# **Conference Issue**

Vol 59 / Issue 3 / Jul-Sep 2015

# Indian Journal of Public Health

Official Publication of The Indian Public Health Association



Online full text at www.ijph.in



Medknow

# Landscaping Academic Programs Offered in Demography and Population Studies in India

#### Ritika Tiwari<sup>1</sup>, Ranjana Singh<sup>2</sup>, Sanjay Zodpey<sup>3</sup>

<sup>1</sup>Program Officer, Academic Programs, <sup>2</sup>Assistant Professor, Indian Institute of Public Health, Delhi, <sup>3</sup>Director, Public Health Education, Public Health Foundation of India, Gurgaon, Haryana, India

#### Summary

As per the United Nations 2013 report, India's population is expected to reach 1.2 billion by 2015. Thus, there is a need for professionals trained in demography and population studies to carry out research regarding population aspects and project population growth/trends. This study landscapes the academic courses being offered in demography and population studies in India (in regular and distance learning modes). It outlines the details of these courses with respect to available courses, fee structure, number of seats, eligibility criteria, duration, nature of the program, etc. The details of the institutes offering demography and population studies courses were collected and compiled. A systematic and predefined approach including Internet search, search in the leading newspapers and discussions with students, academicians, and faculties were used to collect information for different courses provided by institutes all over India. There are around 22 institutions currently offering certificate, diploma, Masters, Master of Philosophy (M.Phil), and doctoral courses in demography and population studies in India (through regular and distance learning modes). Based on the annual intake capacity of these academic institutions, around 1,052 qualified professionals are available to work in the field of demography and population studies in India. This work has helped us to identify and track various academic courses being offered in demography and population studies in India. However, the courses that are being offered are relatively small in number when compared with the number of demographers/population scientists required. A need was also felt to include demography at the Bachelor's degree level.

Keywords: Academic programs, demographers, demography, India, population studies, postgraduate diploma

## Introduction

As of 2013, the world population was estimated to be 7.2 billion. As per the United Nations 2013 report, the world population is expected to reach 7.3 billion by 2015 and 9.6 billion by 2050.<sup>1</sup> India is the world's largest democracy and the second most populous

**Corresponding Author:** Prof. Sanjay Zodpey, Public Health Education, Public Health Foundation of India, Plot 47, Sector 44 (Opposite PF Office), Institutional Area, Gurgaon - 122 002, Haryana, India. E-mail: sanjay.zodpey@phfi.org

Access this arti	cle online
Website: www.ijph.in	Quick Response Code:
DOI: 10.4103/0019-557X.164655	
	· · · · · · · · · · · · · · · · · · ·
	首都認知得到

country in the world (1.21 billion people according to the provisional figures of the 2011 census), with the median age of 26.9 years.<sup>2</sup> From international standards, the median age of population in India is relatively lower. In the near future, India will be the largest individual contributor to the global demographic transition.<sup>3</sup> As per the 2011 International Monetary Fund Working Paper, India's age structure and changing demographics have contributed substantially to the population growth experienced by the country since the 1980s.<sup>4</sup>

For reprints contact: reprints@medknow.com

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Cite this article as: Tiwari R, Singh R, Zodpey S. Landscaping academic programs offered in demography and population studies in India. Indian J Public Health 2015;59:178-88.

A developing country such as India, currently undergoing extraordinary socioeconomic and demographic changes, struggles to achieve a rapid improvement in income, longevity, literacy, secondary school enrolment ratio, urbanization, industrialization, etc. At the same time, it is focusing on decreasing poverty, unemployment, underemployment, etc. Thus, there is a need for trained professionals in demography<sup>\*</sup> and population studies<sup>†</sup> in India in order to carry out research in population aspects; identify current trends and predict future trends for the government, social service agencies, not-for-profit companies, and private companies; examine labor force trends; determine community needs, map population data; and project population growth. However, demographers need a tertiary degree in demography, economics, or social science as a minimum requirement. A postgraduate qualification with previous work or research experience is highly preferred by organizations that hire demographers. Demographers need to have excellent statistical knowledge with good analytical research skills, written communication skills, and competent computer skills (particularly with statistical packages). Hence, the need for demographers/population scientists is increasing for which it is very important, first of all, to map the courses that are being offered in the field of demography/population sciences. This manuscript tries to portray the situation of existing courses in demography/population sciences all over India. The manuscript also reviewed the evolution and history of demography in India.

## **Materials and Methods**

The details of the institutes providing programs in demography/population studies were collected and compiled in the form of a matrix. A systematic and predefined approach was used to collect information for different programs provided by institutes all over India. The various steps incorporated within the process were as follows:

The foremost approach was to capture all the information available in the public domain regarding the details of these programs. An Internet search was conducted using the Google search engine. Keywords for the search such as "demography," "population studies," "population ecology," "applied population research," "demography and social health" were determined. The search was limited to programs offered in India and to collaborations between Indian and foreign institutes, if any. The websites of the All India Council of Technical Education (AICTE), University Grants Commission (UGC), and several universities were searched using the keywords of the identified subjects and training programs. Detailed information about the programs was collected from the respective institutions or from the designated websites of these institutions. All programs with a span of 1-4 years were included. Short-term training programs of a few days' duration offered by various institutions were disregarded and not entered into the matrix. Leading newspapers were searched for their "education supplements," for information regarding the available institutes, programs, admission criteria, etc. to contribute to the search in the desired domain. The third strategy included discussions with the stakeholders. To explore the program details, informal discussions with students, faculty, and administrative staff of the institutes offering programs in demography and population studies were conducted. Another strategy involved contacting experts in the field of demography and population studies in India. The institutes were contacted over the phone and through mails to get more information regarding the available programs, fee structure, number of seats, eligibility criteria, duration, nature of the program, etc. These parameters were incorporated into the matrix. The institutional data were entered and the findings were triangulated wherever possible. Any other salient feature of relevance to the programs was also incorporated subjectively into this matrix.

## Results

The history of demography in India dates back from ancient times in the *Arthashastra* of Kautilya that gave the details of population, economic census, and agriculture census. During the period of Akbar too, the description of data derived from the population, industry, wealth, and the traits of population were given in the document called *Ain-e-Akbari*. During the British period, the first attempt was made in 1872 to start the decennial census to collect traits of the Indian population. An important landmark in the development of demography in India was publication of the first Imperial Gazetteer in 1881. A significant number of issues were discussed

<sup>\*</sup>Demography refers to quantitative study of five demographic processes: Nuptiality (marriages); reproduction (births); mortality (deaths); migration of people from one place to another (both within a country and between different countries); and social mobility.

<sup>&</sup>lt;sup>†</sup>Population study refers to a body of substantive studies that link population trends with the socioeconomic and cultural trends.

in detail there including birth and death rates, nutrition, infant mortality, and causes of death. Although efforts were made regarding population-related matters, the progress of demography mainly started after 1930 in India. The first Population Conference was held in 1936 in Lucknow, Uttar Pradesh, India. The second All-India Conference on Population was held in 1938 in Bombay where various issues related to population growth and control were discussed. From then onward, the concerns arose about population-related issues and consequently a Population Data Committee was set up in 1944 by the Department of Education, Health and Lands. The Bhore Committee was also set up in 1946 by the Government of India to look into health-related matters in India. The Family Planning Association of India with the motto of population control was founded in 1949.

Some of the important landmarks in the development of demography in India after independence were the launch of the National Family Planning Program in 1952, establishment of the National Sample Survey System in 1949, and establishment of four demographic centers in different parts of India. The first Demographic Training and Research center (currently known as International Institute for Population Sciences) was established in Mumbai, Maharashtra, India in 1956. Demographic centers at Delhi, Delhi, India, Kolkata, West Bengal, India, and Thiruvananthapuram, Kerala, India were established in 1957 and the one in Dharwad, Karnataka, India was established in 1960. The research on populationrelated topics gained momentum as a result of all these developments. The first Asian Population Conference was hosted by India in 1963 that again encouraged demographic research. Data pertaining to populationand health-related matters also started coming regularly from sources like the census and sample registration system that further stimulated research in the field of demography. Another milestone in the development was the establishment of the Indian Association for the Study of Population (IASP) in 1971. This association publishes the journal "Demography India" and also conducts annual conferences that provide the latest researches conducted in the field of demography.

In India, formal teaching of demography was initiated in Allahabad University with the introduction of a paper on "population problems" in its Master of Arts (M.A.) course in Economics in the late 1930s.<sup>5</sup> However, in the postindependence era demographic transition began soon after independence mainly due to sharp declines in mortality. This resulted in an accelerating and quick increase in India's population. Few statisticians and social scientists, who received their training in demography in the USA and UK, took keen interest in formalizing teaching programs in demography in India during the 1950s and 1960s. Several universities started teaching topics related to demography and population studies in various M.A. courses. Some of the topics that were taught by Indian universities during 1950s included: "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.<sup>6</sup> Currently, several universities are offering various certificate, diploma, masters, Master of Philosophy (M.Phil) and doctoral programs in demography and population studies in India. Thus, this study was undertaken to estimate the supply and identify and landscape the courses being offered in demography and population studies in India (in regular and distance learning modes).

The description of various programs in demography and population studies offered in India is enlisted in Table 1. A total of 22 institutions have been identified that offer 53 such programs. It was observed that around 80% of these programs were offered through regular on-campus mode. Nearly 20% of these programs were offered through distance learning mode. A breakdown of the yearly output by a cumulative summary of the intake capacity in each institute is done to study the supply side.

It was observed that a variety of academic programs in demography and population studies are offered in the country. These include short-term, certificate, Bachelor's, Postgraduate diploma, Masters, M.Phil, and doctoral programs. Majority (34%) of these programs are regular M.A or Masters of Science (M.Sc.) programs in demography studies or population studies. Around 24.5% of these programs are postgraduate diplomas. It was observed that out of all the 53 programs, 15.1% were M.Phil programs and 15.1% were doctoral programs. The remaining 11% programs included short-term programs (5.7%), Bachelor's programs (3.7%), and certificate programs (1.9%). Every year, around 1,052 qualified professionals would be available to work in the field of demography and population studies based on the yearly intake capacity of these programs. However, the yearly intake capacity of distance learning programs could not be clearly spelt out. The International Institute for

Table 1: Institutions currently offering programs in Demography and Population Studies in India   Name of the Institute Programs offered	ently offering programs	In Demography ar Duration	ITVDE OF DROPTAN	dies in India Intake capacity	Elizibility criteria
The National Programme on Technology Enhanced Learning (NPTEL) – Indian Institute of Technology (IIT) Kannur, IIthar Pradesh	Programment Population and Society - Web course (distance learning mode)	40 lectures	Distance Distance learning mode - no defined seat limit	Distance Distance learning mode - no defined seat limit	Bachelor of Engineering (B.E.), Bachelor of Technology (B.Tech), Master of Bachelor of Engineering (M.E.), Master of Technology (M.Tech), Master of Computer Applications (MCA), Bachelor of Science (B.Sc.), Bachelor of Computer Applications (BCA), etc.
The National Programme on Technology Enhanced Learning (NPTEL) - IIT Kanpur, Uttar Pradesh	Population and Society - video course (distance learning mode)	40 lectures	Short-term	Distance learning mode - no defined seat limit	BE, B.Tech, M.E., M.Tech, MCA, B.Sc., BCA, etc.
Annamalai University, Chidambaram, Tamil Nadu	Postgraduate (PG) diploma in Demography and Social Econometrics (distance mode)	1 year	PG Diploma	Distance learning mode - no defined seat limit	Bachelor's degree in any discipline
Annamalai University, Chidambaram, Tamil Nadu	PG diploma in Population Education (Part-time evening program)	1 year	PG Diploma	20-40	B.A./ B.Sc. degree and working as a teacher in schools, colleges, and universities. Personnel from the Primary Health Centre, Family Planning Department, and Statistics Department; personnel connected with Adult Education Centers and other government and voluntary agencies engaged in population-related activities
International Institute for Population Sciences (IIPS), Mumbai, Maharashtra	Diploma in Population studies (distance learning mode)	1-3 years	PG Diploma	50	Bachelor's degree / equivalent of an acceptable standard from any Indian/foreign university
University of Rajasthan, Jaipur, Rajasthan	Post PG Diploma in Population Ecology	1 year	PG Diploma	15	Master's degee in Botany/Zoology/Physics/Chemistry/Mathematics/Geography (with BSc)/Law [ <i>Legum Magister</i> or Master of Laws (LLM) with B.Sc.] with at least 50% marks in aggregate
The Centre for Development Studies, Thiruvananthapuram, Kerala	PG Diploma In Population and Sustainable Development	40 weeks	PG Diploma	No defined seat limit	A candidate shall be eligible for admission to the course leading to the PG Diploma in Population and Development if he/she holds a Master's degree or equivalent from any university. However, in the case of students who have passed the examination outside the Indian universities' system and who have not obtained a Master's degree, they may be considered for admission to the course subject to the condition that each candidate shall be examined on his/her own merit by the Admission Committee and in accordance with the recommendation of the Committee of Direction for the training program on Population and Development
Himachal Pradesh University, Shimla, Himachal Pradesh	Diploma in Population Studies	1 year	PG Diploma	ក	Bachelor's degree (or its equivalent) with at least 50% marks in aggregate (45% in the case of [scheduled caste/ scheduled tribe (SC/ST)] or Master's degree (or its equivalent) with 45% in aggregate (40% in case of SC/ST). A candidate who has a minimum of 3 years of service in any institution or department [government, corporate undertaking, local self-government bodies, registered non-government, corporate undertaking, local self-government bodies, registered for admission against the above nonsubsidized seats will be the same as provided for other candidates. But the merit for the admission will be determined on the basis of marks obtained in the qualifying examination plus the weightage of marks in the subject concerned. However, the candidate will need to put a separate application for the three forms in this handbook, stating on the form that the application for supernumerary seats

(Continued)

Table 1: (Continued)					
Name of the Institute	Programs offered	Duration	Type of program	Intake capacity	Eligibility criteria
Gandhigram Rural University, Chinnalapatti, Tamil Nadu	Diploma in Applied Population and Health Services (add-on course)	Goes along with the 2 <sup>nd_</sup> and 3 <sup>rd_</sup> year courses	PG Diploma	No defined seat limit	Graduates of Gandhigram Rural Institute
Gandhigram Rural University, Chinnalapatti, Tamil Nadu	PG Diploma in Applied Population Research (distance learning mode)	1 year	PG Diploma	Distance learning mode - no defined seat limit	Graduate in Mathematics, Statistics, Home Science, Economics, Sociology, Psychology, and other social sciences. Persons employed in government and nongovernmental agencies and engaged in health- and population-related activities. As a concurrent course for 1st- and 2nd-year PG programs
Pravara Institute of Medical Science, Rural Medical College, Loni, Maharashtra	PG Diploma in Population Studies	1 year	PG Diploma	20-40	Bachelor of Medicine, Bachelor of Surgery (MBBS)
Pravara Institute of Medical Science, Rural Medical College, Loni, Maharashtra	PG Diploma in Demography and Vital Statistics	1 year	PG Diploma	20-40	MBBS
Banaras Hindu University, Varanasi, Uttar Pradesh	PG Diploma in Population Studies	1 year	PG Diploma	20	Master's degree of a recognized university (recognized by UGC) with at least 55% marks or equivalent grade in any social science subjects, i.e., Demography/ Population Studies, Geography, Economics, Sociology, Psychology, Anthropology, Social Work, Mathematics, Statistics, Health Statistics and allied sciences
Annamalai University, Chidambaram, Tamil Nadu	Diploma in Population and Health Management (distance learning mode)	1 year	PG Diploma	20-40	Graduates and in-service candidates like medical personnel, paramedical and other health personnel, and school teachers. Personnel in population-related research institutions, voluntary agencies, etc., who may be nongraduates
Annamalai University, Chidambaram, Tamil Nadu	PG Diploma in Demography and Social Health	1 year	PG Diploma	20-40	Graduation from any stream
MohanlalSukhadia University, Udaipur, Rajasthan	PG Diploma in Population Studies	1 year	PG Diploma	30	Graduate (Arts/Science/Commerce)
Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu	Bachelor of Arts (B.A.) in Population Studies (distance learning mode)	3 years	Bachelors	Distance learning mode - no defined seat limit	A candidate seeking admission to the aforementioned program should have passed the senior secondary examination (12th grade) or equivalent examination
Annamalai University, Chidambaram, Tamil Nadu	B.A. in Population Studies (distance learning mode)	3 years	Bachelors	Distance learning mode - no defined seat limit	A pass in preuniversity/higher secondary examination/second year foundation/2- year diploma in Teacher Education/3-year diploma or an equivalent examination
Mohanlal Sukhadia University, Udaipur, Rajasthan	Certificate Course in Population and Family Welfare Studies	6 months	Certificate	60	Graduate
University of Kerala, Thiruvananthapuram, Kerala	Master of Science - Demography	2 years	Masters	4	B.Sc. with Mathematics or Statistics as optional main subject in Part III and securing not less than 55% marks for that part
					(Continued)

Table 1: (Continued)					
Name of the Institute	Programs offered	Duration	Type of program	Intake capacity	Eligibility criteria
IIPS, Mumbai, Maharashtra	Master of Population Studies (MPS)	1 year (Fulltime)	Masters	50 seats with Government of India (Gol) fellowship	Master's degree in: Statistics, Mathematics, Economics, Psychology, Sociology, Social Work, Geography, and Anthropology, with a minimum of 55% marks or equivalent grade
IIPS, Mumbai, Maharashtra	MPS (through distance learning mode)	Minimum - 2 years; maximum - 4 years	Masters	100	Admission to this course is open to all those with a Master's degree from any recognized university in any of the social science subjects that include Mathematics, Statistics, Health, and allied subjects. Preference will be given to candidates with experience in Population Studies, Health, and/or in allied areas
IIPS, Mumbai, Maharashtra	Master of Arts (M.A.)/ Master of Science (M.Sc.) in Population Studies	2-year (fulltime)	Masters	50 seats with Government of India fellowship	Candidates with a Bachelor's degree from recognized universities in India or abroad with a minimum of 55% marks will be eligible for admission to the above program Preference shall be given to candidates holding a Bachelor's degree in one of the following subjects: Mathematics, Statistics, Economics, Psychology, Sociology, Social Work, Geography and Anthropology, Rural Development and Political Science. In addition to the above subjects, applications from nonsocial science background with experience in population and health-related field shall also be considered for admission. Marks and age are relaxable for candidates belonging to reserved categories as per Gol rules
Fakir Mohan University, Baleshwar, Odisha	M.A. in Population Studies	2 years	Masters	40	Graduates with Honors in any subject or Pass graduates with 50% of marks in the aggregate
Maharishi Dayanand Saraswati University, Ajmer, Rajasthan	M.A. in Population Studies	2 years	Masters	20	48% marks in aggregate at the graduate level from any faculty
Maharishi Dayanand University, Rohtak, Haryana	M.A. in Population Studies	2 years	Masters	20	Admission to this course is open to candidates who have a Bachelor's degree from a recognized university with a minimum percentage of marks prescribed by Maharishi Dayanand University for admission to other PG courses. Candidates seeking admission to the course should be graduates with any one of the following subjects: Geography, Demography/ Population Studies, Sociology, Economics, Psychology, Anthropology, Social Work, Mathematics, and Statistics
Rani Durgavati University, Jabalpur, Madhya Pradesh	, M.A. in Population Education	2 years	Masters	30	B.A. with second division in Sociology or Geography or Economics
University of Rajasthan, Jaipur, Rajasthan	M.A. in Population Studies	2 years	Masters	20-40	Graduate and Equivalent
Mannam Memorial NSS College, Kollam, Kerala	Master of Science in Demography	2 years	Masters	20-40	B.Sc
Jawaharlal Nehru University, New Delhi	M.P.S.	2-3 semesters	Masters	20-40	A candidate shall be eligible for admission to the course if he/she has a Master's degree from a university or a degree recognized by the university for this purpose as its equivalent in: (a) Mathematics, Statistics, Geography, Sociology, Economics or Anthropology and (b) a Master's degree in such other disciplines as the Committee for Advanced Studies and Research of the School of Social Sciences (hereafter called the Committee) may, on the recommendations of the Centre for the Study of Regional Development (hereafter called the Centre)
Sri Venketeswara University, Tirupati, Andhra Pradesh	M.A. in Population Studies	2 years	Masters	20	Bachelor's degree

(Continued)

Table 1: (Continued)					
Name of the Institute	Programs offered	Duration	Type of program	Intake capacity	Eligibility criteria
Sri Venketeswara University, Tirupati, Andhra Pradesh	M.P.S	2 years	Masters	18	Not available
Bharathiar University, Coimbatore, Tamil Nadu	M.A. in Population Studies	2 years	Masters	10	A Pass in any UG degree
Lucknow University, Lucknow, Uttar Pradesh	M.A. in Population Education and Rural Development	2 years	Masters	20-40	Bachelor's degree
Himgiri Zee University (Himgiri Nabh Vishwavidyalaya), Dehradun, Uttarakhand	M.A. in Population Studies (will be offered next year)	2 years	Masters	40	Graduate and equivalent
Annamalai University, Chidambaram, Tamil Nadu	M.A. in Population Studies (on campus)	2 years	Masters	30	A Pass in Bachelor's degree in any subject including the professional courses of this university or an examination of any other university accepted by the syndicate as equivalent
Annamalai University, Chidambaram, Tamil Nadu	M.A. in Population Studies (distance learning mode)	2 years	Masters	20-40	A pass in Bachelor's degree in any subject including the professional courses of this university or an examination of any other university accepted by the syndicate as equivalent
Annamalai University, Chidambaram, Tamil Nadu	M.Phil. in Population Studies (on campus)	1 academic year with two semesters	M.Phil	5-10	The candidate should have secured 55% of marks in Population Studies and other disciplinary courses viz. Hospital Administration, Hospital Management, Project Management, Sociology, Economics, Commerce, Management, Psychology, Geography, Statistics, Social Work, Rural Development, Anthropology, Medicine, Nursing, Public Health, Education, and Adult Education
IIPS, Mumbai, Maharashtra	Master of Philosophy in Population Studies (M.Phil)	1 year (fulltime)	M.Phil	50 seats with Gol fellowship	M.A./M.Sc. in Demography/Master's in Population Studies from a recognized university with at least 55% of marks or equivalent. Marks and age are relaxable for candidates belonging to reserved categories as per Gol rules
University of Kerala, Thiruvananthapuram, Kerala	M.Phil in Demography	1 year	M.Phil	6	Masters
Fakir Mohan University, Baleshwar, Odisha	M.Phil in Population Studies	2 years	M.Phil	Ø	Minimum Second Class PG in Population Studies/Demography/Economics/ Geography/Anthropology/ Mathematics/ Education/ Psychology/ Sociology/ Statistics/ Social Work/ Political Science / other allied subjects
Jawaharlal Nehru University, New Delhi	M.Phil program (Population stream)	1 year	M.Phil	12	Master's degree in Political Science, History, Economics, International Relations, and Area Studies with at least 50% marks or Master's degree in Humanities and other Social Sciences with at least 60% marks or Master's degree in Natural Sciences with at least 65% marks
Sri Venketeswara University, Tirupati, Andhra Pradesh	M.Phil in Population Studies	1 year	M.Phil	10	Master's degree
Bharathiar University, Coimbatore, Tamil Nadu	M.Phil	2 years	M.Phil	On the basis of availability	Master's degree
Annamalai University, Chidambaram, Tamil Nadu	M.Phil. in Population Studies (distance learning mode)	2 years	M.Phil	Distance mode - no defined seat limit	Master's degree
					(Continued)

Indian Journal of Public Health, Volume 59, Issue 3, July-September, 2015

Table 1: (Continued)					
Name of the Institute	Programs offered	Duration	Type of program	Intake capacity	Eligibility criteria
Annamalai University, Chidambaram, Tamil Nadu	Doctor of Philosophy (Ph.D) in Population Studies	Not available	Doctoral	On basis of availability	The candidate should have secured 55% of marks in PG degree in Population Studies or other interdisciplinary programs viz. Hospital Administration, Hospital Management, Project Management, Sociology, Economics, Commerce, Management, Psychology, Geography, Statistics, Social Work, Rural Development, Anthropology, Medicine, Nursing, Public Health, Education, and Adult Education
IIPS, Mumbai, Maharashtra	Ph.D. in Population Studies	3 years	Doctoral	23	Candidates having M.Phil/Master's degree in Population Studies of a recognized university with at least 55% of marks. Marks are relaxable for candidates belonging to reserved categories as per Gol rules. Candidates awaiting results of qualifying examination latest by September 30, 2014 can also apply for consideration
Maharishi Dayanand Saraswati University, Ajmer, Rajasthan	Ph.D. in - Population Studies	Not mentioned	Doctoral	On the basis of availability	Master's degree with at least 55% marks in postgraduate examination of the university or any equivalent examination recognized by the university in the subject or any allied subject in which he/she wishes to pursue research. If the candidate secures less than 55% marks at the PG examination but has secured second division at the PG level as well as the degree level, he/she will be eligible for admission to Ph.D program
University of Kerala, Thiruvananthapuram, Kerala	Ph.D in Demography	Not available	Doctoral	On the basis of availability	Masters or M.Phil in Demography or Population Studies
Sri Venketeswara University, Tirupati, Andhra Pradesh	Ph.D in Population studies	Not available	Doctoral	On the basis of availability	M.A or M.Phil courses in Demography/Population Studies
Bharathiar University, Coimbatore, Tamil Nadu	Ph.D in Population Studies	Not Available	Doctoral	On basis of availability	M.A or MPhil courses in Demography/Population studies.
Institute for Social and Economic Change, Bengaluru, Karnataka	Ph.D in Population/ Demographic Studies	Fulltime (4 years)/ Part-time	Doctoral	On the basis of availability	Candidates applying in Population/Demographic Studies should have Master's degree in Demography/Population Studies or Economics/Statistics/Sociology or Anthropology or Geography, preferably with specialization in Population Studies
Jawaharlal Nehru University, New Delhi	Ph.D program (Population stream)	2-3 years	Doctoral	13	Master's degree in Political Science, History, Economics, International Relations, and Area Studies with at least 50% marks or Master's degree in Humanities and other Social Sciences with at least 60% marks or Master's degree in Natural Sciences with at least 65% marks

Population Sciences (IIPS) serves as a regional institute for training and research in population studies for the Economic and Social Commission for Asia and the Pacific (ESCAP) region. IIPS was established in 1956 and was declared a "Deemed University" in 1985 by the Ministry of Human Resource Development (MHRD), Government of India (GoI).<sup>7</sup>

The geographical distribution of these institutes [Figure 1] suggests that all the 23 institutions offering academic programs in demography and population studies are spread across the states of Delhi, Himachal Pradesh, Haryana, Uttar Pradesh, and Rajasthan in the north of India; Madhya Pradesh in central India; Maharashtra in the west of India; Odisha in the east of India; and Andhra Pradesh, Kerala, Karnataka, and Tamil Nadu in South India. Tamil Nadu and Maharashtra are the leading states offering the maximum

number of programs in demography and population studies in the country. However, there is a dearth of programs in the eastern part of the country.

However, the eligibility criteria for these programs vary from institute to institute, with a minimum requirement of a recognized graduate degree in any stream, preferably geography, sociology, economics, psychology, anthropology, social work, mathematics, and statistics. The teaching methodology includes classroom lectures, group discussions, projects and assignments, role plays, and case studies. The program modules cover subjects such as: Research methods in population studies, demographic models, history of world population growth and its impact on society, population of India, urbanization and development, population theories, population policy and family

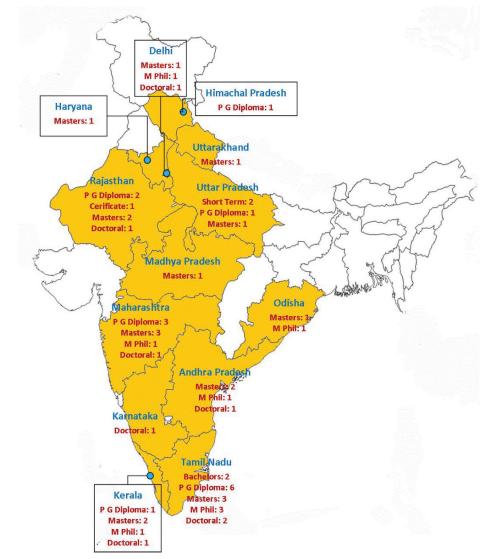


Figure 1: Geographical distribution of programs in Demography and Population Studies

planning program, national population policy in India, ecological degradation and environmental pollution, and emerging issues in sociology of population.

Students undertaking courses in demography and population studies usually get involved in working either for a government agency or in the academic sphere as a researcher. The government agencies need demographers mainly to provide services to its citizens, as they need accurate data about the population in order to determine its needs, the likely outcome of policies, and ensure the most efficient allocation of resources. Private organizations like corporations and news agencies also hire demographers. Demographers also have opportunities for advancement to senior administrative positions, and may choose to follow an academic career course and proceed from postdoctoral studies to assistant professorship and then full professorship. Some demographers, after having gained experience, set up their own businesses and work as freelance consultants.8

# **Discussion**

Due to the increasing concern about high population growth, during the 1960s, importance was given toward establishing the field of demography and population studies. However, toward the end of the 20th century, when fertility rates and population growth were controlled, interest in and support for training in demography started to decline and population variables became marginalized from current dialogues and plans for socioeconomic development. As a consequence of excluding population variables from national and international programs, training in population studies and demographic analysis were given progressively low priority by national and international agencies. This has, in turn, led to a very short supply of trained demographers in crucial government departments.9 There is a need to bring about both the integration of population matters in development plans and a return of training in population studies/demography to the forefront.<sup>10</sup> Despite the growing concerns around the issue of deteriorating skills in applied and technical demography across the developing world, the progress to arrest the same has been slow.<sup>11</sup>

Currently in India, there are 23 institutions offering 53 programs (to award degrees) in demography and population studies. Demography is taught in only two of the institutes at the undergraduate level in India. Both these institutes are situated in the state of Tamil Nadu.

Demography, being a multidisciplinary subject, attracts students from various disciplines such as geography, sociology, economics, psychology, anthropology, social work, mathematics, and statistics. As per India's leading demographic training institute, the IIPS, the institute had to tone down its focus on technical demography in order to recruit students with nontechnical backgrounds.<sup>9</sup>

Here, the course contents play a crucial role in teaching demography and population studies to students with multidisciplinary backgrounds. Although uniformity with respect to course contents cannot be expected like any other discipline among different institutions, population studies is often the worst sufferer among social science disciplines.<sup>6</sup> Some centers emphasize the applied mathematical or technical part of demography while others pay less attention to it. Ideally, there should be an optimum mix of technical and substantive parts of demography.<sup>6</sup> This could be due to differences in the training and educational backgrounds of teachers available in different institutes.

Pedagogy is also a crucial aspect for the success of any academic program. Much depends on the teaching methods and the faculty teaching the program. During the discussions with the respective institutions, it was observed that certain departments of demography and population studies are on the verge of closing down the programs due to lack of faculty and teaching staff. Thus, there is a need for some in-service training or refresher courses for the current faculty in these institutions. There are few candidates who opt for the course (as students) and very few faculty resources available for these courses across India. One of the reasons that could be thought of is the lack of job opportunities. Demography/ Population Studies being a multidisciplinary subject might pose a threat in terms of job opportunities, as the demographer/population scientist positions can also be filled by individuals from other backgrounds such as Geography, Statistics, and Sociology.

It has been suggested that demography should also be taught at the undergraduate level. New demography and population studies departments should be started in the central universities of the country. Current development necessitates the development of additional courses to bring out the interface of demography with other disciplines such as genetics, public health, and environment. India now needs trained demographers and population scientists in large numbers as it has massive national health programs but their monitoring and evaluation have largely suffered due to the lack of trained personnel. Also, there is a need to improve and ensure good employment prospects for Demography and Population Studies graduates. If there are rigorous efforts from governmental agencies, nongovernmental agencies, and the academia, the conditions prevailing in demographic teaching could be recovered to some extent.<sup>6</sup>

*Financial support and sponsorship* Nil.

#### Conflicts of interest

There are no conflicts of interest.

## References

- United Nations Department of Economics and Social Affairs, Population Division World Population Prospects: The 2012 Revision, Revision, Vol. 2, Demographic Profiles (ST/ESA/ SER.A/345). 2013. p. 18-21.
- World Health Organization. Country Cooperation Strategy at a Glance-India. WHO/CCO/13.01/India. New Delhi: WHO Country Office; 2013.

- Wikipedia. Demographic dividend 2014. Available from: http://en.wikipedia.org/wiki/Demographic\_dividend#India. [Last accessed on 2014 Aug 14].
- 4. Aiyar S, Mody A. The Demographic Dividend: Evidence from the Indian States, IMF Working Paper. 2011. p. 1-7.
- 5. Premi MK. Interdisciplinary approaches to the teaching of demography in India. Manila: IUSSP Conference; 1981. p. 2.
- Nair PS. Teaching Demography in India: Problems and Prospects. Brazil: 24<sup>th</sup> General Conference of IUSSP; 2001.
- International Institute for Population Sciences. About Us India 2010. Available from: http://www.iipsindia.org/about. htm. [Last accessed on 2014 Aug 13].
- Demographer Job Description and Career Outlook: Sociology Degree Programs; 2014. Available from: http:// www.sociologydegreeprograms.org/sociology-careers/ demographer/. [Last accessed on 2014 Aug 22].
- Dasvarma G. The State of Technical Demographic Training in Asia. IUSSP/UNFPA meeting on Applied and Technical Demographic Training in Developing Countries. The Hague, The Netherlands: 2009. p. 6.
- 10. Dasvarma G. Population and Environmental Issues in South Asia. South Asia 2004. 2003 (Routledge):35.
- Preliminary Report: Teaching of Technical and Formal Demography in the Developing World. IUSSP/UNFPA meeting on Applied and Technical Demographic Training in Developing Countries: Towards an Agenda for Revitalisation. Hague, Netherlands Interdisciplinary Demographic Institute: 2009. p. 1-2.