



Geography in Indian universities: Development and trends

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Introduction

Politicians, political scientists and historians in India take pride to describe India as a sub-continent, and many of the social scientists subscribe to this view naturally because of the vast size and regional differences and disparities of the country. As such, Geography and Geographers have a greater role to play in giving rational descriptions and convincing interpretations to the patterns of incidence of resources, change dynamics and development processes of the country. Unfortunately Geography gets last priority everywhere when the faculties get established in an University. It has thus a very late start in this country, and of course, it is also true when we see the history of geography in United Kingdom and the Continent and U.S.A. Geographers have to fight and develop strategic lobbies to organize a department of geography in the University. It is all the more a reality now when the policy makers and authorities have developed an unscientific and sinister approach on the classification of the subjects of knowledge as utility and non-utility subjects, and they are quick to designate Geography as one of the non-utility subjects.

Arrival of Geography

Geography was opened as a subject of study in colleges in 1920 in Punjab University, in 1927 in Patna University, and in 1928 in Aligarh Muslim University.

This was followed by a very slow spread of Geography till 1950s. Department of Geography was opened in Calcutta University in 1941, in Banaras Hindu University in 1946, in Agra and Allahabad Universities in 1947, in University of Madras in 1948 and in University of Bombay in 1957. It took more than a quarter of a century for Geography to spread from north to south. First post-graduate department in Geography was opened in Aligarh Muslim University in 1931. A quick survey of dates of opening of post-graduate departments in the Indian Universities indicates that it took about 20 years on an average for an under-graduate department to become a post-graduate department. For instance, Madras University had one-year diploma programme in Geography for 17 years before a post-graduate department got established.

Between 1930 and 1950, only eight universities had Geography departments. Since 1952, more and more departments, especially in the colleges and the Universities in the state of Uttar Pradesh, the Hindi heartland and the largest state of the country, had been opened for Geography. By 1980s, most of the Universities had established Geography departments. Response for opening the departments of Geography seems to be more encouraging in the region of Ganges, and here Geography has been very much regarded by students and parents as a subject of General Knowledge which helps the students appearing for different competitive examinations of the Government and private establishments.

In Southern India, where science subjects are more valued by the students and parents, the spread of Geography is poor. In the state of Kerala, a Southern mountainous state where population density is higher, literacy level is the highest in the country, out-migration takes place quite significantly, and resources are poorly managed, there is still no University department for Geography; it must be a shock

and puzzle, and unfortunate too.

Landmarks in Indian Geography

In the history of Indian Geography, there has been no instances of revolutions but there have been points of changes initiated by landmark incidences.

The first landmark in the history of Indian Geography, as stated, was the establishment of the Department of Geography at the Aligarh Muslim University in 1928. In 1956, a national level organization for publishing thematic mapping in this country, National Atlas Organization (NAO), was established in Calcutta with the efforts a well-known Geographer, Prof.S.P.Chatterjee of the University of Calcutta. The NAO was latter renamed as National Atlas and Thematic Organization (now popularly known as NATMO). Next to Survey of India, inherited from the British Ordinance Survey, the NATMO is a premier organization for mapping in India, and its maps of one million series are well-known.

The organization of the Cartographic Unit in 1960s at the French Institute, Pondicherry brought about a significant impact on the development of Geography in India, and its publication of Vegetation and Soil maps at the scale of 1:100000 were very well received for its cartographic appreciation and resource mapping. This Unit was upgraded in 1995 as a Geomatics Laboratory with an emphasis of computer cartography and GIS. The 21st International Geographic Union conference held in New Delhi in 1968 gave opportunities for a larger section of Indian geographers to interact with geographers from different parts of the world and thus to extend and expand their horizon of geographic view and understanding beyond the shores of India.

Establishment of the Centre for the Study of Regional Development at Jawaharlal Nehru University in 1970 helped to introduce an inter-disciplinary approach in Geographic research in India, and to emphasize the social relevance of Geographic research for the survival of Geography, and to 'indianize' the Indian Geographic studies.

The year of 1980 marked another great moment in Indian Geography and in that year, the National Association of Geographers, India (popularly known as NAGI) was set up to unite the Indian Geographers under one single banner of Indian Geography and Geographers, thanks to the foresight, the concerted efforts and the commanding leadership of three great personalities of contemporary Geography, Prof.Moonis Raza of Jawaharlal Nehru University (unfortunately who passed away a few years back), Prof.C.D.Deshpande, an elder statesman and Geographer from the University of Bombay and Prof.L.S.Bhat of the Indian Statistical Institute, New Delhi.

Geographical Societies and Journals have been always known for their active participation in promoting Geographic studies at different levels of education. Geographical societies in India have a long history of more than 150 years or so. Even before the institution of an university department for Geography, a society for Geography, Bombay Geographical Association, was promoted with British initiatives in Bombay (now Mumbai) in 1832, and this Association was latter merged in 1873 with one of the foremost, active, resourceful and respectful societies in those days, the Royal Asiatic Society. In 1925, the Aligarh Muslim University first showed the way to organize a society in an Indian university for the promotion of Geography.

The real beginning of the activities of the societies towards the promotion of Geography in India was noticed with the establishment of the Indian Geographical Society in Chennai (then Madras) in 1926 under the able leadership of Prof.N.Subramanian of the Teachers College of the Madras Province in Madras. With its Quarterly journal, The Madras Geographical Journal (started in the same year, 1926; now the Indian Geographical Journal), the Indian Geographical Society played a key role in popularizing

the Geography in schools and in developing the theme of Regional Geography by holding a series of district level seminars and publishing a series of articles on the regional geography of different districts of then Madras Province. In 1933, Calcutta University promoted the Calcutta Geographical Society and started its journal, the Geographical Review of India in 1936. Banaras Hindu University started publishing National Geographical Journal of India in 1946, and this Geographical Society got developed as one of the resourceful societies in the country under the active leadership of Prof.R.L.Singh.

In 1948, to coordinate with the Indian Science Congress, an association, Council of Geographers, India, was promoted by those geographers who were used to associate actively with the Indian Science Congress; the Indian Science Congress is a national level organization for scientists, and with a good support from the national government, meets once in a year to display and discuss the progress of research in science in the country. In 1953, Bombay Geographical Journal was established and after a few years of service, it was unfortunately discontinued. In 1956, an Association of Indian Geographers was instituted in Delhi and it also became inactive after a few years.

There are a number of other national and regional institutions in India which are also participating either directly or indirectly towards the promotion of Geography. For instance, at the national level, the National Atlas and Thematic Mapping Organization, Census of India, Indian Statistical Institute, National Council for Applied Economic Research, Central Arid Zone Research Institute, National Planning Commission, Indian Meteorology Department, Landuse Division of Indian Council of Agricultural Research and National Remote Sensing Agency are some of the institutions which are much relevant to Geography, and they have been helping the development of Geography in this country. At state-level, state's Planning Commissions, Town and Country Planning Departments and Metropolitan Development Authorities are some of the departments that are taking part indirectly in assisting Geography to grow.

Phases of Development of Indian Geography

Geography in India has a history of seven decades only, after its introduction in Punjab in 1920s. A survey of papers published in the Indian Geographical journals may indicate four definite phases of development of the subject, Geography, in this country: before 1950, 1950-1970, 1971-1990 and post 1990.

The period of before 1950, the First Phase, was marked by descriptive studies with a more emphasize on physical landscape; gazetteer type of narrative writing was common; not much of research was promoted; and teaching of geography at school level and under-graduate level was given more importance.

During the Second Phase, 1950 1970, more and more Geography departments got established in the Universities and as such post-graduate studies in Geography became wide-spread; consequently research too got priorities in Geographic studies and these studies were of more analytical in nature and interpretative in approach. In this period, there had been proliferations of Geographic associations and journals, especially in the Gangetic Belt, and the Geographic Journals had started coming in the language of Hindi also, the dominant language in North India.

In the Third Phase (1971-1990), existing Geography departments got expanded in terms of faculty and students; research got further strengthened and research studies had become more empirical and scientific; deductive approaches became more popular and so quantitative methods were frequently adopted. In North India, medium of instruction for Geography in post-graduate courses in many universities was switched over to Hindi, and researchers started to write Ph.D theses in Hindi.

The current Phase (Post 1990) was marked by the wide-spread use of computers and computer-

assisted cartography, interdisciplinary approaches and the thrust on socially relevant research. Geographic research studies get 'indianised'. 'Hindianisation' of Geography continues in the North, and in the South and East, Geography is still learned in English at post-graduate levels, and M.Phil and Ph.D theses are continued to be written in English. Geographers are always quick to adopt any new tool or technology, and Indian Geographers have started driving through the Global Highway, the Internet.

In the development of Geography in India during the post-Independence period, one may notice the imprints of European and American approaches. Many of the Geographers of the First Stage, like Prof.S.P.Chatterjee of Calcutta University and Prof.George Kurien of University of Madras had their education in Great Britain. Prof.Shafi of Aligarh Muslim University followed the Dudley Stamp's landuse studies in Great Britain. Prof.R.L.Singh of Banaras Hindu University, well-known for his settlement studies, Prof.E.Ahmad of Ranchi University, well-known for his geomorphic studies, Prof.M.P.Takore of Delhi and Prof.Alam of Osmania University, well-known for his urban studies had their education in United Kingdom..

A number of Geographers in the Second Stage had their education in United States of America. Prof.Gosal and Prof.A.B.Mukerjee of Punjab University, Prof.Ramachandran of Delhi University, Prof.C.R.Pathak of Indian Institute of Technology and Prof.P.D.Mahadev are some of the scholars got trained in the States.

The development of Indian Geography in the recent past was very much influenced by Banaras Hindu University and Aligarh Muslim University, and this may be the Third Stage of Indian Geography. Many of the Geographers who are occupying the chairs of Geography in the universities of Gangetic Belt and Central India had their education either in Aligarh Muslim University or in Banaras Hindu University. Prof.A.Ahmad of Jawaharlal Nehru University, well-known for his Social and Historical Studies in Geography, had his education in Aligarh Muslim University. Prof.Ramesh of University of Madras in the south had his Ph.D from the Banaras Hindu University.

Trends of Indian Geographic Studies

Physical Geography: Geomorphology and Climatology are treated as compulsory papers for the post-graduate courses in Geography in all the Universities and as such teaching of Geomorphology and climatology has been there but research activities in Climatology and Geomorphology are very much limited. Thanks to the quantitative revolution, fluvial geomorphology and basin morphometry have drawn much attention of geomorphic researchers. Calcutta University has developed a good amount of research on soil and glacial studies. The studies on coastal landforms by Prof.E.Ahmad of Ranchi University, the studies on landform evolutions by Prof. K.R.Dixit of Poona University, studies on fluvial geomorphology by Prof.Savindra Singh, and the studies on tropical landforms by Prof.Padmaja are well-known. Waltair University in Andhra Pradesh is known for the studies in Climatology and Geomorphology, and Water Balance studies of Prof.VP.Subramaniam and studies of landform identifications with the help of visual interpretation of remote sensing products by Prof.Vaidyanathan are worth to be quoted. Geomorphic research is actively going on at the Centre for Earth Science Studies in Kerala, Central Arid Zone Research Institute in Rajasthan, and University of Assam.

Currently remote sensing products are profitably used for geomorphic research and mostly visual interpretation is undertaken. National Remote Sensing Agency is active in developing model studies of geomorphology with imageries and ariel photos, and it promotes digital processing too.

Environment and Resource Studies: With the interest from the Planning Commissions and the initiatives from the National Remote Sensing Agency and the Institute of Remote Sensing, there have been wide-spread interest among geographers for Environment and Resource studies. An ecosystem approach and

EIA studies are frequently undertaken, thanks to the present concern for environment and sustainable development. There are studies on resource inventory, exploitation and conservation and environmental impact. Department of Geography at the University of Madras is one of the earliest departments in the study of EIA and in the use of remote sensing products for landuse studies.

Human/Economic Geography: Being an agricultural country, agricultural geography has been remaining an active field of research for Geographers in many universities in India. Aligarh Muslim University is the forerunner in the studies of Agricultural Geography. Studies on landuse, crop-combinations, crop and agricultural regions, crop productivity, agricultural efficiency and nutrition are very common. Centre for the Study of Regional Development of the Jawaharlal Nehru University takes more interest on the studies of regional differences in agricultural development and adopted a holistic approach with an emphasis on social and institutional factors in explaining the regional variations in agricultural productivity and development. Quantitative methodology of agricultural regionalisation and Von Thunen's theory of crop location and agricultural production have also drawn the attention of Geographers in Allahabad University and Banaras Hindu University.

Banaras Hindu University is known for its contributions for the works on Settlement Geography including urban and rural studies. Most of the urban Geographers in the country are the products of the Banaras Hindu University. One can notice a good lot of American influence on the methodology used by the Banaras Hindu University for urban studies. University of Madras has studies on locational analysis and urban ecology, and Osmania University in Hyderabad, on metropolitan economy and industrialization and urbanization. Centre for the Study of Regional Development of the Jawaharlal Nehru University, following the study of B.J.L.Berry on the analysis of commodity flow in India, made a quantitative study on trade and transportation in India with secondary data.

Demographic studies have also attracted many of the Geographers all over the country, thanks to the availability of reasonably a good database from the Census of India. Prof.Gopal Kishan of Punjab University is well-known for his studies on Population Geography. Population Cell at the Centre for the Study of Regional Development of Jawaharlal Nehru University has drawn many geographers along with the scholars of Statistics to work on population studies. Population growth, literacy, disadvantaged communities of Scheduled caste and tribes and regional variations in demographic variables are some of the topics of concern for Geographers. Historical Geography: Aligarh Muslim University, Bombay University and Jawaharlal Nehru University have been showing continuous interests on the study of

Historical Geography. Prof.Moonis Raza, Prof.A.Ahmad and Prof.M.H.Qureshi of Jawaharlal Nehru University took keen interest to motivate the Geographic scholars to work on Historical Geography. Generally epics, travel documents and Mugal writings are the sources of materials for these studies. Prof.B.Arunachalam of Bombay University have been working on the history of Chola kings of Tamil Nadu for their administrative structure and naval activities. Atlas of South India, which traces the history from the Stone Age to 1977, is a monumental work carried out by one of the well-known American Geographers who have interest on India and South Asia, Prof.Scharlsburg of University of Minnesota.

Regional Planning: Economic planning during Five Year Plan periods recognized the approach of regional planning and block development approach for realizing a balanced development, and Geographers are the most appropriate scientists to look into the aspects of regions and regional planning. As such, there have been always an interest among Geographers on the study of regional planning and its related fields. In the early periods of Indian Planning, Growth Pole approach was attempted with the help of Ford Foundation to propagate the development signals in a region. Indian Statistical Institute and Planning Commission have shown a greater interest on regional approach for planning and development. The study of regional planning made by Geographers, Prof.L.S.Bhat of Indian Statistical Institute, Prof.A.T.A.Learmonth of United Kingdom and Prof.V.L.S.P.Rao of Delhi University for Karnataka was

a pioneering study on regional planning in India. Prof.K.V.Sundaram of Planning Commission and R.P.Misra of Mysore University made significant contributions on the thesis of regional planning. Myralguda study of Sudhir Wanmali of International Food Policy Research Institute is another landmark study for a micro-level planning with a growth centre approach. Prof.C.R.Pathak of Indian Institute of Technology with his journal, Indian Journal of Regional Studies, contributed significantly on regional planning and methodology of regionalisation. Centre for the Study of Regional Development have been taking continuous interest on the studies of Regionalisation, regional imbalances and regional planning.

Current Status of Indian Geography

As elsewhere in the world, in the departments of Geography teaching of Physical Geography is continued, though undertaking any serious research in Physical Geography is becoming more and more infrequent. Many of the Geography departments have dropped the content of surveying and use of surveying instruments including dumpy levels and theodolites from the teaching of post-graduate Geography. It is not rare to hear some serious participants in some seminars and conferences commenting that Geography teaching has become dull and dump, and the quality of teaching has become poor. Of course there is a wide-spread belief and concern among the people of different walks of life that the general standard of education itself has been very poor now. Geography is a field science but Geographers have now become arm-chair Geographers.

Field work is not much emphasized now or field works often become excursions, even though it is very often included in the curriculum of Geography. Cartographic skill of Geographers is found alarmingly declining, and many a time Geographers depend on draftsmen for their cartographic works. Participation of Geographers in the seminars of the Indian National Cartographic Association has been found to be very poor in the last so many years. Interest on the study of Regional Geography is declining. Geographers have readily accepted that Geography is a spatial science, and so there has been wide-spread and frequent use of quantitative methods and multi variate statistics in Geographic investigations. Multi- and inter-disciplinary approaches are accepted for Geographic research. Remote sensing has been included in the Geographic curriculum of almost all the universities. In the last five years or so, there has been wide-spread awareness among Indian Geographers about the Geographic Information Systems (GIS) and New Information Technology. University of Madras is one of the earliest in introducing GIS at different levels in their Masters programme in Geography. Of course, in the fields of remote sensing and GIS, engineering institutions are going strong, even though Geographers only can make these tools more meaningful.

Micro-level studies are seen getting encouraged but generalization is not attempted much. Taking up a Geographic investigation with a theoretical perspective has always been a nightmare to Indian Geographers, and unfortunately this trend continues. Critical discussions of the selected topic of investigation is very often missing in the writings of Indian Geographers. On the whole, with positive and negative signs of situations, it may be observed that Indian Geography and Geographers are still struggling for identity, and as such, job market for Geographers remains sluggish and most of them end up at school teaching.

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