

2.5 AGRICULTURE VERSUS URBAN IMPACTS

In recent decades, India has been experiencing rapid urbanization, represented by significant changes in its demographic composition and large-scale expansion of its urban landscape. For instance, total urban population jumped from 78.94 million in 1961 to 377.10 million in 2011 which is about 388 % increase. The percentage of urban population (or number of cities/towns) increased from 17.97 % (or 2657) in 1961 to 31.16 % (or 7935) in 2011. In contrast, increase in the country's rural population was at a much slower rate; it increased from 36 million in 1961 to 83 million in 2011, i.e. a mere 131% increase. This indicates that urban population in India is growing at a much higher rate along with a significant decline in the share of rural population.

Agriculture sector in India is majorly dependent on monsoon which is often unpredictable; therefore it has been characterized by disguised and seasonal unemployment. The decline in employment opportunities in the agriculture and lower productivity level are the major reasons for the decline in the share of agriculture sector to total GDP. On the same logic, it could be construed that the increasing share of industry and service has also led to the decline in the share of agriculture in GDP. Total extent of agricultural land also decreased from 96.98 % in 1985 to 96.78 % in 2000 90.77 % in 2010 and to 90.70 by 2012. In this perspective, it is important to note that Pandey and Seto (2014) clearly measured the total agriculture land loss due to urbanization in India. They found that the total amount of agricultural land lost in India during 2001-2010 was a staggering 0.7 million hectares. Agricultural land loss to urban expansion was the highest (0.12 million hectares) in the first one-year period of the study, June 2001 - May 2002, which decreased marginally until 2006, only to increase thereafter.

The discussion clearly indicates that India is experiencing a transformation from agricultural lead economy to industry and service based urban economy. In fact, this transformation is an inevitable stage of development, which had been experienced by many developed countries in their early stage of development. The basic reason behind this phenomenon is that the resources (e.g., land, worker etc) which are excess

in rural areas (mostly in developing countries) are being released and absorbed in the urban areas. Since urban area provides the advantage of higher productivity, the resource shifting from rural to urban sector leads to higher economic growth of the country through increasing rate of urbanization. In this phase of development, demand and supply side economics play an important role. Demand side factors such as higher income/job opportunity, higher level of standard of living and higher accessibility of basic infrastructure pull the rural population into urban areas. On the other hand, higher level of agricultural productivity works as a supply side factor in releasing rural resources for the urban areas.

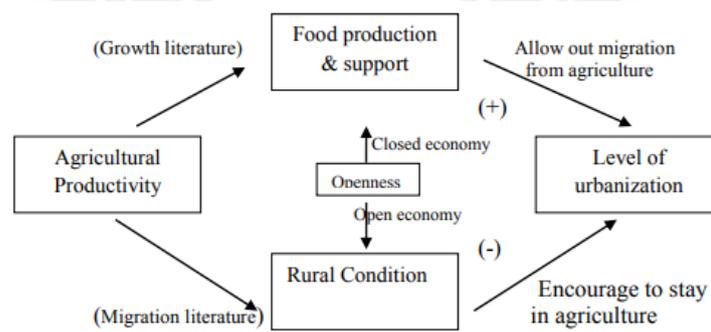


Figure 2.5.1 Effect of Agriculture on Urbanization

[Source:<https://images.app.goo.gl/zU63RrxxMYbbyNgE7>]

The negative impact of the share of agriculture and cultivated land area on urbanization clearly indicates that when agriculture activity increases urbanization rate decreases. In other words, agriculture activities decrease with the rise of urbanization in India. This has been evidenced by the declining share of agriculture and cultivated land area in India. For instance, the share of agriculture declined from 35.7 in 1981 to 13.9 in 2015. On the other hand, due to urbanization total 89 thousand hectare agriculture land was lost in 2009-10. The result supports the findings of Pandey and Seto (2014). Consumption of fertilizers and budgetary expenditure in agriculture has a positive effect on urbanization. The result indicates that more expenditure by government on agriculture sector and higher consumption of fertilizer increases the level of agricultural productivity and the rural living conditions. Public expenditure (budgetary expenditure) plays a crucial role in the development of Indian agriculture. State budgetary support to

agriculture also increases private household investment in agriculture (Roy, 2001). As a sizable amount of public expenditure is meant for creating and facilitating infrastructure and as it augments productive capacity, the level of public expenditure is crucial for growth of output. Higher agricultural productivity provides surplus food and agricultural products by using fewer workforces, and thus allows rural to urban migration which actually becomes the main thrust behind higher level of urbanization. It is also very much evident that agriculture productivity has increased over the decades.

Except rice and pulses production, others (i.e., wheat, maize, jowar, bajra and pulses) have a positive effect on urbanization in India. This also indicates that higher agricultural production caused by higher productivity, has had a positive effect on urbanization in India. It is important to note that India is one of the largest producers of rice in the world, accounting for about 20% of all world rice production. It is India's principal and the staple food of the people of the eastern and southern parts of the country. In India, one-fourth of the total cropped area is covered by rice and it provides food for about half the Indian population.