

Teaching Demography in India: Problems and Prospects

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1. History of demographic teaching in India.

In India, references to quantitative aspects of population dates back to the period of Akbar the Great in the latter half of the 16th century (Desai, 1975). Population had attracted some attention during pre-independence days. However, formal teaching of demography in India started in the late 1930s when the Allahabad University introduced a paper on "population problems" in its course for M. A in Economics (Premi, 1981).

After independence in 1947, the interest has rapidly changed with the passage of time. Demographic transition, a process conditioned by social forces, began soon after independence mainly due to sharp declines in mortality. This had, obviously, resulted into a rapid and accelerating increase in India's population which continued till the 1980s. The so-called population explosion in the second largest populated country in the world evoked a good deal of interest among the Western countries especially U.S.A. A few statisticians and social scientists were trained in the USA and UK in demography in 1950s and 1960s. They, in turn, took keen interest in formalising teaching programme in demography in India.

Teaching of a paper or two in 'demography' or 'vital statistics' in statistics courses, 'population problems' or 'population and economic development' in economics courses, 'population geography' in geography courses, and 'social demography' in sociology courses at the M. A level began in several Universities in India from 1950s. The Indian Statistical Institute, Calcutta has been offering a course on vital statistics in its diploma and certificate courses since 1960's.

A full-fledged teaching programme in demography at the graduate level was started at the Demographic Training and Research Centre (DTRC renamed later as International Institute of Population Sciences), Bombay, in 1958. Since the DTRC did not have a University status, it started with a one-year "certificate" course and later on, an one-year "diploma" course for those who had completed the certificate course and wished to pursue the subject further.

2. The current situation

Table 1. Current teaching centres for full specialisation in Demography/Population Studies in India.

#	University / Institute	Since	Courses
1	International Institute for Population Sciences (IIPS), Mumbai.	1958	Dip. P.S, M.A, M. Phil and Ph.D
2	University of Kerala, Trivandrum.	1962	B.Sc, M.Sc, M.Phil and Ph.D.
3	Bharathiar University, Coimbatore.	1985	M.A, M.Phil and Ph.D
4	S. V. University, Tirupati.	1976	B.A, M.A, M.Phil and Ph.D
5	Annamalai University, Tamilnadu	1975	M.A, M.Phil and Ph.D
6	Jawaharlal University, New Delhi.	1974	M. Phil and Ph.D

2.1. International Institute for Population Sciences (IIPS), Mumbai.

As shown in Table 1, there are six centres in India where graduate teaching is imparted in demography/population studies. First and foremost is the International Institute for Population Sciences(IIPS) located in Mumbai (Bombay). IIPS is deemed to be a University since 1985 and was originally established to serve as a regional institute for training and research in population studies for countries of Asia and Pacific region. The Institute currently offers the following regular teaching programmes: 1. Diploma in Population Studies (DPS) 2. Master of Philosophy (M.Phil) in Population studies 2. Master of Population Studies (MPS) through correspondence and 4. Doctor of Philosophy (Ph. D) in Population studies. Besides, the Institute also conducts short term training Programmes in Population Studies.

IIPS has a faculty strength of 27, the largest among demographic teaching centres in India. The institute follows semester system with adequate infrastructure facilities.

Diploma in Population Studies (DPS)

This course is designed to provide a basic understanding of the principles of Population studies and the interrelationships between population and various socio-economic factors. The admission requirement for the DPS is a bachelor's degree with some experience of handling population data. Generally, three types of students are admitted to this course. Viz. United Nations / WHO/ other international organisation's sponsored fellows, ii) sponsored candidates from various departments of Government of India, states and other

research organisations and iii) self sponsored candidates from India and abroad. The duration of the course is one academic year and number of seats is 25.

Master of Philosophy in Population Studies (M.Phil)

This programme is launched from 2001 as a follow up after the cessation of a graduate programme viz. MPS which had commenced in 1988. M.Phil degree programme is designed to provide higher level of understanding of the population science for providing in-depth understanding of the linkages between population and various socio-economic and environmental phenomena. Admission to this course is open to all those with a master's degree of a recognised University in any of the following disciplines; Statistics, Mathematics, Economics, Sociology, Anthropology, Psychology, Geography, and Social Work. The total strength is 25 and the duration of courses is 3 semesters.

Master of Population Studies (MPS) through distance education.

This programme started in 1995 and intended mainly for those who are in service. Persons having a Master's degree in any social science subject, Mathematics and Statistics are eligible for admission. The entire course materials are sent through correspondence and the duration of the course is 2-4 years.

Ph.D. Programme in Population Studies

This programme started in 1982. Candidates having Master's degree in Population Studies of any recognised University are eligible for direct admission. The duration of the programme is 3-4 years.

2.2 University of Kerala

Among the universities in India, the University of Kerala has the distinction of being the first to launch a two-year M.Sc. course in Demography way back in 1962. It was Prof. N. Krishnan Namboodiri who was instrumental in this venture. During 1962, the Master's and doctoral programmes were started in the Department of Statistics. Master's degree in any social science discipline, Mathematics or Statistics was the admission requirement for admission to Master's programme. In 1979, the demography section was bifurcated from the Department of Statistics and a new Department of Demography was created. The present department runs three teaching programmes viz. MSc, M.Phil and Ph.D. Along with the Department, a Population Research Centre sponsored by the Government of India is also attached. The faculty strength is only five and the infrastructure facilities are not adequate.

2. 2.1. MSc course in Demography

It is a four-semester programme intended for undergraduates in Mathematics, Statistics or social science disciplines. It is a full-fledged course covering various aspects of population science including a community outreach programme. The total intake of students is 12 every year.

2.2.2 M.Phil in Demography

It is a two-semester programme with an intake of 6 students every year. There is coursework during the first semester and dissertation work during the second semester.

Ph.D in Demography

Ph.D admission is generally given to those who completed MSc or M.Phil courses in Demography/Population studies. MSc degree holders are required to pass an entrance test as well conducted by the University or the University Grants commission, the apex body at the national level.

Bharathiar University

The department of Population Studies was formed in 1985 with a two-year M.A programme in Population studies. The faculty strength is only three. However, the infrastructure facilities are adequate.

2.3.1 M.A course in Population studies

It is a four-semester programme covering various aspects of population science intended for undergraduates in any discipline. The total intake of students is 10 every year.

2.3.2 M.Phil in Population studies

It is a two-semester programme, started in 1986, with an unspecified intake of students every year. There is coursework during the first semester and dissertation work during the second semester.

2.3.3 Ph.D in Population studies

This programme started in 1987. Ph.D admission is generally given to those who completed M.A or M.Phil courses in Demography/Population studies.

Sri Venketeswara University, Tirupati

The department was formed in 1976 and present faculty strength is 10. The infrastructure facilities are not adequate especially the availability of computers.

2.4.1 M.A course in Population studies

It is a four-semester programme, started in 1976, intended for undergraduates in any discipline. It is a full-fledged course covering various aspects of population science. The total intake of students is 20 every year.

2.4.2 M.Phil in Population studies

It is a two-semester programme, started in 1979, with an intake of 10 students every year. There is coursework during the first semester and dissertation work during the second semester.

Ph.D in Population studies

Ph.D admission, started in 1977, is generally given to those who completed M. A or M.Phil courses in Demography/Population studies.

B.A in Population studies

Undergraduate programme in Population studies is offered in a few colleges under the jurisdiction of the University.

Annamalai University

DR. S. Chandrasekhar founded the department of population studies in 1975. The present faculty strength is three and the infrastructure facilities are not adequate.

2.5.1 M.A course in Population studies

It is a four-semester programme intended for undergraduates in any discipline. The total intake of students is 10 every year.

2.5.2 M.Phil in Demography

It is a two-semester programme with an intake of 4 students every year. There is coursework during the first semester and dissertation work during the second semester.

Ph.D in Demography

Ph.D admission is generally given to those who completed M. A or M.Phil courses in Demography/Population studies.

2.6 Jawaharlal Nehru University.

Although there is no full-fledged department of demography, demography teaching programme is offered under the Centre for the Study of Regional Development. The teaching programme in demography, MPS, commenced in 1974 and continued until 1979. At present, M.Phil and Ph.D programmes are offered at the Centre.

2.6.1 M.Phil in Demography

It is a two-semester programme, commenced in 1974, with an intake of 12 students every year. There is coursework during the first semester and dissertation work during the second semester.

Ph.D in Demography

Ph.D admission is generally offered to those who completed M. A or M.Phil courses in Demography/Population studies. Currently, 30 students are working for their Ph.D.

Apart from these centres, there are 16 Universities/Institutes which offer demographic teaching as part of other courses. Generally, it is imparted as a part of graduate level teaching of Mathematics, Statistics, Economics, Health education, Sociology, Geography, Social Work etc.

Table 2. Current status of partial teaching in Demography/Population Studies in India.

#	University/ Institute	Course(s)	Status	Topics
1	Andhra University, Vizagpatnam.	B.Sc and M.Sc,STAT.	Optional	Theory and methods of Demography
2	Banaras Hindu University, Varanasi.	B.A/ B.Sc, M.A/ M.Sc Statistics.	Optional	Actuarial statistics, Applied Stat., population theory etc.
3	University of Baroda, Vadodara.	M.Sc Statistics	Optional	Demographic data and their sources, Errors and adjustment, Mortality, Fertility and Projections.
4	University of Bombay. Mumbai.	M.A Economics	Optional	Demographic analysis and Economic development.
5	Gandhigram Institute of Rural Health and family Welfare, Tamilnadu.	Diploma in Health Education	Compulsory	Demographic data and its management, Population policies and Family Planning.
6	Hamidia Arts and commerce College, Bhopal.	M.A. Economics	Optional	Descriptive Demography, Population Theories and Policy, demographic measurement, Life tables, Projection.
7	Indian Statistical Institute, Calcutta.	Diploma in Demography	Compulsory	Sampling and Data Analysis.
8	Karnatatak University, Dharwad.	M.A.in Sociology, M.Sc Statistics	Compulsory	Population Theories, Demographic Analysis,Urbanisation, Urban Development etc.
9	Lucknow University, Lucknow.	M.A. Economics	Optional	Population Theory, Trends and Policies, Census Analysis, Life Table etc.
10	University of Mysore, Mysore.	Diploma in demography	Compulsory	General Demography, Population Policies, Family Planning
11	UtkalUniversity, Bhubaneswar.	M.Sc Statistics	Compulsory	General Demography, Population Policies, Family Planning
12	Patna University, Patna.	M.A. Sociology	Optional	World Population Trends, Demographic Analysis
13	Pune University, Pune.	M.Sc Math.And M.Sc Stat.	Optional	Demographic data and their sources, Errors and adjustment,

				Mortality, Fertility
14	Punjab University, Chandigarh.	M.A. Geography	Optional	Population Theory, Trends and Policies, Census Analysis, Life Table etc.
15	Sagar University. Sagar.	M.A. Economics.	Optional	General Demography
16	Tata Institute of Social sciences, Mumbai.	M.A. Social Work	Optional	Family Child Welfare, Population Dynamics

In India, a survey conducted by Unisa (1996) found that the scope of teaching demography is possible in 28 disciplines. It is taught at M. Phil level in 23 departments belonging to 7 disciplines (Economics in 6 places, Geography in 5 places, Sociology in 4 places and Statistics in 4 places). It is taught at the post graduate level in 21 disciplines in 125 departments (Economics in 28 disciplines, Geography, Sociology and Statistics - 20 departments each). As an optional paper, it is taught in 78 departments at PG level.

3. Problems

3.1 Declining availability of students

Demography has not received its due recognition and importance in India as a policy science. In fact, a trained demographer will be an asset in several organisations engaged in planning, implementation and evaluation of social, economic and health policies. Unfortunately, there are not many jobs available or created in these organisations.

There is already a lull in the demand for conventional courses including demography in the wake of the revolution in information technology. Since the demand for IT specialists is likely to continue for the coming years as a fallout of globalisation, we can not afford to anticipate any drastic change in the demand for demographers in the near future.

With this backdrop, student recruitment poses a serious problem nowadays. Due to uncertain job prospects, motivated and better quality students are not attracted to demography.

3.2 Current situation in Universities and University teaching in India.

As mentioned earlier, there are only 6 Universities (Out of 244) in India which award degrees in demography. In any standard, this is too low. This implies that Demography, as a discipline, has to go a long way to become popular in India. Furthermore, demography is taught at the undergraduate level only in one University in India.

Demography ceases to be a discipline if its multidisciplinary nature is lost sight of. It may be noted that undergraduates from various disciplines such as Economics, Sociology, Geography, Statistics and Mathematics are admitted for the programme. Here comes the role of course contents in teaching demography. Although complete uniformity cannot be expected in respect of any discipline among Universities enjoying autonomy, Population Studies is often the worst sufferer among social science disciplines. Some centres emphasise the applied mathematical or technical part of demography while others pay scant attention to it. Ideally, there should be an optimum mix of technical and substantive parts of demography. This tendency can be traced to differences in the background of teachers available in different centres. By and large, the syllabus appears just as a function of the manpower resources available. In fact, the modus operandi should be the other way round. Syllabus, should dictate the requirement in terms of quantity and quality of teaching.

Ph. D and M. Phil research is another area of serious concern. Doctoral work should, as in the West, be an exclusive domain of the extremely motivated and highly talented students. In India, it has become a matter of routine. Consequently, the quality of research has deteriorated tremendously. One reason for this deterioration in quality of research is the requirement of the possession of Ph. D. degree for faculty appointments and promotions. Although, it is based on good intentions, it forces dilutions in maintaining high quality in doctoral research unfortunately.

Another matter of utmost concern is the library facilities in many Universities/Centres. In many situations, they are too inadequate to run even an undergraduate course in demography.

3.3 Declining quality of teachers

Pedagogy is an important aspect for the success of any coursework. Much depends on how the subject is taught and this, in turn, depends on who teaches it. There is a continuous erosion in the quality of teachers in India in recent years due to various reasons.. Some mechanism should be devised for ensuring the quality of teacher recruits. Later, some in-service training or refresher courses may be arranged for the faculty already in position.

Declining infrastructure development

Infrastructure development is the sine qua non for any programme. The central and state governments in India are currently undergoing a serious resource crunch and this is reflected amply in the lesser allocation of funds for providing the basic minimum

infrastructure facilities including funds for research. This has bearing on the quality of demographic teaching in India.

4. Prospects

If there are concerted efforts from Governmental and non Governmental agencies , the conditions prevailing in demographic teaching could be salvaged to some extent. Following are some suggestions in this direction.

Creating awareness among planners and policy makers

It is often said that the population problem is next only to defence. This is true of India than most other developing countries. India has a very massive family welfare programme but its monitoring and evaluation have suffered because of lack of trained personnel. The country now needs trained demographers or population scientists in large numbers and it is most appropriate that the necessary steps are taken in right earnest.

The Government should also introduce a set of papers in "population studies" for its civil service examinations. It is but appropriate that demographic training should form a desirable qualification for jobs in Government that involves quantitative analysis for population and development planning.

There is a need to improve and ensure the employment prospects of the graduates in demography. If the training is rigorous, employers may start accepting the fact that persons trained in demography can perform the jobs better. With decentralisation of the planning process at the district level, demand for demographers might increase.

4.2 Reorientation of teaching

It is time that scholars specialising in population dynamics assert themselves and prevent the mishandling of population variables by half-baked social scientists. Training in techniques and methods of population analysis must receive greater emphasis in the concerned social sciences. But that will not be sufficient in itself. University level teaching must impart the knowledge of interrelationships between population change and the development-induced changes in other fields. At the present stage of our demographic evolution, it is important to go much further and mount well-designed research programmes in order to enrich that knowledge and make it more specific for the levels where planning is required to handle development-population interactions. The time is ripe for the recognition of 'population studies' or 'population dynamics together with its determinants and consequences' as an applied discipline with a well defined field of its own at the University level.

The subject matter of population studies is interdisciplinary and requires the services of persons specialising in different areas belonging to different subjects. In the existing situation, there are separate departments for different subjects taught in the universities and colleges throughout India. They are recognised and supported by the central and state governments and other agencies. There are several difficulties relating to status, staff, funds, recognition etc. for teaching courses in population without proper recognition. Therefore, for systematic development of population studies, it is highly desirable to have a separate department for it in the universities and colleges.

Role of NGOs and private sector

Efforts in creating awareness among NGOs and Private sector companies on the need for trained demographers in their organisations will go a long way in promoting demographic teaching in India. This route is not yet tapped even partially. A well trained demographer could be fruitfully utilised in several marketing organisations, business firms and industries.

4.4 International Mobility of trained demographers

Globalisation-induced liberalisation policies should envisage liberal movement of trained demographers across countries for higher studies as well as employment. Efforts in impressing upon the world bodies towards this end will be highly rewarding. This will, in turn, enhance the demand for trained demographers in countries like India.

4.5 Western University collaborations

Foreign, especially Western, University collaborations for improving the quality of demographic teaching in India may be explored.

4.6 Turn around of IT revolution

A turn around of information technology revolution is expected in the not so long future. This will imply the resurgence of social sciences and thereby increased demand for demography courses in our Universities.

4.7 New Directions

In population related research programmes, persons trained in allied disciplines should be encouraged to participate and enrich this discipline. Demography should be taught at undergraduate level too. Also, new departments should be started at least in central universities. Current development necessitates the development of additional courses,

which can bring out the interface of demography with Genetics, public health, environment etc.

Population Commissions

As a part of the national population policy announced in 2000, high power population commissions were constituted in India. These forums are expected to give a boost for the propagation of the relevance and need for trained demographers in the country in the years to come.

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