library staffs were extremely supportive. It seems that they are always willing to help the students. Staff were continuously walking around the library and smilingly asking the students "May I help you?". Dedication of library staff to their work and their understanding of the importance of time were heart touching for me. One incident that occurred in the LSE library is still fresh in my mind and worthy to share with you all. I was in LSE library. the printing facility from visitor's computer was not working. Without delaying a single moment, library staff started distributing pen drive to visitors' computer, so that they do their job uninterruptedly. This moment was very astounding for me. The library administration was extremely careful about the concerns of students. Even they were providing Apple laptop for working in the library to the students who don't have the laptop. Laptops were issued on student's identity card through an automatic system.

Photocopy facilities were also very much widespread throughout the LSE library. One Xerox machine was installed for around 50 students. These machines could be used through student identity card. Books can also be issued through the automatic machine.

Special facilities for differently able students were there. The library was so beautifully structured that differently able students can also access the library comfortably. It seems that Library was committed for providing full access to the range of services and facilities to the differently able students. Mechanical help such as Portable hearing induction loops and video magnifying systems were there for hearing and visually challenged students respectively. Manual support, for instance, fetches service, buddy service, Document Delivery service were also available for differently able students. The library administration was minutely observing the needs of the library user. Even there was a faith centre in the library. This centre was also providing the platform for "interfaith dialogue" thus the best example for "interfaith coalition for peace".

The library administration was also concerned about making provision of resting for the students. There was a section in the library which was having around 50 bean bags. Students may take rest if they are tired of their studies. This facility was heart touching as rest is the most important requirement after a prolonged sitting.

Moreover, rare documents related to Dr Ambedkar especially handwritten letters, correspondence of Dr Ambedkar with Gandhi Ji and other British officers, hand written passport of Dr Ambedkar, and seeing the very old Indian literature in different languages of India in the LSE and British Library will also last for long in my memory.

One interesting thing is that, earlier I was of the thought that people of West, particularly the United Kingdom are very cruel, merciless, and barbaric. My thought was not baseless as during British rules the kind of cruelty British did with Indian was heart shaking. But my thoughts had taken U-turn after Visiting London and having interaction with the people of London. I was clicking the photo of a friend on the footpath. After finishing the shot, I was surprised to see around 20-25 people on my sides, and they stopped just because of my photography. It was amazing...

The way British welcomed us was heart touching. Their civic sense, public dealing etiquettes, punctuality of time, professionalism in work, politeness in talking, and feeling of respect for others are worthy to praise.

#### Bedanga's photography

#### **Colours of Parasite**

Place Karnala bird sanctuary which is located in panvel taluka of raigad district the sanctuary is centered on the historic karnala fort and lies just off the Mumbai-Pune national highway to Goa. The picture tries to express the colours of a dead parasite which once lived on others.

Focal length: 1.8 ISO: 100 Shutter speed: 1/160<sub>s</sub>



#### <u>Dossal</u>

Place Karnala bird sanctuary which is located in Panvel taluka of R the sanctuary is centred on the historic Karnala fort and lies just off the Mumbai-Pune national highway to Goa. The spider hanging to its web beckoned my eyes as it looked like an ornament floating under the canopy. Focal length: 1.8 ISO: 100 Shutter speed: 1/600,



# Interaction with Prof. K. Srinivasan



**Prof K Srinivasan is one of the finest Directors of IIPS.** He expanded the academic and geographic scope of the Institute by making it a Deemed University and training a large number of students at the Institute from other countries of Asia with financial assistance from the UNFPA. Prof. K. Srinivasan, has made valuable contributions in the country in areas of Population Studies since May 1959. As a Senior Professor and Director of the International Institute for Population Sciences at Mumbai from 1978 to 1992, he expanded the academic and geographic scope of the Institute by making it a Deemed

University. Dr Srinvasan has a brilliant academic record with first class master's degrees in mathematics, statistics and public health and a doctorate degree in demography. His master's degree in public health is from Harvard University. He is the first doctorate in demography from an Indian University. He has held senior academic positions in the University of North Carolina, Chapel Hill, USA and the Australian National University at Canberra. As a researcher he has 13 books and over 102 research papers published in national and international peer reviewed journals. Many of his books are being used in India and abroad as standard texts in teaching population studies. He has been a recipient of a number of honors including the Scroll of Honor from the People's Republic of China for his assistance in the strengthening of the Population Research Centers in their country in 1983.

IIPSAA is highly honored for his brilliant contributions:

#### Your three best contributions for demography/population studies as a researcher.

I consider my earlier works on modelling of birth intervals, closed and open, and using the models for the estimation of parity progression ratios of women in a population my initial best. Three of my publications in this area, two in Demography in the late 'sixties based on my PhD thesis and the other in the Scientific Report Series of the World Fertility Survey in 1980 gave me visibility in the field of Demography. This area has been developed further by Feeney and others later.

The second is my work in the field of effects of modernization on the natural fertility levels of the population in Karnataka state published in Demography India in the 'eighties and jointly with Easterlin and others in Population and Develop0ment Review. Quite a number of articles in this area have been published by Moni Nag and others.

The third area is in field of evaluation of population policies and family planning programmes and a number of papers have been published, some in collaboration with TK Roy and others from IIPS.

#### Your remarkable contribution for IIPS as an administrator:

When I joined IIPS in June 1978, it was a project under five year plans of the Ministry of Health and family Welfare with a threat of being closed at any time at the whims and fancies of the administrators in Delhi. With a great deal of efforts from me and the support of my colleagues and officials from the Ministry and UGC, I was able to make it a Deemed University, a permanent institution of higher learning in Population Sciences with a University status offering post graduate degrees with UGC pay scales for the faculty and staff and pensioners benefits, though I started my efforts in this direction as soon as I joined in 1978, it took me 7 long years to have this dream fulfilled. IIPS was declared as a Deemed University on 14 August 1985 and this is one of my happiest days. The support of my senior colleagues at IIPS, Professors Asha Bhende, S. Mukerji and K.B. Pathak is fondly remembered in this regard. Unfortunately, all the three are no more with us. (Late) Sri. B. Shankaaranand, Minister of Health and Family Welfare and Smt. Sarla Grewal,

Secretary in the Department supported me in this endeavour from the Ministry.

#### Some memorable events at IIPS:

Two memorable events still linger in my memory. the first was regarding the two Chinese students who came to the IIPS, first time, as UNFPA fellows for the Certificate Course in 1980 In this one year course, after the class room teachings , before the examination , there is a two week study tour of the students wherein the students visit many of the Population Research Institutions in the country and the Ministry of Health and Family Welfare in Delhi and interact with the faculty and students of these institutions to learn of the various research work on population conducted in the country. The journey of 30 odd students by train is undertaken under the supervision of a faculty member and begins with a visit to institutions in Pune and then to Bangalore, Trivandrum and then northwards. In the first batch where the Chinese students went on this tour, they were missing from the batch when they alighted from the train at Bangalore from Pune. This was communicated to me immediately by phone by the accompanying faculty ( Dr. P. C Saxena, if my memory serves me right). A frantic search was launched by the Home Ministry and local police officials with no avail. I became extremely nervous as so many rumors started floating that they were spies coming to India in the garb of trainees at IIPS and so on. Finally, the two Chinese students turned up by themselves two days later at Trivandrum to join the further legs of study tour. On a detailed enquiry after their return to Bombay, it was found that the two Chinese students were taunted by the Afghanistan student on the miseries of people under communism and they decided to get down the train in an intermediate station from Pune to Bangalore in the middle of the night rather than face the severe criticisms from fellow students .They slept on the platform and took the next train to Trivandrum from there. One of the students was Mr Jiang Zheng Hua who later became the Chairman of the Chinese Family Planning Commission. I met him later in Beijing in 1982 when I visited China as a UNFPA consultant to their Population Research Centres.

The second event still fresh in my memory is the love and marriage of an Oriya student with an Afghan girl in which I faced threats from parents of both the boy and the girl, though I was in no way responsible for the matter. They are happily married for over 30 years, each preserving his/her religion and settled in Orissa. There were many inter- state marriages among the students from the institute, the marriages have been stable and some of them rose to high academic positions as Professors in IIPS and TISS. God bless them.

#### Your comments as the ex-director of IIPS-hurdles and happiness:

I am privileged to have enjoyed the full support of the faculty and staff of IIPS and the officials of the Ministry of Health and family Welfare in New Delhi. On any major issues, I discussed the matter with my three senior colleagues, Profs. Ahsa Bhende, S. Mukerji and K. B. Pathak and take a collective decision and then passed on the decision to the AO for implementation. Such meetings were held every week on a fixed day and time and outside it were referred to as that of the Gang of Four.

Food in the mess was a problem since the foreign students desired to have a non-vegetarian meal at least once in a day and many of the Indian students were strict vegetarians. It was resolved temporarily having a separate cooking facility for the non-vegetarians, especially the Koreans who liked to cook their own food.

# Your suggestions for the growth of IIPS in terms of- education and training, network and expansion, administration and research project:

IIPS has grown a lot over the past few years in terms of number of courses offered in the field of population and the number of MPS, M. Phil and Ph.Ds increased. Congrats to the faculty.

However I feel that the international reputation that the IIPS enjoyed since 1956 until 2000 as a regional training centre in Population Studies for the Asia Pacific Region is declining. This is possibly because of the

absence of support from the United Nations (UNFPA) for the fellowship programme for training of students from other countries of Asia. This can be compensated to some extent by offering fellowships for students from SARC and ASEAN countries under the regional agreements that India has with these countries. If we confine our training only to Indian students, the term "International" in the institute's name can be called to question.

#### Your experience and comments on Chennai disaster:

The Chennai disaster from the recent rains is due to a combination of three factors: 1) unusually heavy rains within a short rainfall in November and December, that may be due to global warming ; 2) poor quality of infrastructure in the city especially storm water drains and sewerage disposal systems and 3) irresponsible construction of residential buildings and commercial complexes in areas that were earlier marsh lands, ponds and tanks that helped earlier to store rain waters in different places and rai8sing the underground water levels useful in summer. Now this system of multiple and dissipated storage of rain waters are gone. The greed of the builders combined with large scale corruption in authorities permitting constructions in recovered marsh lands, ponds and tanks are responsible for this large scale disaster in Chennai. I have been a victim of this disaster because large volumes of water were released suddenly from a big reservoir near our locality. I hope we learn the lessons from this disaster and do not play with nature irresponsibly. Greed and corruption are at the root of this disaster. There should be central agency to check on this, possibly a central regulatory authority.

# Your suggestions on role of a demographer in sustainable population-development-environment relationship (taking recent flood hazards in Chennai into account)?:

The demographers have to become more and more interested in the large and hitherto largely unexplored domain of population and environment. The global warming seems to be a reality beyond any doubt and Chennai type of disasters may strike many cities in India more frequently in the coming years. The developmental and demographic implications of these phenomena have to be studied. For instance in Chennai , there was an unprecedented internal migration of people out of Chennai and within Chennai and this going to affect all the three demographic components of fertility, mortality and migration and development per se.

#### Your expert comment on population policy of India:

It is time to revisit the population policy in India. What is needed is not a national policy but state specific policies drafted with assistance from experts and officials from the centre and sate jointly and arrangement for delivery of effective and efficient contraceptive services at the PHC and teshil levels. My recent Working Paper on this topic published by the Madras Institute of Development Studies (MIDS-2013) can be a useful starting point..

#### Your suggestions for the alumni working in all corners of the country and abroad:

Please keep in touch with each other and support each other as much as you can. It is a large family nurtured over two to three generations.

#### Your yardsticks (in context of IIPS):

for a good teacher : teachers well rated by the students at the end of the course taught

or a good researcher : publications as a first author in an internationally referred journal

for a good student : Good academic ranking and acknowledged by fellow students

for a good worker (non-teaching): Well rated by colleagues and the Director

for a good administrator: Ability to have a vision and progress towards it , taking his colleagues with him.

# List of IIPSAA Members

# (January 22, 2015) (Compiled by Prakash, Fulpagare)

Sr. No.	Name	Type of Membership	Sr. No.	Name	Type of Membership
1	Mr. B.K.Gulati	Life Member	26	Prof. B. Paswan	Life Member
2	Dr. Arni S.R. Srinivasa Rao	Life Member	27	Prof. R. B. Bhagat	Life Member
3	Prof. Arun Kumar Sharma	Life Member	28	Prof. D.P. Singh	Life Member
4	Dr. K.M. Ponnapalli	Life Member	29	Dr. Phrangstone Khongji	Life Member
5	Prof. Faujdar Ram	Life Member	30	Dr.Sethuramiah L. Rao	Life Member
6	Prof. Usha Ram	Life Member	31	Prof. Rajiva Prasad	Life Member
7	Prof. P. Arokiasamy	Life Member	32	Mr. Jayakant Singh	Student Member
8	Dr. Kailash Chandra Das	Life Member	33	Mr. Vipul Vaibhav Pandey	Life Member
9	Dr. Arindam Ray	Life Member	34	Mr. Shubhranshu Kumar Upadhyay	Life Member
10	Dr. Chander Shekhar	Life Member	35	Dr. Bashir Ahmad Bhat	Life Member
11	Dr. T.V.Sekher	Life Member	36	Prof. M.Guruswamy	Life Member
12	Dr. Manoj Alagarajan	Life Member	37	Prof. Dhaneswar Harichandan	Life Member
13	Dr. Abhishek Singh	Life Member	38	Ms. Nabanita Majumder	Life Member
14	Dr. Aprajita Chattopadhyay	Life Member	39	Mr. Konsam Dinachandra Singh	Life Member
15	Dr. Sourabh Chakarborty	Life Member	40	Mr. Prakash H. Fulpagare	Life Member
16	Dr. K.G. Santhya	Life Member	41	Mr. Rakesh Kumar Singh	Student Member
17	Dr. S.K. Mohanhy	Life Member	42	Mr. Raj Narayan	Life Member
18	Prof. K.S. James	Life Member	43	Ms. Sujata Verma	Life Member
19	Mr. Sunil Sarode	Life Member	44	Dr. Grace Bahalen Mundu	Life Member
20	Ms. Pallavi Gupta	Student Member	45	Ms. Anupam Shukla	Life Member
21	Ms. Garima Dutta	Student Member	46	Ms.Kshipra Jain	Life Member
22	Prof. Sayeed Unisa	Life Member	47	Mr.Rajan Kumar Gupt	Life Member
23	Dr. Hemkhothang Lhungdim	Life Member	48	Ms. Ankita Siddhanta	Student Member
24	Prof. S.K. Singh	Life Member	49	Mr. Arunanand Murmu	Life Member
25	Prof. Ladu Singh	Life Member	50	Prof. T.K. Roy	Life Member

Sr. No.	Name	Type of Membership	Sr. No.	Name	Type of Membership
51	Shri K.B. Gotpagar	Life Member	83	Dr.Monika Dasgupta	Life Member
52	Prof. C.P. Prakasam	Life Member	84	Ms. Ruby Jain	Life Member
53 54	Dr. Dhirendra Kumar Mr. Jetendra Gouda	Life Member Student Member	85 86	Ms. Aparna Mukherjee Mohammad Hifz Ur Rahman	Life Member Student Member
55 56	Ms. Manisha Dubey Prof. Parasuraman	Student Member Life Member	87 88	Mr. Manish Singh Dr.Shalini Verma	Life Member Life Member
57	Prof. Sulabha Parasuraman	Life Member	89	Dr.Parimita Dutta	Life Member
58	Ms. Anjula Srivastava	Life Member	90	Mohd. Shannawaz	Life Member
59	Dr. Manasi Bawdekar	Life Member	91	Dr. Harihar Sahoo	Life Member
60	Mr. Ashwani Kumar	Student Member	92	Mrs.Namita Sahu	Life Member
61	Mr. Ramu	Student Member	93	Ms. Tanima Basu	Life Member
62	Mr.Le Truong, Vietnam	Life Member	94	Dr. Uttam Jakoji Sonkamble	Life Member
63	Dr. Alok Kumar	Life Member	95	Mr. Uttamacharya	Life Member
64	Prof.Krishnamurthy	Life Member	96	Mr. Bidyadhar Dehury	Life Member
65	Prof. Subrata Lahiri	Life Member	97	Mr. Prashant Kumar Singh	Life Member
66	Mr. Brajesh	Student Member	98	Miss Mousumi Gogoi	Life Member
67	Prof. Sumati Kulkarni	Life Member	99	Ms. Lucky Singh	Life Member
68	Ms. Ranjana Kesarwani	Life Member	100	Ms. Itismita Pradhan	Life Member
69	Dr. Kamla Gupta	Life Member	101	Mr. Anil Hiwale	Life Member
70	Ms. Kakoli Borkotoky	Life Member	102	Mr. Naveen Kumar Roy	Life Member
71	Mr.Ashish Kumar Gupta	Life Member	103	Ms. Kaveri Madhukar Patil	Life Member
72	Mr.Abhishek Kumar	Life Member	104	Mr. Anshul Kastor	Student Member
73	Ms. Kiran Agrahari	Life Member	105	Mrs. Neeta Govind Mali	Student Member
74	Prof. Irudaya Rajan.S	Life Member	106	Mr. Pushpendra Kumar	Life Member
75	Dr.Shivalingappa Sangappa Halli	Life Member	107	Mr.Mayank Prakash	Life Member
76	Dr. Pradeep Kumar Bhargawa	Life Member	108	Ms. Soumi Mukherjee	Life Member
77	Ms. Shalini Ishwar Meshram	Life Member	109	Ms. Biswabandita Chowdhury	Student Member
78		Life Member	110	-	Student
79	Dr. Vipin Saini	Life Member	111	Mr.Prahlad Kumar	Life Member
80	Dr. Nandita Saikia	Life Member	112	Mr.Jitendra Gupta	Student
81	Dr. Shireen Jeejeebhoy	Life Member	113	Ms.Ritika Mukherjee	Student
82	Dr.K.M.Satynarayan	Life Member	114	Ms. Atreyee Sinha	Life Member

Sr. No.	Name	Type of Membership	Sr. No.	Name	Type of Membership
115	Mr. Shiva Nand Chauhan	Life Member	147	Mr. Bibhishana Bhuyan	Student Member
116	Mr. Narendra Kumar	Life Member	148	Ms. Prashika Rajendra Kurlikar	Student Member
117	Mr. Awdhesh Yadav	Life Member	149	Mr. Sanyam Kapur	Student Member
118	Mr.Kaushalendra Kumar	Life Member	150	Ms. Tanya Shrivastava	Student Member
119	Mr.Satish Kumar Chauhan	Life Member	151	Ms. Risha Singh	Student Member
120	Mr. Praveen Kailash Chokhandre	Life Member	152	Mr. Laeek Ahemad Siddiqui	Student Member
121	Mr.Khullak Meson Maring	Student Member	153	Dr. Neeta Mazumdar	Life Member
122	Dr. Sharifa Begum	Life Member	154	Ms. Ankita Kumari	Student Member
123	Dr. Agnihotram Venkta	Life Member	155	Ms. Vidya Yadav	Life Member
124	Ms. Amrita Gupta	Life Member	156	Mr. Jaymangal Chandra	Life Member
125	Mr. Arvind Santu Jadhav	Life Member	157	Mr. Prakash Chandra D. Meher	Student Member
	Dr. B.P. Thiagarajan Prof. G. Rama Rao	Life Member Life Member		Ms.Mamta Rajbhar Dr.U.S.Mishra	Life Member Life Member
128	Dr.Somnath Mukherjee	Life Member	160	Dr. Mala Ramanathan	Life Member
129	Ms. Akansha Singh	Life Member	161	Dr.Ravi Bhushan	Life Member
130	Miss Kirti Gaur	Life Member	162	Mr. Ajit Kumar Yadav	Student Member
131	Dr. Murali Dhar	Life Member	163	Dr.Ulimiri Venkata Somayajulu	Life Member
132	Dr. Archana Roy	Life Member	164	Dr.K. S. Seetharam	Life Member
133	Ms. Aishwarya	Life Member	165	Dr. Sarang Pradipkumar	Life Member
134	Dr. Rajiv Ranjan	Life Member	166	Dr. Laxmi Kant Dwivedi	Life Member
135	Ms.Ankita Srivastava	Student Member	167	Mr.Pradeep Subhashrao Salve	Student Member
136	Mr.Raman Mishra	Student Member	168	Mr. Jang Bahadur Prasad	Life Member
137	Ms.Chhavi Paul	Student Member	169	Mr. Rakesh Kumar	Student Member
138	Mr.Guru Vasishtha	Student Member	170	Mr. Bal Govind Chauhan	Student Member
139	Mr.Aman Roj Gupta	Student Member	171	Ms. Suchandrima Chakraborty	Student Member
140	Mr.Amit Kumar	Life Member	172	Mr. Chhathu Kumar Sahu	Student Member
141	Ms. Poulomi Chowdhury	Student Member	173	Mr. Sidheswar Birua	Student Member
142	Mr. Donald Ricaldo Mawkhlieng	Student Member	174	Ms. Rajeshwari Annappa Biradar	Student Member
143	Mr. Jitendra Kumar	Student Member	175	Mr. Mausam Kumar Garg	Life Member
144	Mr. Radhe Shyam Mishra	Student Member	176	Ms. Ruchita Bhalchandra Sakpal	Student Member
145	Prof. R. Nagarajan	Life Member	177	Mr. Kabir Pal	Life Member
146	Mr. Bedanga Talukdar	Student Member	178	Mr. Hanumant Kashinatha Waghmare	Life Member

Sr. No.	Name	Type of Membership	Sr. No.	Name	Type of Membership
179	Mr. Himanshu	Student Member	217	Dr. Ravi Kumar Verma	Life Member
180	Ms. Mithilesh Chourase	Student Member	218	Dr. Niranajan Saggurti	Life Member
181	Mr. Rajaram Yadav	Student Member	219	Dr. Saritha Nair	Life Member
182	Ms. Amrapali Mukherjee	Life Member	220	Mr.Abhishek Gautam	Life Member
183	Mr. Abhiskek Kumar	Life Member	221	Dr. Nilanjana Pandey	Life Member
184	Mr. Rahul Rajendra Koli	Student Member	222	Ms. Vandana Gautam	Life Member
185	Mrs. Dorthy Sudatar Tayade	Student Member	223	Dr. Damodar Sahu	Life Member
186	Dr. Vijaya Pradip Khairkar	Life Member	224	Dr. Sanjay kumar	Life Member
187	Mr. Balasaheb Madhukar Bansode	Student Member	225	Dr. Tilottama Ghosh	Life Member
188	Mr. Sachin Ramesh Lokhande	Student Member	226	Dr.Rahul Sadashiv Bawankule	Life Member
	Mr. Ajay Gupta	Student Member		Dr. Arvind Pandey	Life Member
	Ms. Sritapa Chatterjee	Student Member		Prof. N.S. Bist	Life Member
191	Mr. Sharad Kumar Suman	Student Member		Dr. Rajat Shruvra Adhikary	
192	Ms. Anita Pal	Student Member	230	Ms. L.K. Wonthing	Student Member
193	Mr. Kumar Chiman Sinha	Student Member	231	Ms. Seri Chanda	Student Member
194	Mr. Sanjit Sarkar	Student Member	232	Ms. Kajori Banerjree	Student Member
195	Mr. Ravindra Chowdhary	Life Member	233	Mr. Mukesh Ravi Raushan	Student Member
196	Dr. Dhananjay Wamanrao Bansod	Life Member	234	Mr. Santosh Bhagwanrao Phad	Student Member
197	Dr. Dipti Govil	Life Member	235	Mr.Lalit Kumar Rawat	Student Member
198	Dr. Manas Ranjan Pradhan	Life Member	236	Mr. Navaid Ali Khan	Student Member
199	Mr. Amit Sachan	Student Member	237	Mr. Imtiyaz Ali	Student Member
200	Dr. Ruchi Jain	Life Member	238	Mr. Raj Kumar Verma	Student Member
201	Dr. Ajay Kumar Singh	Life Member	239	Dr. Vaithilingam M.V.	Life Member
202	Ms. Nidhi Jain	Student Member	240	Ms. Rohini Sapkal	Student Member
203	Ms. Bharati Maurya	Student Member	241	Ms. Shraboni Patra	Life Member
204	Dr. Bidhubhusan Mahapatra	Life Member	242	Mr. Ashish Upadhyay	Student Member
	Dr. Ravi Prakash	Life Member		Ms. Swati Srivastava	Student Member
	Dr.Radhakrishnan	Life Member		Dr. Hanimi Reddy Modugu	Life Member
	Ms. Usha Radhakrishnan	Life Member		Mrs. Bhaesharani Maharana	Life Member
	Arun Kumar Yadav	Life Member		Mr. Kamalesh Kumar Patel	
	Mr. Lokender Prashad	Life Member		Ms. Divya Kumari	Student Member
	Dr. Sucharita Pujari Dr.S. Ravichandran	Life Member Life Member	248 249	Ms. Ankita Shukla Ms. Vaishali Chaurasia	Student Member Student Member
	Dr. Rahul Dev Bhawsar	Life Member		Ms. Rishabh Gupta	Student Member
213	Mr. Abhishek Saraswat	Student Member		Mr. Solomon Debbarma	Student Member
214	Mr.Mukesh Ranjan	Student Member	252	Ms. Priyanka B. Bomble	Student Member
215	Mr. Junaid Khan	Life Member	253	Mr. Rahul Mishra	Student Member
216	Mr. Mahadev Diganbar	Student Member	254	Ms. Ragini J. Mishra	Student Member

Sr. No.	Name	Type of Membership	Sr. No.	Name	Type of Membership
255 Mr. Y. S	Selvamani	Student Member	261	Gyan Chandra Kashyap	Student Member
256 Mr. Sha	arban Sarkar	Student Member	262	Ms. Sunita Patel	Student Member
257 Mr. Bri	jesh Kumar Yadav	Student Member	263	Ms. Enu Anand	Student Member
258 Mr. Pra	adeep Kumar	Student Member	264	Dr. Suryakant Yadav	Life Member
259 Mr. Raj	jeev Kumar	Student Member	265	Dr. Pralip Kumar Narzary	Life Member
260 Mr. Am	nbarish Kumar Rai	Student Member			

# Members by year and type of membership

