

Infographic

New narratives

for
Rural Transformation in
Latin America and the Caribbean:
a renewed measurement and
classification of rural spaces



UNITED NATIONS

ECLAC



LIFAD

Investing in rural people



NEW
NARRATIVES

New Rurality

In Latin America and the Caribbean, rural spaces have undergone diverse transformations and mutations over the last decades. In the economic realm, the share of added value and employment generated by agriculture within rural economic activities is generally lower; this is the result of the growing presence of services, such as agritourism, and processing activities.



The rural population employed in the agricultural sector was:

54.6% In 2019 and **66.0%** in 2000

In territorial terms, there are increasing interactions between urban and rural areas and a greater appreciation of local and natural resources

Significant demographic changes can also be seen, such as a decrease in the population living in rural areas, as well as new forms of interaction with urban centres.



These transformations have led to the forging of new concepts and methods of interpretation and analysis (such as “the new rurality”) that underscore the need to rethink the paradigms of public development policies for rural areas.



The **World Social Report 2021**, prepared by the United Nations Department of Economic and Social Affairs (UNDESA), makes an urgent call for a rethinking of rural development strategies. The report recognizes that current strategies are failing to lead to the fulfilment, in rural areas, of the socioeconomic and environmental targets of the SDGs.

Initial Motivation

- 1 Major transformations** in the rural spaces (economic, territorial and demographic) that are invisible in current official definitions.
- 2 The official methodology** is dichotomous and static, and underestimates the importance of the rural
- 3 Incomplete and disjointed** vision of rural areas that does not allow for an adequate design of rural and territorial development policies.



Four out of every five people in extreme poverty in the world live in rural areas.



Many rural areas are affected by the depletion and degradation of natural resources which contributes to climate change and requires a fresh look.

Rurality in Latin America and the Caribbean

This book summarizes the activities and main findings of ECLAC's technical collaboration processes with financial support from IFAD.

The Economic Commission for Latin America and the Caribbean (ECLAC), with financial support from the International Fund for Agricultural Development (IFAD), implemented the international cooperation project entitled "New Narratives for Rural Transformation in Latin America and the Caribbean". The main purpose was to review the limits and scope of the classic definitions of rurality in LAC, in order to build new technical tools to help strengthen rural development policies from a new perspective.

The methodological proposal developed in this task was applied to four countries as a starting point to draw lessons and develop related methodologies applicable to the rest of the countries in the region.



Costa Rica



El Salvador



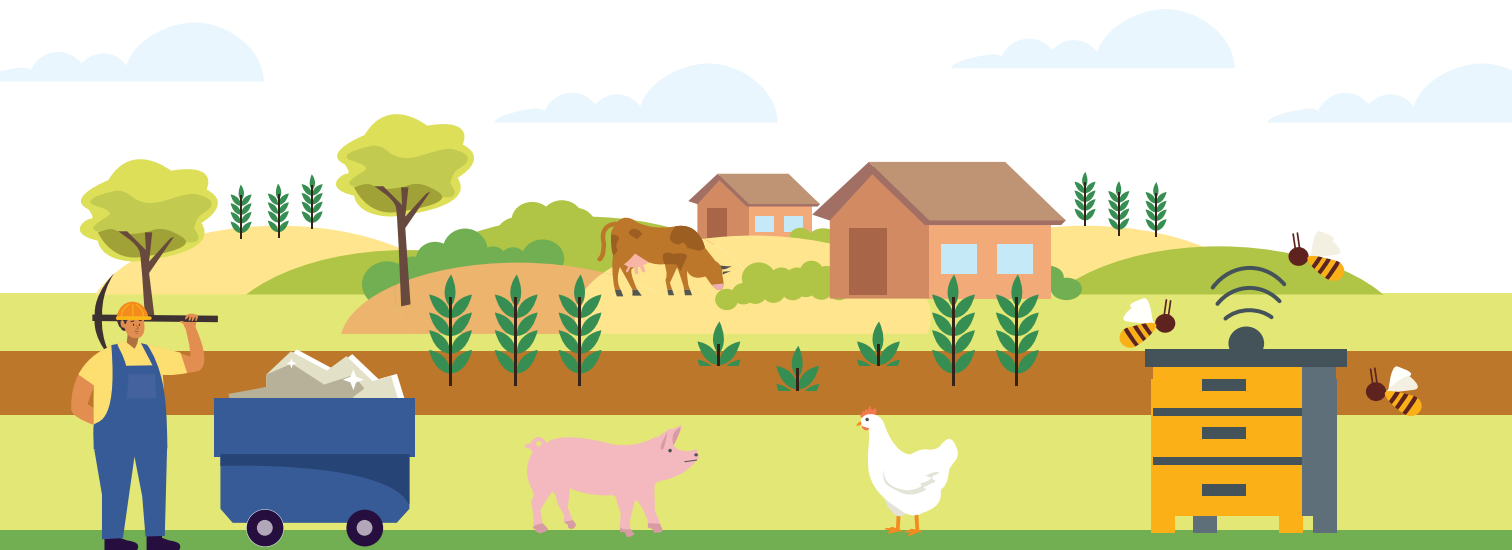
Mexico



Panama

The results of the project are classified into four areas:

- Development of new technical instruments
- The analysis of the implications for the design and implementation of public policies
- Promotion of inter-institutional dialogue
- Strengthening of national and regional capacities



Current definitions of rural and urban spaces



Mexico

The definition of rural-urban, which dates back to 1936, defines that:

Urban localities:

2.500

or more inhabitants

Rural localities: less than

2.500

inhabitants



Panama

The census framework determines rural spaces by what is left over:

Urban area:

1.500

or more inhabitants

Rural areas:

Those places that do not have the characteristics of urban areas.



El Salvador

In the context of the 2007 Population and Housing Census, the General Directorate of Statistics and Censuses (DIGESTYC) establishes that rural is the residual, defined by discarding:

Area of urban residence:

1.000

or more inhabitants per km² possessing

500 grouped dwellings



Costa Rica

For the 2011 census, the National Institute of Statistics and Census (INEC) adopted the following definition:

Urban areas: Delimited areas from each canton or district, with criteria such as sidewalks, urban services and economic activities

Rural area: This is the residual of the urban area.



Project phases



The first phase consisted in analyzing the scope and limitations of the measurement methodologies in force at the selected countries and in developing three alternative rurality indexes, based on the contributions of the New Rurality theory.



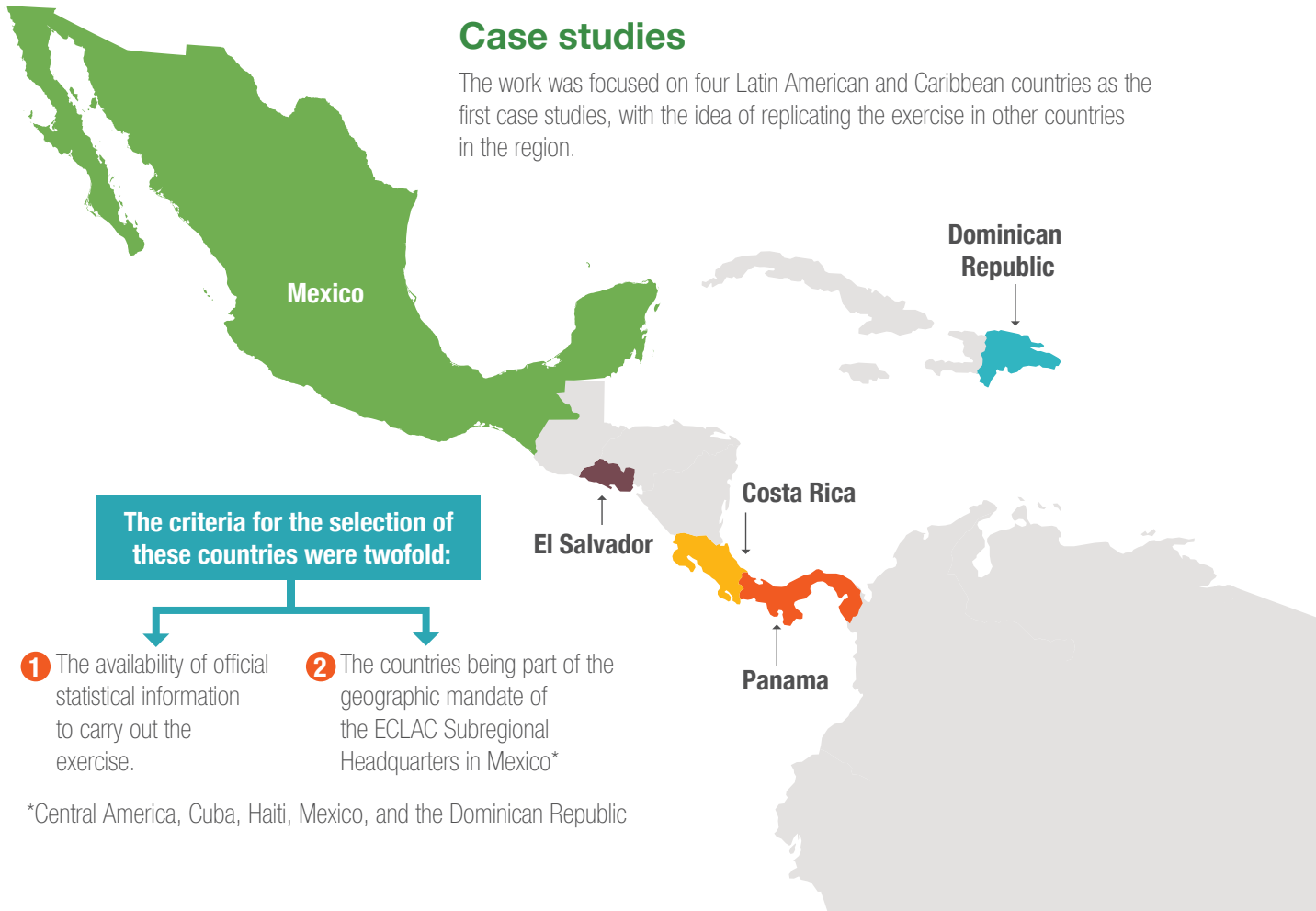
The second phase involved the preparation of maps presenting alternative rurality scenarios and the socioeconomic characterization of the selected countries based on the new rural reality presented.



The third phase focused on the analysis of the contributions of alternative rurality scenarios in terms of public policy, with a concrete application in two exercises in each of the selected countries.

Case studies

The work was focused on four Latin American and Caribbean countries as the first case studies, with the idea of replicating the exercise in other countries in the region.



Alternative Indicators to define rural and urban

These indicators are proposed as exploratory alternatives; they are not official ECLAC recommendations for other countries to implement and adopt these methodologies. The main source of information for the construction of these indicators is the population and housing censuses.



Costa Rica

Three-dimensional rurality index

Population density, population employed in primary activities, in the territory, natural forest conservation.

Functional rurality index

Labor commutation, urban area detected through the use of diurnal satellite-imagery-derived products.

Multivariate rurality index

Access to education, health, drinking water, electricity, information and communication technologies, protection of natural resources.

Combined rurality index

Three-dimensional rurality index, functional rurality index, multivariate rurality index.



El Salvador

Scenario 1

Population density with a threshold of 1,000 inhabitants per km² and intensity of nighttime luminosity for municipalities and functional territories.

Scenario 2

Threshold of 1,000 inhabitants per km², light intensity and territorial economic functionality index for municipalities and functional territories.

Scenario 3

Precarity index for municipalities and functional territories.



Mexico

Relative rurality index (RRI)

Population, population density, percentage of built-up area, distance to an urban locality.

Accessibility index

Population, road network and road condition.

Thiessen polygons

Delimits zones based on localities (population density and land use: construction, agriculture, other uses).

Characterization of rural-urban spaces

Based on 1 km² grids (population density and contiguity of areas of similar densities).



Panama

Environmental rurality index

Population density, forests per township, agriculture per township.

Relative rurality index

Population, population density, built-up area percentage, distance to an urban locality.

Demographic index of rurality

Population density; land allocated to agriculture per township, population born in a different district.

Alternative indicators for defining rural and urban

The elaboration of new proposals for defining rurality was based on the conceptual framework of the New Rurality presented by Gaudin in Chapter 1 of this book, and included aspects specific to each country that were considered central to the new definitions. The exercise did not seek to start from pre-established criteria in order to have common indexes for the four countries. Rather, the teams of experts working in each country, in dialogue with national public agencies, selected a common approach and the variables for the construction of alternative indicators that respond to national characteristics and interests.

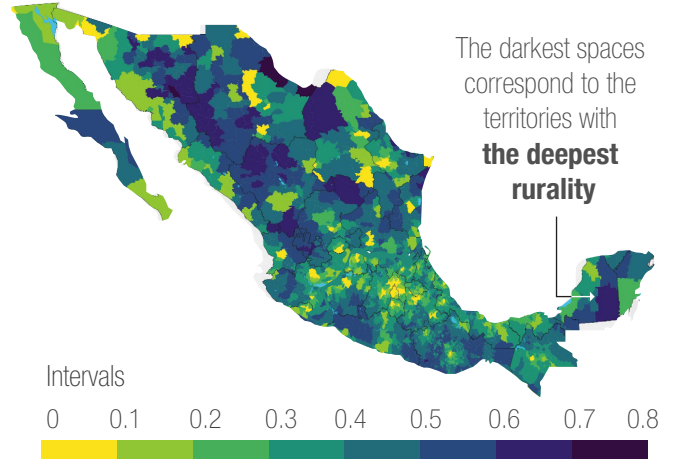
Classification according to INEGI

The difference in Mexico's territorial division between rural and urban, segmented into two colors, according to the dichotomous criteria of the official definition is shown.



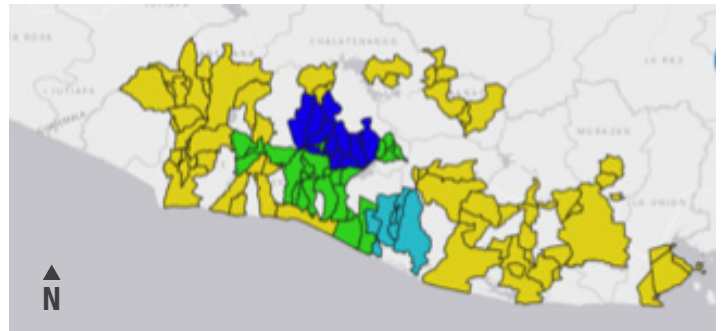
Ranking with the Relative Rurality Index

The division of the Mexican territory follows a gradient approach, presenting 10 colors, according to the different values of the Relative Rurality Index.



Functional territories

Using the population density and satellite nighttime luminosity for El Salvador, a set of territories that can be considered functional were identified and classified into four types:



First chapter

Yannick Gaudin, ECLAC consultant, analyzes the main economic, social and cultural transformations that rural areas in Latin America and the Caribbean have undergone and that have led to talk of a new rural reality.

The chapter shows a **brief historical-structural retrospective** on the birth of cities, presenting the perceptions and beliefs about rural spaces **until the 20th century**, as well as the tools that were used for their measurement and characterization.



It argues for **improved tools** for understanding and measuring rural life in Latin America and the Caribbean.



Second Chapter

Written by Martine Dirven and David Candia, ECLAC consultants, offers a critical analysis of the different rural measurement methodologies in force in Latin America and the Caribbean as a starting point for the design of new instruments that recognize the dynamic and heterogeneous nature of rural areas.

The chapter emphasizes the **need to strengthen measurement methodologies** that take into account the interactions between areas in order to move towards a territorial understanding of rurality.



Proposals and **recommendations are made** to modify the tools for better understanding and measurement.



Third Chapter

Written by Juan Fernández Labbé, María Ignacia Fernández and Isidro Soloaga, ECLAC consultants, specifically examines the territorial approach to rural analysis as a significant advance for the understanding and transformation of these spaces. The chapter seeks to respond to the demand for tools to understand rural areas and contribute to promoting processes of change that move towards territorial equity and cohesion in Latin America and the Caribbean.

After presenting the main characteristics of the territorial approach to understanding the rural and the concept of functional territory, the authors have brought operational proposals for the creation of:

Cartographic inputs

Socioeconomic analyses



Reflections are presented on **the design of public policies** that could be derived from this approach to understanding and analyzing rural issues.

With these three chapters, the conceptual and methodological bases for working with the different countries of the region were established. These innovative methodologies reveal a new rural reality possible, hitherto hidden by the dichotomous and static ways of measuring rural life through statistics and maps.

Fourth Chapter

Isidro Soloaga, Thibaut Plassot and Moisés Reyes, ECLAC consultants, present four alternative methodologies for measuring and characterizing rural areas in Mexico based on official statistics: the Relative Rurality Index (RRI), the Accessibility Index (AI), the cluster methodology (Thiessen polygons) and the measurement through 1 km square grids.



Mexico

This chapter reflects the stages established within the framework of the project:

- 1 Characterization of rurality in Mexico based on official statistics and the development of alternative rurality indexes.
- 2 Preparation of maps presenting these scenarios, as well as the socioeconomic and geo-referenced characterization of the country.
- 3 Analysis of the contributions of alternative rurality scenarios to public policy.

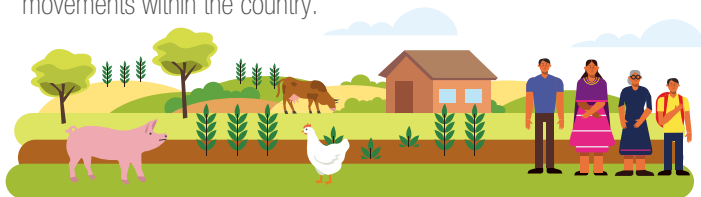
In particular, ECLAC contributed to the work carried out by the National Institute of Geography and Statistics (INEGI), the Ministry of Agrarian, Territorial and Urban Development (SEDATU) and the National Population Council (CONAPO) to define an alternative methodology for measuring and characterizing rural in Mexico.

Fifth Chapter

Written by Isidro Soloaga, Thibaut Plassot, Yannick Gaudin, Moisés Reyes and Sara Hess, consultants and ECLAC staff, three alternative indexes for measuring and characterizing rural areas in Panama are presented.



In order to compare results with the case of Mexico, Panamanian rurality was measured again with the IRR. After analyzing the recent transformations in Panamanian rurality, as well as the limitations of the current methodology for measurement purposes, the environmental characteristics of the country were highlighted to construct an **Environmental Index of Rurality (IAR)**, as well as a **Demographic Index of Rurality (IDR)** that allows for the analysis of population movements within the country.



Greater inter-institutional articulation to advance towards **new ways of understanding** and measuring rural Panama was promoted.

ECLAC worked with the Ministry of Agricultural Development (MIDA) and the Ministry of Social Development (MIDES) to disseminate the results of the work and to analyze their possible impact on the public agenda.

Sixth chapter

Mario Samper, Marco Martínez, Hernán González and Jorge León, ECLAC consultants, assessed the scope and limits of the official definition and methodology for measuring rural areas in Costa Rica. They constructed alternative methodologies, taking into account the contributions of the theory of New Rurality and the territorial approach to understanding rural areas.



Three alternative rurality indices were developed:

- 1 Dimensional Rurality Index**
- 2 Functional Rurality Index**
- 3 Multivariate Rurality Index**

In addition, the authors created a **Combined Rurality Index (RRI)** from these three proposals to provide an additional rurality scenario.

In addition to presenting the results of these exercises in terms of geo-referenced characterization of Costa Rican territories, the authors made a particular effort to work at a multi-scale, at the level of planning regions, maintaining a close working relationship with the Ministry of National Planning and Economic Policy (MIDEPLAN), and at the level of rural territories with the Institute of Rural Development (INDER).

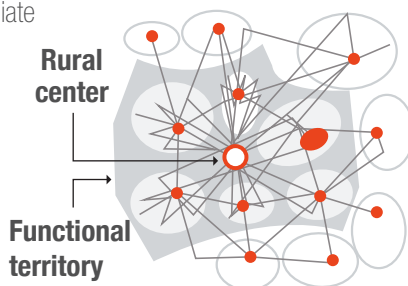
Seventh Chapter

Written by Cesar Sanchez, Andrew Roberts Cummings, David Lopez, Astrid Gonzalez, Marielos Garcia and Celeste Molina, ECLAC consultants, characterizes and analyzes strengths and weaknesses of the definitions of rural and urban areas based on the official statistics of the Government of El Salvador.



Elements of the regional debate that are relevant to propose alternative definitions that go beyond dichotomous considerations are taken up again, based on three scenarios aimed at gradually advancing toward more complex conceptualizations of the territorial reality, while maintaining comparability with current statistics.

The incorporation of the concept of **functional territories** allows a critical examination that is of interest for **territorial diagnostics** since it distinguishes intermediate or hinge municipalities that can ease the implementation of public policies by showing the economic, labor commutation and functional intermunicipal links and other aspects.



Innovative sources of information, such as satellite **nighttime luminosity**, provide conditions for publishing complementary information.



The chapter favors greater **multiscale interaction** among development policy makers through a territorial and **functional approach**.

In order to analyze the implications of a redefinition of rural areas with a territorial approach, based on a more complex understanding of the relationship between rural and urban areas, and to formulate proposals in favor of a renewed public agenda for territorial development in El Salvador, a collaboration was established with Planning Office of the San Salvador Metropolitan Area (OPAMSS).

Eighth Chapter

Written by Ramón Padilla, ECLAC staff member, and Yannick Gaudin, ECLAC consultant, presents the final reflections on the essential argument of the book: it is necessary to modify the patterns of understanding and measurement of rural areas, with an aim towards having a renewed knowledge of territorial dynamics and, consequently, to design more effective public policies for rural development. The book favors the construction of a new regional agenda for rural and territorial development, with the aim of achieving the SDGs of the 2030 Agenda.



Practical application

Examples of practical application of the new definitions of rural in the public policies of the four selected countries.



Contribution to the strengthening the institutional framework



Panama

Adoption of the IRR to define rural (Law 855, which establishes the state agrifood policy).



Contribution to the inter-institutional dialogue



Mexico

Participation and technical contributions to the inter-institutional dialogue oriented to creating a new definition of rural and urban (Specialized Technical Committee in Cadastral and Registry Information, CTEICR).



Innovative technical tools for strengthening territorial planning and rural development



Costa Rica

Statistical and spatial analyses for the socioeconomic categorization of each planning region, along with its rural territories.



El Salvador

Contributions for redesigning the characteristics that define rural and urban territories in the San Salvador metropolitan area, thereby informing policy implementation plans.



Technical inputs for targeting public strategies for rural development



Mexico

Redefining rural areas for MSME digitization programs in rural areas.



Panama

Tool for targeting territorial programs of the Ministry of Agricultural Development

Conclusions

The following reflections have emerged from the cross-sectional analysis of the four cases:

- 1 The indicators proposed** for the four countries overcome the dichotomous vision of urban and rural. Some offer continuous measures that reflect a gradient of urbanity and rurality, while others recognize the existence of a diversity of intermediate territories between the metropolis and the deep rural.
- 2 The indicators are composite** and incorporate dimensions of relevance for each country, such as forest land protection.
- 3 The classification of territories** resulting from the implementation of the indexes goes beyond the administrative criteria used in each country (e.g., municipalities, cantons or townships).
- 4 Indicators such as the functional index of rurality** follow a dynamic approach, recognizing that the interaction between geographic spaces is key to the definition of territories and their characteristics. In the case of Mexico, for example, the accessibility index includes a dynamic analysis of territories with access to road networks and their conditions for mobility.
- 5 Among the variety of indicators** proposed are simple indexes that give preponderance to the number of inhabitants and population density and do not incorporate normative preconceptions of rurality. Complex indexes have also been developed that not only differentiate urban from rural, but also classify the type of rurality according to socioeconomic or environmental indicators.
- 6 Population density** is the most commonly used variable among the four case studies, but a wide range of complementary variables are incorporated.
- 7 Alternative ways of measuring rurality** open new perspectives in terms of socioeconomically understanding and classifying territories, allowing to highlight and measure new socioeconomic realities that have been concealed by the classic ways of measuring rurality.
- 8 A new understanding of rurality** offers opportunities for the design of better focalized public policies of rural territorial development.

Next steps



Incorporation of data and statistics for future exercises, allowing for updating the exercise at an intermediate or intercensal level. Innovative sources of information, such as satellite nighttime luminosity, facilitate conditions for publishing complementary information.



Use the experience of the four countries addressed in the project to carry out exercises in other countries of the region that have the necessary information for that purpose.



Construction of a common index for the countries of Latin America and the Caribbean to facilitate intra-regional comparisons; a common index for the region is recommended.



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