# THE INDICATORS IN RURAL TOURISM, REFERENCE POINTS IN ECONOMIC ANALYSIS

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Abstract: Rural tourism is one of the forms of tourism that has been integrated and quickly adapted to the requirements in the current global tourism market. The need for knowledge and analysis of rural tourism has emerged as a result a change of tourism demand for tourism in nature, away from pollution and the stressful pace of urban cities. Application of specific indicators of rural tourism is necessary to highlight the quantitative and qualitative aspects of the tourist activity. The results highlight the level, trends and evolution of tourism activity that characterizes the countryside and are points of reference in making decisions about establishing strategies aimed at sustainable development.

*Key words:* rural tourism, sustainable tourism, the tourist offer, the environment, economic indicators

JEL classification: Q56

#### INTRODUCTION

Tourism, in its various forms, has experienced marked diversification and development over the past decades. From the beginning of XXI century, is considered one of the most dynamic areas of current civilization. The main argument is the permanent transformation, as a result of adapting the demands of the tourist phenomenon to the world of economic globalization and sustainable development of the service sector.

Rural tourism is one of the forms of tourism that has integrated and quickly adapted to the requirements in the current global tourism market.

French economist Robert Lanquar shows that "Statistically the tourist sector is used to examine the most entrenched consumer behavior in tourist services".

Tourism activity can be studied statistically in terms of its approach as a system in which is interwoven two types of component:

■ the quantitative component represented by the amount of each feature of the system: number of tourist attractions, number of accommodations, tourist arrivals number, number of staff employed, costs, etc.

■ the qualitative component designated by status, such as: tourist motivations, socio-professional category, nationality, etc.

The development and implementation of a system of statistical indicators to characterize the touristic activity still remains a problem.

This aspect is the result of the lack of a terminological standardization established at the international level, because it does not include a uniform classification and clearly defined concepts. Although it has emerged in recent years, it is constantly improving in order to cover in width and depth aspects of tourist activity.

Tourism statistics are applied in each country regarding the development and conditions of tourist activity. Every government has the obligation to publish the statistics, studies and research on the behavior of consumers of travel services based at minimum on the structure of the resolutions adopted by the conferences.

The National Institute of Statistics and Economic Studies in Romania develops and administers in the field of tourism "*the methodology of statistical tracking of tourism activity*" on the basis of which the tourist movement is quantified through four categories of units of observation:

■ border checkpoints;

• units with touristic activity;

• domestic or foreign travel agents resident in the national territory;

■ households [through the Integrated Household Survey, Household Survey] (Cosmescu., 1998, p33).

### MATERIALS AND METHODS

Conducting surveys on tourist activity appears to be a necessity of the modern age, providing public information needs, guiding institutions, both at micro and macro levels, premising of the conduct of other fields that coexist in closely related to tourism (management, marketing, etc.)

OBSERVATION UNITS	THE SUBJECT AND STATISTICAL OBSERVATION FREQUENCY	SOURCES
<ul> <li>border checkpoints;</li> </ul>	■ the traffic of domestic and international	traveler's declaration
	tourists and backpackers on:	to the border
	<ul><li>Countries of origin;</li></ul>	
	means of transport;	
	depending on the purposes of travel.	
units providing tourist accommodation	• the accommodation and other matters regarding related services:	■ records of persons accommodated
	• people staying and overnight stays by	
	country of origin;	
	data about income and number of employees.	
■ internal or external	- the tourist agency:	■ the ticket to rest and
travel agency resident in	the number of tourists;	treatment/ bordereau for
the territory	movement of tourists and tourist consumption related to organized activities;	register on a trip
	<ul> <li>areas of tourist internal activities;</li> </ul>	
	<ul><li>the country of destination in the case of</li></ul>	
	foreign tourist actions;	
	<ul><li>income from secondary activities.</li></ul>	
■ family budgets	■ the way of participation of the population in tourism	<ul> <li>questionnaires filled out by tourists</li> </ul>
banking authorities	<ul> <li>monetary units entries (lei, currency) of tourist activities</li> </ul>	<b>b</b> ank record sheets
	Source: processing authors after Eurostat	1

Source: processing authors, after Eurostat

Processing of information collected and systematized can be valid only in the context of the elaboration and implementation of a table of indicators suitable for this type of tourism.

The table of indicators used in the analysis of rural tourism activity is presented as a subsystem of the table of indicators applied to tourism in general, and is customized according to the activities carried out by practicing this form of tourism.

The classification system used in tourism indicators and specific activities undertaken by practicing rural tourism has allowed the establishment of a new system of indicators, highlighting its peculiarities during the presentation of components.

The system of indicators used in the study of rural tourism activities must comply with the following general principles:

■ the uniqueness of the concept of the content, calculation methodology and their means of aggregation;

ensuring comparability;

• expanding and enhancing the system with new indicators.

Analysis of the elements of the system allows highlighting its main functions (WTO, 2002):

■ measuring tourism demand based on information relating to the number of tourists and overnight stays, country of residence, length of stay, the motivation of the journey, means of transport, accommodation and the form used, the amount of the tourist spending;

■ measuring effective tourism offers analyzed by areas and tourist centers: capacity of accommodation infrastructure, level of employment, benefits, employee, staff turnover, etc;

■ analysis of the impact of international tourism (inbound and outbound), on the balance of foreign payments, on the economy, in general, and the contribution to the creation of national tourism income, multiplying the effect employment (direct, indirect and induced) or to the achievement of positive economic outcome by the travel units.

The determination of indicators of measurement of activities carried out by practicing rural tourism, has as its starting point the work of observation and collection of statistical information; this in turn is included within a system of elements whose grouping includes (Constantin, Costescu, 2000, p.34)

■ quantitative elements: serve the description of each traits of this intensity (number of tourist arrivals, the number of employees, turnover, etc.);

■ quality elements: expresses the traits of status (nationality, socio-professional categories, the motivations, the structure of expenditure, the level of customer satisfaction, etc.).

The request can be analyzed through a person's desires, sprung from a personal need to acquire a specific product, it can be transformed into reality, conditioned by the existence of a judgment and the opportunities to buy, this being the result of this interpenetration of four elements: needs, aspiration, determination, possibility, (fig. 1)

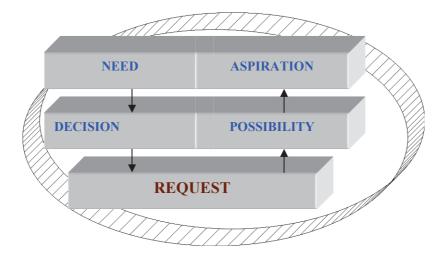


Fig.1. Elements that underlie the demand Source: authors processing

The market demand is very difficult to quantify, due to its peculiarities, so demand analysis will take into account the determination of the indicators considered indicators of global demand of rural tourism (Cristian, 2002, p. 64):

■ Indicators of rural tourism demand for transport, in which are included:

• the number of tourists who prefer to use a particular type of means of transport in their travels, carried out with the aim of practicing rural tourism;

• number tourists who prefer to use two or more types of means of transport in their travels, carried out with the aim of practicing rural tourism;

• the number of tourists who don't have preferences regarding the means of transport in their travels, carried out with the aim of practicing rural tourism;

These indicators allow the identification of visitors ' preferences for each type of means of transport used in practicing rural tourism by determining:

• specific gravity of demand for each type of means of transport in terms of rural tourism demand for all means of transport used in the practice of rural tourism;

• the variation in time of the rural tourism demand for each means of transport;

• the variation in time of the structure of rural tourist demand on each type of means of transport.

## • The indices of rural tourism demand seasonality.

For studying seasonality of rural tourism demand there are used some indicators like:

■ Monthly traffic coefficient is calculated as a ratio between the number of tourists from the maximum traffic month (LM) and the number of tourists from the month with minimum traffic (lm):

$$Cl = \frac{LM}{lm}$$
(1)

Quarterly traffic coefficient, calculated similar to the preceding example but based on the number of tourists in the first quarter (TM) reported to the number of tourists in the first quarter (tm):

$$Ct = \frac{TM}{tm}$$
(2)

The minimum value of these coefficients is 1, and the higherit is the more it expresses a pronounced seasonality.

• Monthly concentration coefficient which is calculated by the number of tourists in the month with most arrivals (LM) reporting by the total number of tourists in a year (At):

$$Cc = \frac{LM}{At}$$
(3)

The value of this coefficient Cc of theoretically should be between 0.083 and 1, to indicate that there is a reduced seasonality.

All these indicators show the determining specific gravity of rural tourism demand for each month of the year, determined on geographical areas in dissociated practising rural tourism, types of rural tourist accommodation or means of transport.

### ■ Indicators of demand distribution ways of organizing the trip.

These indicators comprise two categories of tourist demand, which refers to the use of travel agencies to organize the trip.

■ the first component, represented by rural tourism demand of tourists who use travel agencies;

■ the second component, represented by rural tourism demand of tourists who do not travel through travel agencies.

They represent the starting point in establishment of structural elements and the variation in time for the demand of rural tourism, as follows:

• the specific weight of rural tourist demand for each way of organizing the trip in relation to the total rural tourism demand;

• the variation in time of the rural tourism demand for each way of organizing the trip

### ■ Indicators of the distribution of the demand travel motivations.

These indicators show the rural tourism demand across multiple categories of tourists depending on the types of motivations that underlie the choice of practicing this form of tourism activities.

■ the number of tourists who prefer to practice rural tourism for the purpose of recreation, entertainment, of maintaining health status;

In number of tourists who prefer to practice rural tourism in order to contemplate the landscapes, the natural unpolluted areas of practice rural tourism;

number of tourists who prefer to practice rural tourism in order to practice proper hiking and other sports that can be practice doing rural tourism;

• number of tourists who prefer to practice rural tourism in order to participate in recreational activities conducted in rural tourism areas;

• the number of tourists who prefer to practice rural tourism motivated by other elements of attraction that are encountered in rural areas;

They form the basis of determining the specific gravity or importance of each claim as a whole, the motivations of its variation in time as well as for their implementation at the level of the different geographic areas.

### ■ Indicators of tourism demand established by social criteria.

Rural tourism demand established by social criteria may be compared, measured and determined according to:

• the number of registered tourists by age group;

• the number of registered tourists by civil status categories;

• the number of registered tourists by gender;

• the number of registered tourists on other categories set out according to the purpose and needs of mesurement and analysis used in the study of rural tourist demand in a given period.

Using indicators leads to determinate other elements that allow an analysis of rural tourism demand, in terms of determining the share of rural tourism demand in total

demand for tourism in a region or in Romania, the percentage of variation of rural tourism demand in a period of another period taken as a basis for comparison, etc..

### Satisfaction indicators of rural tourism demand

These indicators are mainly used to inform about the tourist demand satisfaction.

Depending on the reason for traveling they can be calculated for any type of tourist demand stratified according to various geographical categories.

Rural tourism demand is measurable in this context by using the indicator composed of people whose motivation was satisfied.

Fidelity indicator of rural tourism demand.

The number of tourists who repeated the trip to a specific tourist destination. It is based on the recognition of the number of tourists who have returned to a specific destination (Rd) or which have the intention to return in the future (Id).

$$\mathbf{F} = \frac{R}{C_{tTR}} + I \frac{d}{C_{tTR}} \tag{4}$$

Comparing the indicator of fidelity in two different periods, we obtain the time variation of the reliability index of interest for a specific tourist destination.

### Elasticity indicators of rural tourism demand

Determining flexibility of a phenomenon that it is effect to the variation of the phenomenon, manifested in the rural tourism sector, aims to establish the demand elasticity of this type of tourism.

The coefficient of elasticity of demand for rural tourism, considered in relation to the variation of rural tourism, is used for the purpose of potential request that might turn into actual application following a change in not only income, but also other variables that influence and determine a certain level of demand for rural tourism. This can be determined with relation:

$$ETR = \frac{\Delta C_{TR}}{C_{TR}} : \frac{\Delta V_{TR}}{V_{TR}}$$
where:  
TR  $\Delta C$  = absolute change of demand of rural tourism;  
CTR = volume of demand of rural tourism;  
(5)

VTR = volume of income of rural tourism;

TR  $\Delta V$  = absolute change of the income of the tourism;

ETR = elasticity of demand for rural tourism.

Movement indicators of rural tourism, which includes the following indicators:

total number of tourists ( $\Sigma$ t) arriving in areas of the rural tourism - is an absolute indicator and shall be determined by summation;

total number of days-tourist ( $\Sigma zt$ ) of rural tourism-is the result of the product of the number of travelers (t) and tourist activity duration or length of stay in days (z), provided that the maximum period considered to be one year; can be analyzed using an aggregate index by which to determine both the relative changes and the corresponding absolute analyzed phenomenon.

• average number of tourists arriving in the rural areas of tourism (t) is calculated as the average number of arrivals per day, reporting the total number of days-tourist ( $\Sigma zt$ ) to the number of days ( $\Sigma z$ ) considered :

$$\bar{t} = \frac{\sum zt}{\sum z}$$
(6)

The indicator expresses the average tourist movements within a certain time period and estimated intensity of tourist traffic during certain periods (calendar or the tourist season).

The average number of tourists can be studied and dynamically analysed using indices calculated as the ratio of two average variable structure, fixed structure and the changes in structure.

• average length of stay (S) of rural tourism: is calculated as the ratio between the total number of days-tourist ( $\Sigma zt$ ) and the total number of tourists ( $\Sigma t$ ):

$$\overline{S} = \frac{\sum zt}{\sum t}$$
(7)

It is an indicator of average character, which is obtained by calculating more complete information about the development of rural tourism activity and may be commensurable with the help of statistical indices calculated as the ratio of the two environments that allow further determination of absolute and relative changes characteristic of the tourism phenomenon in progress.

 $\square$  rural tourist traffic intensity (dt) is a relative measure of intensity is determined in close connection with the receiving country residents and is expressed as the ratio between the number of tourists visiting a country, area or resort to practice rural tourism or total days-tourist and the number of residents of the country, area or resort receivers (P) as follows:

$$dt = \frac{\sum t}{\sum P} \quad \text{sau } dt = \frac{\sum zt}{\sum P}$$
(8)

■ relative preference of tourists practicing rural tourism - is determined as the ratio between the total number of tourists who practice rural tourism from a country A to a destination B and the residential population of the country as follows:

$$\Pr = \frac{\sum t}{P} \tag{9}$$

This indicator reveals the intensity of movement of rural tourism, as well as the area or country of origin of tourists, highlighting trends in rural tourist flows.

#### **RESULTS AND DISCUSSION**

The rural tourism market is a result of interaction between two components: rural tourism demand and supply. Measuring the rural tourism offer must cover all components of its elements, i.e. the potential natural and human, material and technical basis, manpower, including default and services necessary to conduct this type of tourism activities.

The interaction between the demand and supply of rural tourism occurs at the level of the specific market of this form of tourism.

#### CONCLUSIONS

The greatest significance belongs to the services which are essential to economic growth.

This justifies the idea of treating and using a system of indicators that can be applied in rural tourism and the possibility of adaptation for other forms of travel, or a selective research whose design methodologies, collection, systematization, processing and data analysis can be extended and used in other parts of the tourism.

The result of the need to expand business in rural tourism through the development of a new system of indicators that can be applied at the level of the country

and the various areas in which it is practised, need to contain an overview on the work of rural tourism, an assessment of the situation, past, present and future, in conditions of sustainable development of tourism and its integration in international quality standardscoordinates.

Rural tourism, although it is considered to be relatively new, yet managed quite quickly to impose and to form its own market.

The evolution of the rural tourism market should be continually monitored and should be examined as a result of the new requirements, changes, rapid and steep technological trends of information, or of any changes in the methodology of the sales process.

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