



Geographical Analysis Centred on Factors and Developments That Affect the Main Crops Challenges in Indian Agriculture

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Abstract:

Reading and continuing their discussion of the numerous topics associated with urban agriculture, the authors of this article, serving as a theoretical and psychological introduction for the Special Issue of Indian agriculture geographically, it Reports on "New trends and challenges of urban agriculture in the context of urban and rural agriculture," They have done so with regard to land-use conflicts, agricultural restructuring, multifunctionality, ecologic services, and the transformation of rural and urban places, alongside to their geographic viewpoint. The most recent research on Indian urban and rural agriculture across the continent is reviewed and summarized after the introduction, which shows how agriculture's function is evolving in the context of urban and rural transitions. Then, the key ideas and patterns of developing and growing urban and rural agriculture are highlighted, with a focus on the distinctive challenges that geographers have in addressing them.

Keywords: Food production, Rural agriculture, Peri-urban agriculture, Farming in rural and urban settings.

INTRODUCTION:

Even though methods of farming have, to some extent, always been present in and around cities and villages, the simultaneous use of the words "urban"," rural" and "agriculture" seemed a bit rare and pretentious inside the geographical research a few decades ago. This idea possesses only recently, specifically during the 1970s, emerged from the shadows and gained consideration across a wide range of scientific fields in India, including geography. The basic ideas recognize that food production doesn't just pertain to the rural area and that cities are not exclusively consumers of food and agricultural products. Given the recent sharp increase in the across the globe commerce in food and agricultural products, one may wonder whether "urban", "rural" and "agriculture" are connected given the current state of the food system, which is often regarded as globalization. "Farmers from somewhere" typically harvest crops and deliver their goods to retailers via trade routes, food processing, and distribution networks all over India and abroad. When urban and rural consumers purchase these goods, they do not have any background knowledge on where their food came from. That being said, times have changed, and the agro-food system as a whole country has recently experienced unparalleled changes that have shaped both the urban and rural spheres, as will be examined extensively below. Furthermore, there is a recurrent upsurge in the desire to link "urban" with "food," particularly around recessionary periods and other connected social issues.

Furthermore, to being a colossal fabrication, this article is among the hardest ones I have ever undertaken to review. With almost 12,000 references to books in agricultural geography arranged by continent, country, and topic area, some eminent professor's bibliography is the largest of any specific, specialized area of geographical that I have come across. Having identified for more than 5 years as an agricultural geographer, I am awestruck by the scope and commitment required in order to generate this work. I can

only be envious of my younger colleagues who have access to it because I know how helpful it would have been to have it available for reference during my own career. But I have to admit that as I was attempting to put together a scholarly review, I discovered a few issues with the work. The content issue came first. In light of the few entries, this may seem strange, but with a few notable exceptions, there are hardly any references after a, whole, and the most current entries for many nations and subjects date back to the mid-2008s, even in fields where more recent published work is acknowledged. It is unfortunate that there has been an abundance of books, monographs, and journal articles published in among which five years, not least in India. Of course, the reason for the "early" cut-off could be attributed to the time it took to produce this article. Hopefully, someone is going to begin gathering material and publishing a 21st century edition now that the course of the twentieth century has been thoroughly covered.

AGRICULTURE AND RURAL DEVELOPMENT:

Three-quarters of the world's poor live in rural areas and most earn their living from farming. Enhancing agricultural productivity is thus essential to achieving poverty reduction. Productivity growth in agriculture is also the driving force behind structural transformation.

- Provide guidance on productivity enhancing investments in, and policies toward, the agriculture sector.
- Understand the transformation of the sector that is already underway and how this has contributed to ending extreme poverty and boosting shared prosperity.

The research program has yielded outputs concentrated in four main areas:

- **Structural transformation:** An analysis of micro panel-data from Bangladesh shows that rising agricultural productivity has increased employment in both manufacturing and services. In rural areas, this employment growth is largely concentrated in small-scale enterprises (less than 10 workers), whereas in small towns it is spread across both small and large-scale enterprises. Agricultural productivity growth appears to induce structural transformation within the small-town services sector, with employment in high-skilled services growing at a faster pace than that in low-skilled services.
- **Food prices, trade, and poverty:** Elevated food prices in the late 2000s provoked a rash of government interventions in agricultural markets across the globe, often in the name of protecting the poor. However, evidence from India shows that unskilled wages rose faster in rural districts growing more of those crops with large price run-ups over the 2004-09 period, thus benefitting rural households. Policies, like agricultural export bans, which insulate producers (as well as consumers) from international price increases, are likely to be particularly harmful to the rural poor.
- **Land and returns to scale in agriculture:** The 2007/08 commodity price boom triggered a global "land rush," with investors especially eager to acquire agricultural land in Sub-Saharan Africa. Analysis of new data from Ethiopia shows that, even at the peak of the land rush, the bulk of land transferred to investors went to Ethiopians rather than to foreigners and about half of it remains unutilized. Moreover, with one permanent job per 20 hectares, commercial farms fail to generate much employment. Finally, for most crops, the yields of commercial farms are roughly twice those of smallholders.
- **Water resources in agriculture:** Efficient management of canal irrigation is critical to sustaining improvements in agricultural productivity. Two forthcoming studies consider the allocation of canal water in Pakistan's vast Indus basin. The research shows that both water availability and land values decline as one moves down a given irrigation channel, with this decline accentuated along channels on which political power is relatively greater upstream. Irrigation reforms, which were designed to rectify such inequities, appear to have worsened them. Indeed, on channels with larger landowners situated upstream, Punjab's decentralization of irrigation management led to especially inequitable water allocations, suggesting that the reform enhanced opportunities for rent-seeking.



AGRICULTURAL GEOGRAPHY'S REINTERPRETATION:

Agricultural change research in Area by "redefinition" agricultural geography in India. By elaborating on previous theories regarding the political economy of agriculture put forth by the researchers aimed to prevent research on farming from becoming a pointless focus of research by scholars. The concern they had at the time originated from the fact that the research topics that agricultural geographers looked at focused on alterations to farm inputs, farm size structures, farm incomes, and agricultural markets on a regional basis. Most of them said that these were attracting "a declining total number of researchers in all countries" and that there showed "every signs of diminishing returns. "In an additional statement on this paper, the scholars stated that agricultural geography had become lost in an excessive concentration on "production functions and tedious typologies," underlining that the focus of research should be on food rather than farming. Such work had come to be identified with a "theoretical impasse," which helps to explain why most of the study was published at the time it was. Novel theoretical concepts in human geography have the potential to be relevant in comprehending shifts in the agriculture industry. In fact, they contended that "Agricultural geography must now broaden its theoretical foundation to include the structuralise aspects of political economy. "The "problems and possibilities" of combining political economy ideas into agricultural geography were more thoroughly critiqued by recent researchers who offered support for this dimension. The fact that agriculture has shifted from a protracted period of stability to one of policy uncertainty supplied additional impetus for now a days research focus. The political crisis of the mid-1980s, which included interconnected budgetary, production, and environmental issues, put the dominant productivism mind-set focused on boosting food output under jeopardy. This significantly altered the conventional framework for agricultural geography in India while also creating new research prospects. A few scholars proposed structuring agricultural research around three main pillars. In the beginning, it was argued that the "food chain" was broad enough to offer "integrating conceptual framework" and a practical means of investigating the connections between farm output and urban/rural and industrial food systems.

AGRICULTURAL POLICY HAS CHANGED THROUGHOUT TIME:

Agricultural geography had traditionally generated relatively little work focused on policy, with Bowler's work being one notable exception. This utilized ideas from a behavioural perspective and comprised a unique spatial examination of farmers' adoption of particular policy measures (such the hill cow subsidy and ploughing grant). On the other hand, a new kind of policy- related research has been prompted by the extent of recent changes in agricultural policy. There are two primary categories of work. In order to examine the nature as well as size of state intervention in agriculture, the environmental effects of such intervention, and the ways whereby international processes and events, have influenced national policy making, researchers first adopted a macro-policy perspective. Furthermore, for individuals with an interest in policy analysis, advancements in agri-environmental policy (AEP) have emerged as a crucial area of attention to detail. The implementation of agri-environmental policies has received increasing attention in research, with many AEP schemes offering a handy analytical focus due to their well-defined territorial claims limits. However, research has also critically analysed the design of the policies themselves. A substantial body of research has looked explored how AEP affects farmers, mostly by analysing how different agri-environmental programs are adopted.

DIVERSION OF AGRICULTURAL LAND FOR NON-AGRICULTURAL PURPOSE:

Indian National Policy for Farmers of 2007 stated that "prime farmland must be conserved for agriculture except under exceptional circumstances, provided that the agencies that are provided with agricultural land for non-agricultural projects should compensate for treatment and full development of equivalent degraded or wastelands elsewhere". The policy suggested that, as far as possible, land with low farming yields or that was not farmable should be earmarked for non-agricultural purposes such as construction, industrial parks and other commercial development



[Amartya Sen](#) offered a counter viewpoint, stating that "prohibiting the use of agricultural land for commercial and industrial development is ultimately self-defeating". He stated that agricultural land may be better suited for non-agriculture purposes if industrial production could generate many times more than the value of the product produced by agriculture. Sen suggested India needed to bring productive industry everywhere, wherever there are advantages of production, market needs and the locational preferences of managers, engineers, technical experts as well as unskilled labour because of education, healthcare and other infrastructure. He stated that instead of government controlling land allocation based on soil characteristics, the market economy should determine productive allocation of land.

AGRICULTURE AND THE INDIAN ECONOMY:

The contributions of agriculture in the Indian economy have been increasing over the years. According to the economic survey, the share of agriculture in gross domestic product (GDP) reached almost 20% for the first time in 17 years, making a sole bright spot in performance during financial year 2020–2021.

Modern farms and agriculture operations have changed over the years primarily because of advancements in technology, including sensors, devices, machines, and information technology.

Personalized e-commerce stores and market places have brought farming products like fertilizers, seeds, machines and equipment that help farmers grow quality products. Educational portals let farmers know innovative things about farming that increase the contributions of agriculture to the economy.

PERI –URBAN AGRICULTURE:

Purpose of this book is to set out the key lessons learned and to provide recommendations and guidance based on existing cases and examples for a wide range of actors involved in urban food systems. In particular, the aim is for this publication to serve as a sourcebook for local decision-makers, policy advisors, urban planners, specialists, practitioners and others involved in urban and peri-urban agriculture (UPA). The sourcebook is also for those involved in the design and implementation of production schemes, planning of urban food strategies, and policies concerning agriculture in urban and peri-urban areas.

FARMING IN RURAL AND URBAN SETTINGS:

As rural-urban migration is increasing, the urbanization poses a number challenges viz., food insecurity, environmental pollution, unequal distribution of resources, etc. Among the many challenges, food provision is gaining importance but omitted or neglected for long period. The pressure on agricultural land to meet the present food demand is increasing. With the increasing urban population, there is an urgent need for feeding those people in a sustainable manner. Urban farming, the cultivation of crops in and around urban areas, is the complementary to rural agriculture. This practice provides much benefits like food provision, nutrition security, productive usage of waste water, reducing pollution and increased green cover, etc. This can be used as an effective tool for achieving the urban food security and leads to a positive future for urban agriculture.

CONCLUSION:

Throughout the next millennium, agriculture should continue to be an important point of departure for conversations and studies due to the political weight of agricultural issues and its uniqueness within "the rural and urban." The recognition related to farming as a starting point for geographical research can facilitate an examination of changes within the sector as well as related economic, social, cultural, and political activities, as studies on agro-food are beginning to recognize. After demonstrating the ongoing significance of an agrarian focus for study, it is clear that a political economy discourse has dominated the geography of agricultural transformation ever since scholar's work became available. Agriculture attempted to accommodate this diversity through modified forms. This can be seen as somewhat disappointing, especially in light of the conversations that have occurred in rural geography and the



significant amount of new research that has led to increases from them. It is obvious that there is a multifaceted study agenda in agriculture, making it challenging to pinpoint a single, cohesive conceptual framework like those proposed by the researchers. The variety of both empirical and theoretical stances that are feasible prevents any idea of redundancy in agricultural research in the future by enabling scholars to understand the complexity of both contemporary and historical agrarian difficulties.

REFERENCES:

1. Singh, J. and Dhillon, S. S. (1984): 'Agricultural Geography', McGraw Hill, New Delhi.
2. Singh, J. and Dhillon, S.S. (1988), "Agricultural Geography", 2nd edition, Tata McGraw-Hill, New Delhi
3. Symons, L. (1972): 'Agricultural Geography', Bell and Sons, London
4. The Hindu (2006): Survey of Indian Agriculture 2006. New Delhi.
5. Production, 4th edition, Arnold, London. Agronomy by Yella Ananda Reddy
6. Plant Breeding by B.D. Singh
7. Murdoch, J. and Ward, N. (1997) Governmentality and territoriality: the statistical manufacture of Britain's 'national farm'. *Political Geography* 16, 307-324.
8. Newby, H. (1979) *Green and Pleasant Land: social change in rural England*. Hutchinson, London.
9. Phillips, M. (1998) The restructuring of social imaginations in rural geography. *Journal of Rural Studies* 14, 121- 153.
10. Philo, C. (1993) Postmodern rural geography? A reply to Murdoch and Pratt. *Journal of Rural Studies* 9, 429-436.