## AGRICULTURAL TRANSFORMATION AND RURAL-URBAN MIGRATION

#### Nikolche JANKUlOVSKI

University St Kliment Ohridski Bitola, 7000, Macedonia nikolce.jankulovski

## Vakhtang CHKAREULI

PhD Candidate in Economics, Tbilisi State University, Georgia vakhtangchkareuli@gmail.com

#### **Abstract**

Nowadays, the migration of people to the cities is proceeding at historically unprecedented rates, especially in developing countries. A large part of the explanation of urbanization can be found in the economic stagnation of rural areas. Nowadays, more than 3 billion people over the world live in rural areas and a quarter of them in extreme poverty. Their absolute majority is involved in agricultural sector.

In this paper we are going to discuss the main tendencies and dynamics of internal migration, what are the main fruits of urbanization and how does it influence on agricultural transformation.

Key words: Agriculturale, Economic Development, Migration, Rural-Urban Areas, Transformation.

JEL Classification: Q18; R23, R11.

#### I. INTRODUCTION

Rural-Urban migration, or just internal migration means a movement within a country, when people from the countryside move to the cities, which are often country's metropolitans.

During the last two decades, world's most developing parts witnessed unprecedented rates of people migration to the cities. A large part of the explanation can be found in the economic stagnation of outlying rural areas. But let's go through them and discuss basic fundamentals of those reasons.

The factors which influence people's decision about internal migration are often divided into "push" & "pull" factors. Due to diversity of those factors and reasons let's split them in economic and non-economic determinants (Table 1).

Table 1 Rural-Urban Migration factors

Economic Push Factors	Unemployment or underemployment in rural areas
	Law rates of wages
	Lack of available land and other material assets
Non-economic Push Factors	Poor rural infrastructure & living conditions
	Lack of healthcare & educational possibilities
	Agricultural transformation (modernization of farming, new techniques, machines
	etc.)
Economic Pull Factors	Higher employment possibilities
	Higher rates of wages
	Asset availability
Non-economic Pull Factors	Sound infrastructure & living conditions
	Better educational opportunities
	Protection from conflicts etc.

You would note that on the one hand economic push factors are opposite of economic pull factors, and on the other hand non-economic pull factors are the opposite of non-economic push factors and vice versa.

It is clear that the process of rural-urban migration will cause substantial changes in both areas of origin and destination. First of all, urbanization leads to spatially expanding of the cities, as there is not enough housing space. The other fact is a significant increase in population who live in the cities, on the behalf of those who lived in countryside. It is worth to note, that rural depopulation often leads to leaving very old and very young people in the rural areas. Misleading young skilled adults from countryside cause more rural development problems.

Nowadays, over two-thirds of the world's poorest people are located in rural areas and engaged primarily in subsistence agriculture, who's basic concern is survival. It is inevitable, that development has to take place and that there is little space left for everything else, rather than agricultural sector.

Generally, agriculture is considered to play a secondary, supportive role for economic development. Mainly, it provides low-priced food and manpower to the industrial economy, which is thought to be a fundament for future development.

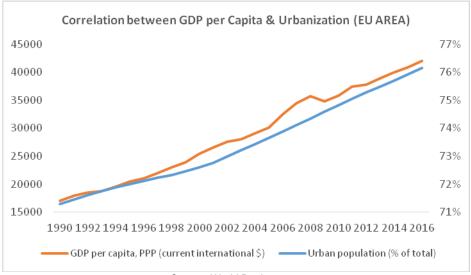
# II. AGRICULTURAL TRANSFORMATION - PAST PROGRESS AND PRESENT CHALLENGES

In economic development it is often mentioned a crucial role of structural-change models. These models focus on underdeveloped economies which are transforming their domestic economic structures from a heavy emphasis on traditional subsistence agriculture to a modern, more urbanized and industrially diverse manufacturing and service economy.

Lewis two-sector model is one of them, in which underdeveloped economy is divided into two sectors: first one is rural subsistence sector characterized by zero marginal labor productivity and the other is a high-productivity modern, urban industrial sector.

The main idea of the model is, that surplus labor can be withdrawn from the traditional agricultural sector without any loss of output and transferred to urban industrial sector.

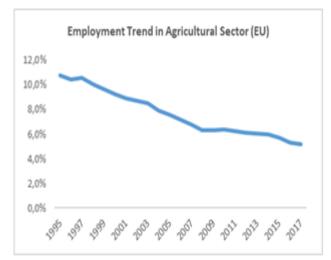
Anyway, it's fruits are increased output and employment in the "modern" sector, which is fueled by agricultural one. Agricultural transformation of the last decades proves this postulate. (Figure 1)

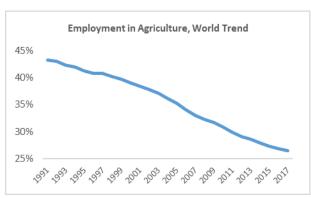


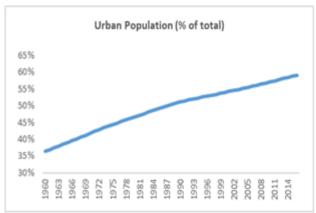
Source: World Bank

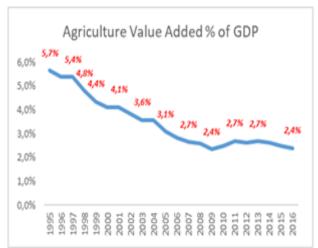
Today, most economists agree that far from playing passive role in the process of economic development, the rural economy (in particular agricultural sector) can and have to play a crucial part of development, especially for developing countries.

If we choose an agriculture and employment based strategy of economic development, we should accept the challenges of traditional agricultural transformation. Basically, it requires fulfilling of some fundamental elements. First of all, output growth should be accelerated through diverse portfolio of incentives, which cover technological, institutional and price incentives to raise the productivity of small farmers. Economic policy should be oriented to increase domestic demand for agricultural output which comes from urban development. But, we should not forget rural development as well, which should be diversified. The broad spectrum of rural development activities, including small-farmer agricultural progress, the provision of physical and social infrastructure, the development of rural nonfarm industries, and the capacity of the rural sector to sustain and accelerate the pace of these improvements over time.









Source: Source: World Bank & international labor organization ILOSTAT database.

Changes in employment in agriculture calculated as a % of total (modeled ILO estimate) employment is defined as persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working time arrangement. The agriculture sector consists of activities in agriculture, hunting, forestry and fishing.

Labor has to a large extend been substituted by capital. With capital investments increasing, productivity per unit of capital decreased. Capital productivity shows an overall decreasing trend prior to the financial crisis, indicating that investments in machinery, buildings and alike have played a major role in the realization of output growth rate of 4% per year prior to the crises to fall back afterwards. As a consequence, after the financial crisis capital productivity growth is recovering, mainly linked to the slowdown in investment growth.

EU commission has launched an ambitious program towards a resource efficient Europe in 2020. As a consequence, the agricultural sector is challenged to achieve more with less. To monitor the progress towards higher productivity, which indicates improved output over input ratio, Total Factor Productivity (TFP) offers an interesting starting point. While in the past main gains is agricultural output were achieved by resource intensity (more land, capital and intermediary inputs brought into production), the last decade productivity increase has led production growth, allowing for the saving of resources while out grew further. The increase in agricultural productivity allowed for a sustained decrease in real agricultural prices, and hence food prices, contributing to a decreasing share of food in the overall consumer expenses.

Productivity in the EU has increased over time. During 1995-2015 period productivity growth rate surpassed 1% each year including 2005, while from 2006 it slowed down to around 0.8%. As a whole, factor productivity was 9% higher in 2015 rather than in 2005. If we go deep through its fundamentals over the longer run, it becomes clear that labor productivity growth has contributed most productivity gains. Output growth has been achieved while the workforce was shrinking. Since 2005 the volume of agricultural output has increased by

about 6%, while between 2005-2015 the total workforce in agriculture declined by about 25% (around 9.5 million full time equivalents, in line with the restructuring in the direction of fewer but larger farms).

Let's briefly discuss some key facts (facts are mostly taken from Eurostat 2013 research, as it covers the most comprehensive data, which is needed for our study).

The standard output of farms in the EU increased by almost 56% between 2005-2013. For example, in 2013, there were 4.4 million farms in the EU-28 with total output up to EUR 2000, while the number of farms which composed their economic output in the range of EUR 2000 EUR 8000 was 3.1 million. On the one hand, these farms which are classified as "very small" and "small", account for more than two thirds (69.1%) of all farms in the EU-28, but on the other hand their share of standard output was lower than 5%.

This figures prove the consideration, that scale matters a lot in agricultural sector. By contrast, there c. 680 thousand farms in the EU-28 with standard output of EUR 100 000 or more. These farms classify as the "largest" and account for 6.3% of total farms and 71.4% of the agricultural standard output.

## III. CONCLUSIONS

Major objective of agricultural and rural development in developing countries should be a progressive improvement in rural levels of living achieved primarily through increases ins small-farm, output and productivity. It is important to identify the principal sources of agricultural progress and the basic conditions essential to its achievement.

In most developing countries, innovations in farm practices drive improvements in productivity and outputs. When we are talking about innovations in agricultural sector, first of all we mean technological progress, that helps replacing human labor. It is clear, that introduction of mechanized agriculture can have dramatic effect on the volume of output per worker.

In the end we can draw main conclusions regarding the necessary conditions for the realization of a people-oriented agricultural and rural development strategy.

First of all, farm structures and land tenure patterns must serve to increasing food production on the one hand, and promote a wider distribution of the benefits of agrarian progress on the other hand. We should consider, that full benefits of small-scale agricultural development are unreal, unless government composes special policies to create necessary incentives, economic opportunities and access to needed credit and inputs to enable small cultivators to expand their output and raise productivity.

Rural development encompasses efforts to raise not only farm but also non-farm real incomes through rural industrialization. Also, it means decreasing of inequality in the distribution of rural incomes and lessening of urban-rural imbalances in incomes and economic opportunities.

## IV. REFERENCES

- Anderson, J. R. (2007). Agricultural Advisory Services, Background paper for 2008 World Development Report. Washington, D.C: World Bank.
- 2. Cole, W. E. (1975). Internal migration and urban employment in the Third World. Economica vol. 42, 37-49.
- 3. Commission, E. (2018, 05 10). Agricultural and farm income. Retrieved from European commission: https://ec.europa.eu/agriculture/sites/agriculture/files/statistics/facts-figures/agricultural-farm-income.pdf
- 4. EUROSTAT. (2018, 05 12). Retrieved from EUROSTAT: http://ec.europa.eu/eurostat/data/database
- 5. Harris, J. a. (1970). Migration unemployment and development. American Economic Review vol. 60, 126-142.
- 6. International Labor Organization. (2018, 05 10). Retrieved from International Labor Organization: http://www.ilo.org/global/statistics-and-databases/lang--en/index.htm
- 7. Rural Development in the EU. (2018, 05 8). Retrieved from European Commission: https://ec.europa.eu/agriculture/sites/agriculture/files/statistics/rural-development/2013/full-text\_en.pdf
- 8. Todaro, M. P. (1969). A model of labor migration and urban unemployment in LDCs. American Economic Rebiew Vol. 59, 138-
- 9. Von Braun, J. (1989). Commercialization of Smallholder Agriculture: Policy Requirments for Capturing Gains for Malnourished Poor. Washington, D.C.: International Food Policy Research Institute.
- 10. World Bank. (2018, 05 15). Retrieved from World Bank: https://data.worldbank.org/