



# punjab geographer

A JOURNAL OF THE ASSOCIATION OF  
PUNJAB GEOGRAPHERS, INDIA

VOLUME 4

OCTOBER 2008



## SPATIAL PLANNING, DEVELOPMENT AND ENVIRONMENTAL SUSTAINABILITY: CHALLENGES AND STRATEGIES\*

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Ladies and Gentlemen, it is a great privilege of introducing the theme to a galaxy of Geographers and Planners. It gives me immense pleasure of delivering key note address in presence of my teachers who taught me the philosophy of geography in the Department of Geography, Punjab University, Chandigarh. Sir, theme selection for this Two-day Seminar is an urge to share views on one of the most powerful branch of applied methodologies of Geography in the field of Spatial Planning. It has been felt that this branch of applied methodologies of geography now craves for revisiting in relation to other associated studies essential for human settlement planning aimed at achieving sustainability. This urge to deliberate on this subject was deeply influenced by the ingenuity of my teacher of Geography Dr. Gurdev Singh Gosal when I came across one of his observations reading as follows: -

“After all, historical events do not take place in the air, their base is always the earth. For proper understanding of history, therefore, the base, that is the earth, must be known closely. The physical earth and the man living on it in their full, multi-dimensional relationships constitute the reality of the earth. There is no doubt that human ingenuity, innovations, technological capabilities and aspirations are very potent factors in shaping

and reshaping places and regions, as also in giving rise to new events, but the physical environmental base has its own role to play”.

This observation unfolds the whole gamut of understanding the earth at preplanning stage necessary for establishing the relationship *inter-se* man and the land as resource and the sustainability of the society based on the resource carrying capacity.

The physical environment and the man living on the earth are to be studied in their full multidimensional relationships before the initiation of spatial planning. This aspect of physical planning is not visible in today's planning. All that is being done is limited to the regulated urban growth.

Dr. Sumita Ghosh in the book *Settlement Geography* has rightly summarized while observing that, “In the cities, however, it is man who is in command and he conditions the environment to suit his purpose. The climate, hydrology and terrain of an area undergo tremendous changes when a city grows. In fact the city is an example how in the process of maximizing the space and resource-utilization man exploits his environment to the full though not always wisely”. Such observations will keep on flowing in absence of geographic studies establishing spatial correlation as explained by Dr. Gosal.

If we go back to the 1960s when Applied

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\* Key note address presented to the 8th APG National Conference held at Institute for Spatial Planning and Environment Research, Panchkula, on October 27-28, 2007.

Geography by L. Dudley Stamp was published and reprinted. In the chapter "The Evolution of Town and Country Planning in Britain" L. Dudley Stamp has quoted Lord Justice Scott, Chairman of interdepartmental committee on Land Utilization in Rural Areas, Britain, once said that 'town planning is the art of which geography is the science'.

How town Planning is an art has to be understood in the context of a wide range of philosophical views expressed in different times. In simple terms this it can be explained as, "An art of intertwining all conditions, influences and circumstances that determine the growth and sustainability of a human settlement". The trinity of conditions, circumstances and influence, in togetherness, stand for the situation, in which people live and work or perform their jobs, situations and events that affect and influence the life that are not in ones control, and the effect that has on the way a person thinks or behaves, works and develops.

It may not be out of place to mention that, like other professionals, Geographers never agree completely, and often disagree radically, in defining their subject. But the objective sought to be achieved has to be understood before expressing disagreement. However it is this disagreement that is maintaining the dynamic nature of any field of knowledge and thus progressing.

A spatial planner plays greater role in shaping and reshaping the surface of the earth that craves for the ingenuity of the artist. This responsibility depends not only upon the creativity but also on the vision the artist is capable of transforming it into the reality reflecting the aspirations of the people concerning living, work, and mobility comforts. Above all it is the physical environment that always demands its strengthening and a careful handling for the

sustainability.

Physical environment here stands for all conditions and circumstances that influence the growth and development of an organism in its natural setting. When we talk of the organism it includes both the fauna and the flora. Dudley Stamp has aptly observed that '...the unique contribution of the geographer is the holistic approach in which he sees the relationship between man and his environment, with his attendant problems, as a whole.'

Spatial Planning being an integral part of Geography today craves for developing new conceptual approach and more effective ways of measuring the interrelationship of phenomena. New conceptual approach and techniques can result only from intensive substantive work in this branch. Urban planning as an important part of spatial planning, at all times, requires methods of analytical studies capable of establishing the relationship of correlated urban phenomena. With the phenomenal increase in urban population, industrial growth, and the service sector, methods must be invented that provide required speed in analysis with precision in predictions for establishing the spatial (areal) relationship. Therefore the intrinsic character and the purpose of geography in today's urban phenomena need a logical repositioning in this field of knowledge as Science. Hence there is a need revisiting geography to fulfill the requirement of this branch of geography. This has to be completely supported by statistical tools for market analysis, establishing relationship of various indices of urban phenomena and developing the art of interlacing the relationship to plan for a sustainable human settlement within the given physical environment.

As a student of geography, believing Bowman that Geography is the one subject that

provides regional synthesis systematically, I was able to establish spatial integration of settlements, existing and the future, proposed to be developed throughout the 136 km length of Kundli-Manesar--Palwal Expressway (longest access controlled Expressway of today) and the road transport network but as planner I was required to give regional synchronicity to establish the spatial relationship of natural phenomena craving for preservation and or demanding a careful handling in its economic exploitation. That I could not bring out in absence of institutional support and comprehensive techniques available for intertwining and interlacing the phenomena for judicious resource exploitation.

A study has been awarded to the consultants by the government to plan for the corridor only but not aimed at establishing multidimensional spatial relationship. It is this branch of knowledge, I have felt over 30 years of my service carrier, that application of geographical studies and techniques in human settlement planning need revisiting by the scholars for the study of earth in relation to man and his activities in togetherness with the physical environment. Such concerns had have been reflected in the writings of Humboldt,

Immanuel Kant, Richthofen, Ritter, Sauer, Vidal de la Blache, Hettner, Cholley, Ratzel, Richard Hartshorne, to name a few from the galaxy of legends.

The nub of the theme is to revisit the methodologies that have been occupying the centre stage of difference of opinion. Despite difference of opinion there was always commonality that geography shoulders a greater responsibility in dealing with the surface of the earth, intertwining the heterogeneity to form a homogenous community. We are hopeful that this National Conference will focus on such issues that strengthen the positioning of geography to make it more scientific and competitive in spatial planning in the regime of changing technologies.

I am grateful to the Punjab Geographers Association for giving me the opportunity of delivering the keynote address and for having accepted the offer of holding the 8th APG National Conference in our institute.

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