What are the Moderating Effect of Active Agricultural Population, Ethnicity Rate and Urbanization on Agricultural Reforms and Agricultural Growth? From Theory to Empirical Evidence in Benin

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Abstract

This mini review aims to evidence the moderating effect of agricultural population, ethnicity rate and urbanization on agricultural reforms and agricultural growth. Results from the estimation of VAR (1) confirm this relationship and urge the necessity to consider the main driving factors including the population, the ethnicity index and urbanization in the development and implementation of reforms in the agricultural sector for the sake of agricultural growth in developing countries.

Keywords: Agricultural reform; Agricultural Growth; Benin

Introduction

Theoretical and empirical review

Agricultural land is first and foremost a means of production. According to Adam Smith [1], it is a source of income for its holder as soon as the land becomes private property. In his famous land rent theory, David Ricardo [2] relies on the natural fertility differentials of soils to explain the advantage provided to the holders of the most fertile land by the cultivation of less fertile land in the face of population growth. The theory of agricultural land rent is still very relevant today, but it has been revised and amended many times (Cavailhès et al. 1996). Overall, the models derived from the Ricardian formula of capitalization gave often disappointing results. Agrarian reform is always part of contradictory dynamics that unfold over time. The work of Laurence et al. (2008) has shown that land policies are not the only ones to influence the transfer of rights to land. Fiscal policies relating either to land tenure or to transactions and inheritances, economic and monetary policies, rural and territorial development policies, favoring the installation of young farmers or compensating for regional handicaps can weigh heavily on the configuration that take the agrarian structures. In the interface between urbanization and rural environment, dynamics take hold of the land, causing it to change its value and function and directing spatial planning in places Mongbo [3], Mongbo [4] and Oloukoi et al. [5]. Intergenerational transmission, demographic changes and social logics are incorporated into land tenure situations and create local markets, leading to ad hoc institutional productions. Schaffer and Wen [6] shows that reform programs were designed around two main axes. Firstly, they report that the reconstruction of the rural institutional system at the economic level of the smallest farmers makes it possible to better stimulate economic agents. Second, reforms in agriculture allow the gradual relaxation of government control at the macroeconomic level over marketing and pricing to put the rural economy back on the market.
Similarly, the work of Wen [7] and the OECD [8] have shown that land reforms must be organized around agricultural policies aiming at a variety of objectives, in particular: guaranteeing a supply of food products in sufficient quantity to reasonable prices, support farm household incomes contribute to the well-being of rural communities and ensure ecological sustainability and other societal goals. For the World Bank (2019), agriculture is the backbone of the economy in many developing countries focused on fair and equitable land reform. This land reform drives around 25% of GDP of low-income countries and 80% of the population living in extreme poverty live in rural areas. For the work of Nguyen et al. [9] and Lin [10], the acceleration of land reforms remains essential for agricultural growth with a view to responding more to the needs of small farmers who are the majority in developing countries. These land reforms in Asian countries helped accelerate agricultural growth in China in the first half of the 1980s and its apparent slowdown thereafter. The work of Shantanu [11] and Jiaxiu et al. [12] explained that the land reforms allowed economic liberalization, allowed producers to reinvest the surplus from the crop to bring about long-term improvements term on land and increase agricultural productivity and agricultural growth rate. Rosenzweig et al. (2018) has shown the relationship between the active agricultural population and land reforms in countries of Asia and Latin America.

They explained the large-scale existence between the agricultural populations and the various agrarian reforms. They therefore highlight the tensions between obtaining new freedoms, especially through access to land, and vulnerability to new subsistence vulnerabilities. Similarly, the work of Ulla et al. [13], Mizerlo et al. [14] has shown that the internationalization of land reforms limited by the rate of population growth is high. They explain that the active agricultural population participates in the agrarian reform, in the mode of access to land with a view to boosting agricultural growth. On the other hand, Gunya [15] shows that land reforms led to the abolition of the state monopoly of land ownership, to the involvement of local communities and to the emergence of a market. Land reforms have stimulated the emergence of a multitude of actors representing the state, communities and individuals, as well as formal and informal institutions regulating the relationships between these actors. Anastasia [16], Henning [17], and Boone [18] has shown that access to land remains marked by tensions. They note that high rates of ethnicity have acted as a real brake on land reform as a consequence of agricultural growth in Africa. Likewise, Sánchez [19] shows the traditional obstacles to the effective implementation of reforms aimed at securing land tenure, providing access to vulnerable groups and realizing productive potential. Lin (2015) and Jong-Sung [20] show that the failure of land reform is often due to high rates of ethnicity. They find that the success and failure of land reform is attributable to corruption but largely determined by exogenous factors such as external threats and pressures for reform. However, Benahed et al. (2014) has shown that urbanization focused on land reforms negatively impacts agricultural growth in developing countries. Similarly, Valette et al. [21] show that various factors such as public policies in favor of the rehousing of poor populations, the promotion of the privatization of agricultural land rights, as well as more generally economic growth have favored urban sprawl in the main cities. The work of Sabayasachi et al. [19], and Moula et al. (2019) have shown that urbanization has a mixed impact on land reforms, insofar as it promotes decent housing, but considerably reduce agricultural growth in other countries where agricultural forests are destroyed.

**Empirical evidence from Benin**

In Benin, the urban population represented 27% of the total population in 1979, 36% in 1992 (MPREPE, 1998), 38.85% in 2002 [22] and a projection of 45% was planned for 2012 [23]. Cotonou recorded an extremely rapid spectacular expansion and the adopted plans were continued, but without taking into account the marshy areas [24]. Individual housing represents at the national level more than 50% of artificial surfaces while collective housing represents nearly 1.5%. Despite efforts to develop a few tools to better manage land in Benin, their inclusion in decisions leaves much to be desired Comby (2004).

The objective pursued in this research is to assess the relevance or otherwise of the effects of population, ethnicity and urbanization on the growth of agricultural GDP. It has been observed that the growth of agricultural GDP is explained positively by the ethnicity index and agricultural investments delayed by a period. We used secondary data from FAO statistics over the period 1995 to 2019 and estimated a VAR (1) model with all diagnosis tests. The time horizon for responses is set at 10 years, assuming that this horizon corresponds to the time needed for the variables to return to their long-term levels. It emerges from this causality test in the sense of Granger that there is a feedback effect between agricultural GDP and the ethnicity index, between agricultural GDP and agricultural investments between the active agricultural population and agricultural investments then between the ethnicity index and agricultural investments. It is therefore important to revitalize other sectors of activity likely to consume part of the working population in order to avoid the intensification of the workforce which often reduces the income of agricultural workers. We must also work for flexibility in the ethnicity index in order to promote social cohesion. Finally, priority must be given to efficient agricultural investments likely to facilitate intensive cultivation due to advanced urbanization in residential areas.

Agricultural growth supported by adequate agricultural investments and an active agricultural population is a particularly effective means of reducing hunger; malnutrition; food insecurity and above all due to food in African countries south of the Sahara Most of the very poor derive much of their livelihood from family farming and related activities. Agricultural growth achieved by smallholder farmers in African countries, and especially women, is particularly effective in reducing extreme poverty and hunger when it increases the output of labor and creates jobs for the poor. With a view to boosting green growth, African countries south of the Sahara are strongly confronted with recurring problems such as land reforms, urbanization, ethnicity and especially agricultural investments.

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