

Agriculture And Its Stimulus To Rural Development In Developing Countries

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Abstract

Agriculture plays an important part in rural development, especially due to land use, in countries where the sector is of less economic significance. The main potential contributions of farming to rural development are in terms of supporting employment, ancillary businesses, and environmental services. The Developing countries are moving from being largely rural and agrarian to becoming urban and industrial. We study the processes by which this takes place, including the way mutually beneficial links can be forged between town and country, and how the rural non-farm economy can be stimulated to provide local jobs for some of those who leave farming for better paid jobs. Reducing poverty and producing more food that helps reduce the real cost of food are half the battle in beating hunger and malnutrition. The introduction of agricultural employment as a lagged, contemporaneous and leading variable both controls for spurious correlation and allows for the identification of the different kinds of relationship between changes in agriculture and in other sectors. The effect of the lagged variable is interpreted as the effect of agricultural development on non-agricultural development, and the effect of the leading variable after appropriate transformation is interpreted as the effect of changes in the non-agricultural sector on agricultural development.

The current or contemporaneous effect is more difficult to interpret because it incorporates all of the identified effects and additionally the spurious relation between agricultural and non-agricultural developments within a region, i.e. those relations that are due to unobserved regional influences, which affect both developments simultaneously.

Key words: Role for agriculture, *Classification of agriculture*, stabilization, Competition effects and agricultural employment

Introduction

The agricultural and rural development can create jobs and livelihoods for small farmers and the landless, while producing food and raw materials for the urban economy. We study agricultural development, the factors that help such growth technology, supply of inputs, access to markets and the policies and programmes that can stimulate them. Most farmers in the developing world are small land holders. While in production there may be few economies of scale indeed, being small can give advantages in supervision of labour and understanding of micro-variations in soils and climate there are drawbacks when dealing with buyers, suppliers of inputs and bankers. Hence, finding ways to link small farmers to link effectively to large-scale enterprises in supply chains is a challenge.

Developing countries are moving from being largely rural and agrarian to becoming urban and industrial. We study the processes by which this takes place, including the way mutually beneficial links can be forged between town and country, and how the rural non-farm economy can be stimulated to provide local jobs for some of those who leave farming for better paid jobs. Reducing poverty and producing more food that helps reduce the real cost of food are half the battle in beating hunger and malnutrition. But better nutrition, above all for preschoolers, is also about their health and care. So we are also interested in complementary policies to promote basic health care, clean water and sanitation, and girls' education that make a difference to this side of nutrition.

Role of Agriculture in Rural Development

- Farming is an important economic activity creating local employment; it provides multiple economic, social, environmental and territorial benefits. Agriculture is an integral part of the economy and society.
- In without farming activity would in turn generate losses in GDP and jobs in linked economic sectors.
- The agri-food supply chain, which relies on the primary agricultural sector for high quality, competitive and reliable raw material inputs, as well as in non-food sectors.
- Rural activities from tourism transport and public services would also in rural areas probably accelerate.
- There is relationship between agricultural development and non-agricultural development due to the parallel existence of multiplier and income effects on the one hand and competition effects for scarce resources, i.e., land, labour and capital, on the other hand.

Importance of Farming

- Agriculture represents the predominant land use and a major component of the viability of rural areas. Farming and related activities make up the basic fabric of rural life, contributing significantly rural regions in terms of employment and business opportunities and infrastructure.
- The farming represents a share of the rural economy and determines its potential economic contribution to rural development. In some countries, farming may be the primary economic activity of a region and support the vast majority of the population in employment.
- In the developed countries, farming accounts for a relatively small part of a diversified rural economy and in addition the significance of agriculture in terms of the proportion of national wealth and employment is, in most regions, in decline.
- The contribution of farming to rural development in different countries varies to extent policy responses need to be correspondingly distinguished, with the aim of maximizing benefits to society.

Agriculture offerings to Rural Development

Rural development is understood primarily in the economic sense of the process of assuring a progressive improvement in economic security of people in rural areas. Rural areas are usually defined in terms of maximum population density, with figures varying from 150 to 500 inhabitants per square kilometre, depending on the structure of society. While any economic activity in rural areas will have the potential to contribute to rural development, the particular roles farming may play fall into four broad categories.

- **Employment.** In countries whose share of overall employment in agriculture is at high levels, for example where farmers represent over 50% of the workforce, farming is likely to be the key economic activity determining the progress of rural development. With such a substantial proportion of the labour force engaged in agriculture, any policy which led to a swift and artificial reduction in employment could have disastrous consequences for the labour-force and dependants, leading to social and political instability.
- **Related economy.** The farm sector in every country supports a range of ancillary and service industries, generating economic activity in supply and distribution chains as well as processing industries. Where farming is the primary economic activity, the entire rural economy, including

services such as health care, education and basic infrastructure, may depend on the profitability of the sector.

- **Economic activities in remote areas.** Where society has identified a legitimate priority to prevent depopulation, farming is likely to be one of a limited range of economic activities possible to maintain the economic viability of the region.
- **Environmental and cultural services.** Throughout rural areas, farming may contribute to rural development by providing environmental and cultural services to society.

Agriculture and Non-Agricultural Development

Transmission Effects

The Induction and Dependence Effect

The induction effect is where growth in agriculture positively affects non-agriculture largely through the responding of additional income within the region. Where the same complementary relationship exists when agriculture is contracting it is referred to as a dependence effect.

The Stabilization and Destabilization Effect

When changes in agriculture are complementary to changes in non-agriculture. If agriculture relies on part-time farms, for example, a positive development of incomes in the non-agricultural sector could stabilise these farms. Conversely, a crisis outside of agriculture could also threaten the viability of agriculture.

Competition Effects

The mobility and immobility effect where changes in agriculture and non-agriculture are inversely related. Due to the competition for scarce resources, a positive [negative] development in agriculture, that implies immobility of agricultural factors, induces a negative [positive] development of non-agricultural sectors, which otherwise benefit from freed factors from agriculture.

The Attraction and Detraction Effect

Where there is an inverse relationship between changes in non-agriculture and agriculture, i.e. the attraction of agricultural factors by a positive development in non-agricultural sectors.

Regional Heterogeneity

These dynamic relationships are likely to be different and to be weighted differently in different types of regions. A statistical analysis needs to take account of the way these relationships change with respect to different regional characteristics. In this work, regions were classified based on quintiles from the indicators agricultural productivity and share of agricultural employees.

These characteristics of the agriculture non-agriculture relationship pose evident challenges for empirical research. The variables are introduced in different ways and with varying interactions. In the agricultural employment model, for example, the dependent variable to be explained is the (scaled) change in non-agricultural employment. The introduction of agricultural employment as a lagged, contemporaneous and leading variable both controls for spurious correlation and allows for the identification of the different kinds of relationship between changes in agriculture and in other sectors. The effect of the lagged variable is interpreted as the effect of agricultural development on non-agricultural development, and the effect of the leading variable after appropriate transformation is interpreted as the effect of changes in the non-agricultural sector on agricultural development.

Conclusion

The right of countries to pursue rural development policies in which agriculture plays a key role must be recognised. In regions of the world where farming represents a dominant rural economic activity, countries should have the means at their disposal to avert disruptive and potentially catastrophic social and political upheavals caused by a rapid decline in the economic condition of the farm sector. In rural areas, where farm employment accounts for a small portion of the workforce, a broader approach to rural development and the role of farming in the process, including policies to diversify income sources, may be needed. In peripheral regions, the continued viability of rural areas depends to a large extent on policies to maintain the farming sector. Rural development policies which affect the agricultural sector should follow the principle of being no more than minimally trade-distorting and allow structural changes to occur. In the context of agricultural reform, WTO rules should contain sufficient flexibility to allow countries to promote rural development and preserve social and political stability.

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