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CASE STUDY OF RURAL ECUADORIAN REGION AND THE COMPARISON BETWEEN HUNGARIAN RURAL SECTOR

Review Article

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Abstract

The review article aims to know the reality of the rural sector of one of the essential productive territories of Ecuador. Manabi province is in the center of the country's coastal area on the most relevant part of the South American continent over the Pacific Ocean. It is in a strategic position for trade and agro productive activities. The document will analyze the three dimensions (social, ecological, and economic) in which the rural development of the territories is focused and compare the region described with the Hungarian rural economy. Additionally, it will identify some similarities and differences in the rural sector, particularly the strong relationship between the agricultural activities and the situation of the farmers in this context. This case study serves as an instrument of analysis of a settlement within which rural development works at a general level. Also, it will contemplate a series of statistical information that evidence the territorial reality of the regions that can determine future sustainable rural development strategies.

INTRODUCTION

Manabí province is in the center of the coastal region of Ecuador. The climatic characteristics in Manabí are influenced by the marine currents of the Eastern Pacific. Manabí has crucial natural water resources (22 river basins plus underground aquifers); however, the recent water balance determines that this situation severely affects the agriculture activities during certain months. According to the Ministry of Agriculture of Ecuador (2020), Manabí has a total area of 1 922 thousand ha, mainly occupied by crops and livestock production.

Regarding the employment generated by activities, the productive ones are most important in the province, especially those from the primary sector (manufacturing industry and construction), followed by the wholesale and retail trade (SENPLADES, 2019). The principal sectors related to the productive sector are the processing and conservation of tuna and other aquatic products; these activities are highly relevant nationwide because of their contribution to the GDP.

Manabí has 1 369 thousand inhabitants that correspond to 9.80% of the total population of Ecuador (INEC, 2010). Poverty is one of the most critical problems in the province and the country; around 32% of Ecuadorians do not have the minimum income to fulfill their basic needs (GRUPO FARO, 2018). Manabí has countless limitations in their local development; the main ones are the lack of access to higher education, high levels of poverty and extreme poverty, and limited access to basic services. However, it is essential to show that the government policies applied between 2006 and 2017 meant a general growth in economic and social terms in Ecuador and invulnerable territories like Manabí since many social indicators concerning the living conditions of the inhabitants of the province improved. The reality described in Manabí is near to other regions in Ecuador mainly from rural areas. These territories largely depend on agricultural, livestock, and fishing activities; their living conditions are highly inequitable and less developed than in urban and more industrialized areas.

On the country level, both in Hungary and Ecuador, despite some efforts and programs with different approaches to strengthening rural development, these areas' conditions are unequal compared to urban areas. This unsatisfactory performance results from several factors, such as institutional instability, lack of coherence in development policies, scarce financial opportunities, scarce access to technology, inappropriate health care system, and lack of regulation to access natural resources (water and soil).

MATERIAL AND METHOD

For this analysis, a qualitative case study method is applied to explore an intricate settlement within the national context and its comparison with other rural realities. To compare the rural facts, the (Rural Development Institute, Brandon University, 2017) recommends the conventionally comparative analysis to emphasize the explanation of differences and similarities. This comparison supports the relationships between two or more phenomena and provides valid reasons (Tilly, 1984). Also, comparisons can be carried out on various levels: regional, national, or wider geographical boundaries based on specific subject or area of interest (U.S. Department of Health and Services, 2018).

The results will analyze the region in three dimensions (social, ecological, and economic) to establish the relationship between Ecuador and the Hungarian rural economy; and compare the region with the Hungarian rural economy by a SWOT matrix and basic ratio data. The SWOT matrix on the regional development environment is an instrument planned to highlight those dominant and determining factors, both within and outside the territory in question (Karppi, Kokkonen, & Lähteenmäki-Smith, 2001). This analysis involves the collection of information about internal and external factors which can impact regions. The SWOT matrix is often portrayed as a 2X 2 matrix that lists or categorizes the environmental factors under the headings of strengths, weaknesses, opportunities, and threats. Strengths and weaknesses pertain to internal factors of the region, and opportunities and threats pertain to external factors of it. (Pickton & Wright, 1998).

In this research, the collection technic to be used is a documentary analysis that relies on the compilation and analysis of secondary data as existing organizational records, documents, and information of the region to analyze and at the national level of Ecuador and Hungary.

RESULTS AND DISCUSSION

Manabí province is in the center of the coastal region of Ecuador in the most relevant part of the South American continent over the Pacific Ocean. It was created in 1824 at the time of Gran Colombia; it has a total area of 18,400 km2 and, on its political-administrative division, has 22 cantons and 53 rural parishes. On the ecological dimension, the climatic characteristics in Manabí are determined by the influence of the marine currents. In this region, two large sub-climatic zones are considered warm-cool-dry and warm-hot-humid; the average temperature is 26 ° C, with constant rains. Comparing with zone 4 (Manabí and Santo

Domingo), the parameters are similar, especially in the temperature and rainfall average (INEHMI, 2017) (Table 1). This province has a wide diversity of flora and fauna, related to its 350 km of beaches, different types of forest, and countless natural reserves currently protected. Despite having natural water sources, the recent water balance determines a water deficit that exceeds 1 000 mm in annual terms in the coastal areas of the province (Campos Cedeno, Salas Guillen, & Macias, 2019). According to the information obtained from (Ministry of Agriculture and Livestock of Ecuador, 2019)in Manabí, 39% of the total land area is occupied by pastures cultivated for livestock production; the forest corresponds to 28,7%, between 22,7% for short-cycle crops and perennial crops, and the difference in other types of use as shrub vegetation.

About the economic conditions, the employment generated by productive activities is the most important in the province, especially those from the primary sector such as agriculture, livestock, forestry, and fishing, which represent 26.30%; followed by wholesale and retail trade 17.01%; the manufacturing industry 7.56%; and construction on 5.70% (SENPLADES, 2019). The primary industries in the region are the processing and conservation of fish and other aquatic products, and these activities are highly relevant nationwide for their contribution to the GVA (Table 2). The previous assumption ratifies the province's productive vocation in this sector besides the geographical importance of its location and its infrastructure, being the second commercial harbor of importance nationwide. It also confirms the production capability of the province's land and natural resources; however, the national GVA is lowest compared to other regions. The unemployment rate maintains around 4.4% yearly, however in 2015, it increased because the floods and natural hazards combined with the decrease in the oil prices causing problems locally and in the national economy.

The last dimension analysis is the social conditions of the region. Manabí has a population of 1 369 780 inhabitants (INEC, 2010), which corresponds to 9.80% of the total of Ecuador. The population growth in the region has been linearly by 1% annually; however, in the national data, the change is irregular, especially in the latest years caused by the immigration of population from near countries like Colombia and Venezuela (Table 3). The data analyzed shows the high increment of the urban population by the years in the country, 66% more than the base year compared to the rural population that only increases 5% (Table 4). Compared with national data, Manabí is the province with the largest rural population, with 43% of it, while Ecuador has 37%. According to INEC, in 2018, around 35.5% of the people of Manabí have income poverty, and 17.6% live in extreme poverty. The illiteracy rate in Manabí reaches 10.20% as an average of the population over ten years, 90% of the scholar population attended the education system, and only 30,2% of these populations have access to higher education in Manabí.

As Figure 1 indicates, the SWOT analysis made on the province reflects that the most important strengths are the geographical location, the productive vocation of its soils, and maritime territory, besides an essential percentage of the rural population in the province. Among the notable weaknesses are their limitations of access to public services and high levels of poverty that dismiss the quality of life of its inhabitants, especially in rural areas. Another significant weakness is the extensive agricultural production systems that cause deforestation, soil erosion, and other ecological problems. On the external factors within the opportunities, Manabí has national and international demand for agricultural and handicraft products. Referred to previously in the province are still adequate government infrastructure, logistics facilities, and tourist ports, making it an attractive territory for local and international tourists. The major threats of the region are the high vulnerability to natural hazards and the global warming that affects the production conditions and the quality of the natural resources.

With these three dimensions analyzed and the SWOT matrix on the region of Manabí, it is deduced that the same complex realities happen in most rural areas on the national scale. To make an adequate comparison of the two facts on the national level between Ecuador and Hungary, Figure 2 analyzes the similarities and differences in the rural sector of both countries. One of the fundamental similarities is that the rural sector is linked with agricultural and livestock production in both countries. Access to public services is limited compared to urban territories. The migration from rural to urban areas is also a common problem because people from the rural sector look for better opportunities in the city in both cases. From the differences, unlike Ecuador, Hungary belongs to a structured international community of countries called the European Union, which has specific guidelines and resources for the rural development of their member countries. The levels of poverty and extreme poverty faced by the rural sector in Ecuador are incredibly high compared to Hungary, limiting the living conditions of the inhabitants and its rural development.

CONCLUSIONS

Like most regions of Ecuador, Manabí province has sufficient natural conditions that provide the resources for the population to achieve a healthy lifestyle and the most important, for having a potential in agricultural and livestock production. However, the inhabitants have problems in different factors like poverty, access to education, essential services, health care, etc. From the SWOT analysis, it is possible to identify several strengths that the province has, besides the external opportunities that make it a territory with growth potential. However, socio-economic indicators do not guarantee the quality of life of its inhabitants that reflect on their weakness as territory.

Comparing both countries in their rural economy context, it is possible to identify similarities and differences in the rural sectors. One of the most important was the direct relationship between agricultural activities within the rural sector and the situation of the inhabitants in this context. And one of the significant differences between the countries is the governmental management in the rural area. In Hungary's case, a specific Ministry works in this field accompanied by European resources to develop projects in the country's rural development, contrary to Ecuador, where several institutions attend the rural sector without structured programs that cause unsustainable actions and duplication of efforts with unjustified expenses.

From the information analyzed, Manabí is the territory with a high percentage of the rural population in the country, which is linked to the productive vocation of its geographical conditions. Therefore, the state must generate permanent public policies that ensure sustainable local development for all of the province's citizens, focusing on improving the population's quality of life and providing the resources for the next generations in these rural areas.

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Table 1
Comparison of the essential climate parameters of Manabí and other regions in Ecuador

Climatic parameters	**Region** *(Manabí)*	**Zone 4** *(Manabí and Santo Domingo)*	**Country** *(Ecuador)*
Annual rainfall average (mm)	1 012	1 891	2 274
Sunshine hours annual average	1 170	961	1 374
Maximum temperature (°C)	35.9	34	18
Minimum temperature (°C)	17	17.5	14
Relative humidity (%)	79	82.5	70

Source: Annual Meteorological. 2017, INEHMI; Word Bank data. 2019

Table 2
Contribution per industries of the productive sector in the Gross Value Added of Manabí.

Industries of the productive sector	**Gross value added Manabí** *(thousands of dollars)*	**Contribution to the national GVA** *(percentage)*
Processing and conservation of fish and other aquatic products	556 630	66.34
Shrimp processing and conservation	187 323	18.36
Fishing and aquaculture (except shrimp)	135 932	25.03
Banana, coffee, and cocoa cultivation	124 563	5.11
Preparation of oils and fats vegetable and Animal origin	121 179	30.73
Other crops	111 029	4.29
Cereal cultivation	90 808	13.68
Animal husbandry	87 012	12.83
Manufacture of other food products	79 531	15.44
Aquaculture and shrimp fishing	65 847	9.98
Forestry and wood extraction	58 037	4.2
Meat Processing and Conservation	56 340	6.02
Production of dairy products	1 435	0.4

Source: Banco Central del Ecuador, 2020

Table 3
Projection of the population in the three regions and the basic radio per group

Years	**Manabí**		**Zona 4**		**Ecuador**	
	Population	**Basic ratio**	**Population**	**Basic ratio**	**Population**	**Basic ratio**
2010	1 420 328	0	1 799 706	0	15 012 228	0
2011	1 436 259	1.1	1 823 488	1.3	15 266 431	1.7
2012	1 451 873	2.2	1 847 006	2.6	15 520 973	3.4
2013	1 467 111	3.3	1 807 174	0.4	15 774 749	5.1
2014	1 481 940	4.3	1 892 949	5.2	16 027 466	6.8
2015	1 496 366	5.4	1 915 323	6.4	16 278 844	8.4
2016	1 510 375	6.3	1 937 285	7.6	16 528 730	10.1
2017	1 523 950	7.3	1 958 799	8.8	16 776 977	11.8
2018	1 537 090	8.2	1 979 878	10.0	17 023 408	13.4
2019	1 549 790	9.1	2 000 490	11.2	17 267 986	15.0

Source: own calculations based on INEC, 2010

Table 4
Analysis of the urban and rural population in Manabí base in the historic national census

Years	Urban Population	Rural Population	Basic Ratio Urban Population	Basic Ratio Rural Population
1990	464 367	567 559	0.0	0.0
2001	616 733	569 292	32.8	0.3
2010	772 355	597 425	66.3	5.3

Source: own calculations based on INEC, 2010

STRENGTHS	WEAKNESSES
• Geographic location. • Hardworking and enterprising people. • Culture, traditions, and cuisine for which many tourists worldwide visit Manabí. • The productive vocation of its soils and maritime territory. • Biodiversity of flora and fauna in several natural reserves that the province has. • One of the few provinces in Ecuador has more than 60% of the rural sector and in which the production activities are concentrated.	• Limitation of access to essential services, education, among others. • High levels of poverty and extreme poverty limit the quality of life of its inhabitants, especially in rural areas. • Extensive agricultural production systems are causing deforestation, soil erosion, among other ecological problems. • Lack of marketing channels for agricultural products that benefit rural farmers.
OPPORTUNITIES	**THREATS**
• Demand for agricultural and handicraft products in national and international markets. • Adequate government infrastructure, logistics facilities, irrigation channels, tourist ports, and others; which improve the living conditions of its inhabitants and make it an attractive territory for local and international tourism. • Global and local trends to acquire agricultural products produced sustainably by small farmers with certification seals that allow competitive prices.	• Global warming affects the production conditions and the quality of natural resources. • High vulnerability to natural hazards. • Political and economic instability from the Central Government.

Figure 1
SWOT analysis of Manabí region
Source: Own editing

DIFFERENCES	SIMILARITIES
• Unlike Ecuador, Hungary belongs to a structured international community of countries called the European Union, which has specific guidelines and resources for the rural development of the member countries. • In Ecuador, several state and municipal institutions are responsible for rural development that are not necessarily connected, generating slow processes and deviation of resources to achieve practical projects for rural sectors. • Access to technology packages and subsidies given to farmers by the EU and the Government of Hungary significantly improve rural areas, contrary to Ecuador, limited by a series of political and economic despair policies. • Agricultural production systems are different in countries partly because of their climatic differences and natural characteristics, the agrarian sector structure, and access to water and soil resources. • The levels of poverty and extreme poverty faced by the rural sector in Ecuador are incredibly high compared to Hungary, limiting the living conditions of the inhabitants and its rural development.	• The rural sector is linked with agricultural and livestock production in both countries. • In the rural sectors, access to public services is limited in comparison with urban territories. • The migration from rural to urban areas is also a common problem because people from the rural sector look for better opportunities in the cities in both cases. • Both in Hungary and Ecuador, primary activities contribute significantly to the economies of the countries. However, the farmers do not have the same living conditions compared with other sectors within the countries analyzed. • The climatic changes caused by global warming affect the countries in the same way; the rural agricultural sector is one of the most vulnerable because it depends on the access of specific natural resources for its sustainability.

Figure 2
Similarities and differences between Hungary and Ecuador in the rural economy sector
Source: Own editing