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## THE TOURISM FUNCTION OF RURAL AREAS IN POMERANIA PROVINCE: DIVERSITY AND CHANGE

**Abstract:** The aim of this paper is to present the spatial diversity of the tourism function in the rural areas of Pomerania province and the changes which occurred in 1995-2013. The tourism function has been determined by means of two characteristics: the number of tourists using accommodation and the number of businesses registered in the REGON system in sections H or I. To quantify the tourism function a synthetic measure has been used according to a procedure by ZIOŁO (1973). Based on this, five levels of the development of the tourism function have been determined. The quantitative and spatial changes occurring in the development of the tourism function in rural areas have then been analyzed. Particular emphasis has been placed on the so-called tourism communes, i.e. those where the tourism function is at least at a 'moderate' level of development. For these communes, nine functional types have been determined, based on two characteristics (average duration of stay and share of year-round accommodation), changes which occurred in this respect in 1995-2013 have also been determined.

**Key words:** tourism function, rural areas, Pomerania province.

### 1. INTRODUCTION

The tourism function of spatial units constitutes an important research problem in the geography of tourism in Poland (KUREK & MIKA 2007, DEREK 2007, WŁODARCZYK 2009). There is increasing research on the tourism function of rural areas, this is to a large extent related to the perception of tourism as a factor in the socio-economic 'activation' of these areas (DURYDIWKA 2012). At the same time, opportunities for the development of the tourism function in rural areas of Poland are estimated as being very large. I. SIKORSKA-WOLAK (2005) states that the development of the tourism function in rural areas is fostered by such features as a diversified landscape, retention of its natural state, large areas of forests and water, large areas legally protected, rich cultural heritage resources, unused accommodation resources, and vacationing traditions.

The aim of the present paper is to present the spatial diversity of the tourism function in rural areas of Pomerania province, as well as the changes which occurred in 1995-2013. This research goal, as formulated here, contains two elements which should be addressed: rural areas and tourism functions.

Rural areas are defined in various ways in the literature. In most definitions, the emphasis is put on

their population density. Some definitions, however, take into account the structure of the economy, as a rule, these definitions stress the fact that in rural areas, it is the primary sector that dominates. It seems, however, that in times when so much attention is devoted to the multifunctional development of rural areas, such an approach is passé. For that reason, in this paper we use an administrative criterion in the determination of rural areas. Therefore, the areas taken into account are rural communes and rural parts of urban-rural communes. The use of the smallest territorial units results, to a large extent, from factual premises. It is the smallest territorial units that are most strongly related to the demand processes and the supply of tourism services (AIREY & BUTLER 1999, NAWROT & ZMYŚLONY 2009). Pragmatic considerations were another important reason for their use: the research was undertaken based on statistical data from GUS, hence the use of the administrative criterion resulted from the accessibility of statistical data.

The tourism function is understood as any tourism-oriented socio-economic activity in a given spatial unit (MATCZAK 1989, KUREK & MIKA 2007). As noted by A. SZWICHTENBERG (2006: 191): "the importance of the tourism function among other economic activities

in a given commune is difficult to determine". A reliable estimate could result from a precise analysis of employment in individual sectors of the economy, of revenues from those activities and from capital investments (SZWICHTENBERG 2006). However "it is currently not possible from statistics collected by the state and local government (...) to calculate the indices determining the hierarchy of individual economic functions in a commune. In particular, there is a lack of such indices for the estimation of the potential of the tourism economy, which consists not only of tourism goods and services, but also of para-tourism, in statistics related to trade and services, transportation and communication, public utilities etc." (SZWICHTENBERG 2006: 191). That is why in the present paper the author tries to show the level of development of the tourism function in rural areas of Pomerania province leaving aside other economic functions. To describe the tourism function the following two characteristics have been chosen: the occurrence of both tourism itself and of tourism-related services. This selection is in agreement with the notion of the tourism function, according to which it is tourism itself that generates the tourism function, and its growing dimension stimulates the development of tourism-oriented services (KUREK & MIKA 2007). Besides, tourism and tourism management are the two measures of the tourism function which are most often used and discussed in the literature (WILUŚ 1997).

## 2. METHOD OF DETERMINATION OF THE TOURISM FUNCTION

To determine tourism functions, two characteristics (empirical measures) have been chosen. The first one is the number of tourists using accommodation facilities, the most important feature demonstrating the existence of a tourism function in a given area. The second one, dealing with tourism-related economic activities of the local community, and therefore with the development of tourism-related services, is the number of businesses registered in the REGON system in sections H<sup>1</sup> or I<sup>2</sup>. Businesses classified in these sections include: 1) rental of space for short-term premises with or without catering by hotels, motels, campsites, pensions, recreation houses, private lodging, farms, holiday homes, boarding houses, student hostels and other facilities not classified here, as well as 2) catering by restaurants, bars, canteens, cafeterias and other businesses which prepare and provide meals and drinks to outside customers, not including sale through vending machines ([www.stat.gov.pl/klasyfikacje/pkd\\_04/pkd.htm](http://www.stat.gov.pl/klasyfikacje/pkd_04/pkd.htm)).

To quantify the tourism function, a synthetic measure has been used (after the procedure by Ziolo 1973):

$$F_t = \frac{\sum_{j=1}^m x'_{kj}}{m}$$

where:

- $x'_{kj}$  – normalized  $j$ th empirical measure of the  $k$ th spatial unit,
- $\sum_{j=1}^m x'_{kj}$  – the sum of normalized measures in the  $k$ th spatial unit,
- $M$  – the number of normalized measures.

The measure applied shows the degree (size) of share of individual spatial units (communes) in the total structure, since the sum of the synthetic measures for the entire area analyzed is equal to 100. According to the author, the advantage of this measure, apart from its simple and clear construction, is that it allows "the obtaining of a synthetic value out of several empirical measures" (ZIOŁO 1973: 107).

Correct further statistical procedures are possible only when all the descriptors have the same character. For that reason, it was necessary to standardize them to a form of normalized data (measures). The normalization of empirical measures has been performed by determining their percentage share in individual spatial units. Hence, the procedure applied was based on quotient mapping.

Based on the value of the synthetic measure  $F_t$  five levels (classes) of tourism function development have been determined. It should be added here that when determining the limits of class intervals, the values of the median ( $Me$ ) and standard deviation ( $SD$ ) have been taken into account. Communes in which the phenomenon does not occur ( $F_t = 0$ ), that is in which there is no tourism function, have been called communes with zero level of development. The limits of the consecutive levels of the tourism function development have been determined as follows:

- first level - from 0 to  $Me$ ,
- second level - from  $Me$  to  $(Me + \frac{1}{2} SD)$ ,
- third level - from  $(Me + \frac{1}{2} SD)$  to  $(Me + SD)$ ,
- fourth level - above  $(Me + SD)$ .

It should be added that all these intervals are exclusive.

The research has been based on statistical data from the GUS Database of Local Data (*Bank Danych Lokalnych Głównego Urzędu Statystycznego, BDL GUS*) for two years: 1995 and 2013. The analysis encompassed 98 rural communes and the rural parts of urban-rural communes<sup>3</sup> in Pomerania province. To order the territorial units analyzed with respect to the

level of the tourism function development, a spatial classification has been used, understood as "a division of the Earth's surface into parts, that is into spatial classes, which takes into account a determined criterion of division" (PARYSEK 1982: 141).

### 3. DIVERSITY OF THE TOURISM FUNCTION IN THE RURAL AREAS OF POMERANIA PROVINCE

Using a synthetic measure of the level of tourism function development (F), five levels (classes) have been determined, with level 0 consisting of communes in which Ft is zero, hence where the tourism function has not been developed. Pomerania province is characterized by above-average occurrence of natural and cultural amenities, resulting "from its regional and local identity drawing on the heritage of Kashubia, Kociewie, Powiśle, Żuławy and other parts of the region, as well as from maritime and historical traditions" (<http://www.midwig.pomorskie.eu/turystyka.html>). Thanks to this Pomerania province is one of the main areas of tourism reception in Poland. This is proven by the absence of communes in which there is no tourism function in 2013, with only two such communes in 1995. Level 1 can be described as having a 'weak' tourism function. Communes for which the index Ft varied from 0 to 0.4056 in 1995 and from 0 to 0.3676 in 2013 are found in this class. Their number has remained almost constant, but is significant on the scale of the entire province. In 1995 there were 47, constituting 48.0% of all rural areas of the province, while in 2013, there were 49, constituting 50.0%. Level 2, a 'moderate' tourism function, is represented by the communes for which the index Ft varies between 0.4057 and 1.6308 in 1995 and between 0.3677 and 1.2493 in 2013. In this class interval a marked decrease in the number of communes was noted: from 35 to 28, that is from 37.7% to 28.6%. The class interval representing a 'well developed' tourism function (level 3) is the most stable as regards number. In 1995, a 'well developed' tourism function was characteristic of those communes for which the index Ft had values from 1.6309 to 2.4504, they constituted 6.1% (6 communes) of all analyzed, while in 2013 a 'well developed' tourism function was characteristic for 7 (7.1%). For these communes, however, this index has slightly lower values than in 1995: from 1.2494 to 2.1311. The largest increase in the number of communes in the period analyzed was noted in the class interval representing a 'very well developed' tourism function (level 4). Their number has increased from 8 (8.2%) to 14 (14.3%), with the best having

a value of the index Ft exceeding 2.4504 in 1995 and 2.1311 in 2013.

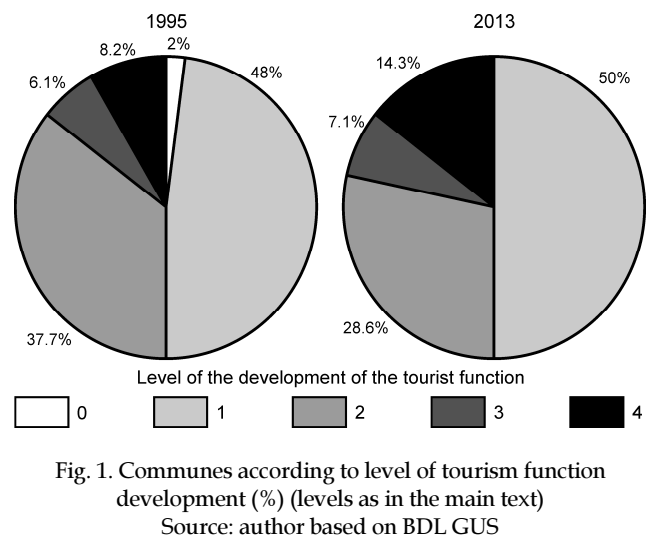


Fig. 1. Communes according to level of tourism function development (%) (levels as in the main text)

Therefore, on the scale of Pomerania province, for the variables used and the limits of the class intervals presented above, two fundamental changes in the level of tourism function development can be observed in 1995-2013: the number of communes with a 'moderate' tourism function decreased markedly, while the number of those with a 'very well developed' function increased.

These changes are particularly apparent spatially (Fig. 2). The tourism function is preserved or strengthened in seaside communes (Ustka, Krokowa, Stegna, Szututowo, Łeba, Puck and Kosakowo) and in communes situated around the Tri-City agglomeration (including Gniewino, Wejherowo, Żukowo, Luzino, Przywidz, Somonino, Kolbudy and Pruszcz Gdański), as well as around Słupsk (Słupsk and Kobylnica). It should be added that most of those communes are rural areas characterized by very attractive natural landscapes, thanks to varied surface features and, above all, thanks to the seashore and lakes (DURY-DIWKI 2008). On the one hand, therefore, these are areas situated directly at the seaside, in which the tourism function was a natural result of development, by a gradual driving out of agricultural or fishing functions. On the other hand, a large part of these areas, also of those situated in the vicinity of the Tri-City conurbation, are lake areas (Kashubian Lake District) which are becoming increasingly popular among tourists, both those living in Tri-City and those arriving from various regions of Poland. These areas are gradually becoming more intensely developed for tourism. The tourism function is particularly pronounced in the part of the Kashubian Lake District called "Kashubian Switzerland"<sup>4</sup>, although it should

be kept in mind that this region was penetrated already between the world wars, for instance during themed excursions "Get to know the beauty of the Kashubian Switzerland".

areas through tourism, at the very least, by including them in the regional network of tourism trails such as Historical Monuments of Żuławy Wiślane and Powiśle, or the Mennonite Trail, or through the introduction of additional attractions such as the Żuławy narrow-gauge railway<sup>5</sup>.



Fig. 2. Level of development of the tourism function in rural areas of Pomerania province in 1995-2013 (levels as in the main text)  
Source: author based on BDL GUS

At the same time, however, in communes with less attractive natural landscapes, a certain weakening or stagnation of their low level of development can be noted. Such are, in particular, communes situated in the western part of the province, hence partly also in the lake areas (e.g. Miastko, Tuchomie and Lipnica), and partly on areas without or with few lakes (e.g. Dębica Kaszubska, Kępice, Kołczygłowy, Czarne and Debrzno). This tendency can also be observed in the south-eastern part of the province, in particular in the region of Żuławy Wiślane (e.g. Nowy Dwór Gdański, Ostaszewo and Lichnowy), which for years had been identified as exclusively agricultural. In recent years, however, attempts have been made to 'activise' these

#### 4. FUNCTIONAL TYPES OF TOURISM COMMUNES IN POMERANIA PROVINCE

Using the notion of spatial types (LISZEWSKI 1995), we call tourism communes those where the tourism function is at least at a 'moderate' level of development, that is those for which the index of the tourism function level  $F_t$  exceeded 0.4056 in 1995 and 0.3676 in 2013. Their number (49) did not change from 1995 to 2013, they constitute therefore 50.0% of all communes of the Pomerania province. Nonetheless,

Table 1. Criteria determining functional types of tourism communes

Type	Name	Average duration of stay	Year-round overnight accommodation (%)
W1	Area with recreational (vacation) tourism function, used mostly seasonally	8 days and longer	up to 25
W2	Area with recreational (vacation) tourism function, partly used year-round	8 days and longer	from 25 to 75
W3	Area with recreational (vacation) tourism function, used mostly year-round	8 days and longer	over 75
S1	Area with tourism function related to medium-term stays, used mostly seasonally	4-7 days	up to 25
S2	Area with tourism function related to medium-term stays, partly used year-round	4-7 days	from 25 to 75
S3	Area with tourism function related to medium-term stays, used mostly year-round	4-7 days	over 75
K1	Area with function of short-term active stay, used mostly seasonally	1-3 days	up to 25
K2	Area with function of short-term active stay, partly used year-round	1-3 days	from 25 to 75
K3	Area with function of short-term active stay, used mostly year-round	1-3 days	over 75

Source: M. DURYDIWKA (2012, p. 233).

ten communes (Dębica Kaszubska, Kępice, Miastko, Parchowo, Lipusz, Linia, Kaliska, Sztum, Kwidzyń and Gardeja), due to a distinct weakening of their tourism function, lost their status, while ten others (Słupsk, Kobylnica, Potęgowo, Luzino, Bytów, Stara Kiszewa, Trąbki Wielkie, Cedry Wielkie, Malbork and Starogard Gdański), thanks to the development of their tourism function, gained this status. More significant changes have been observed as regards the character of the tourism function.

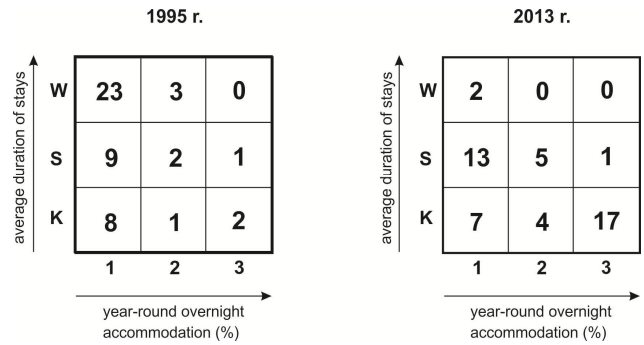


Fig. 3. Tourism typology matrices for rural areas (communes) in Pomerania province (notation as in Table 1)  
Source: author

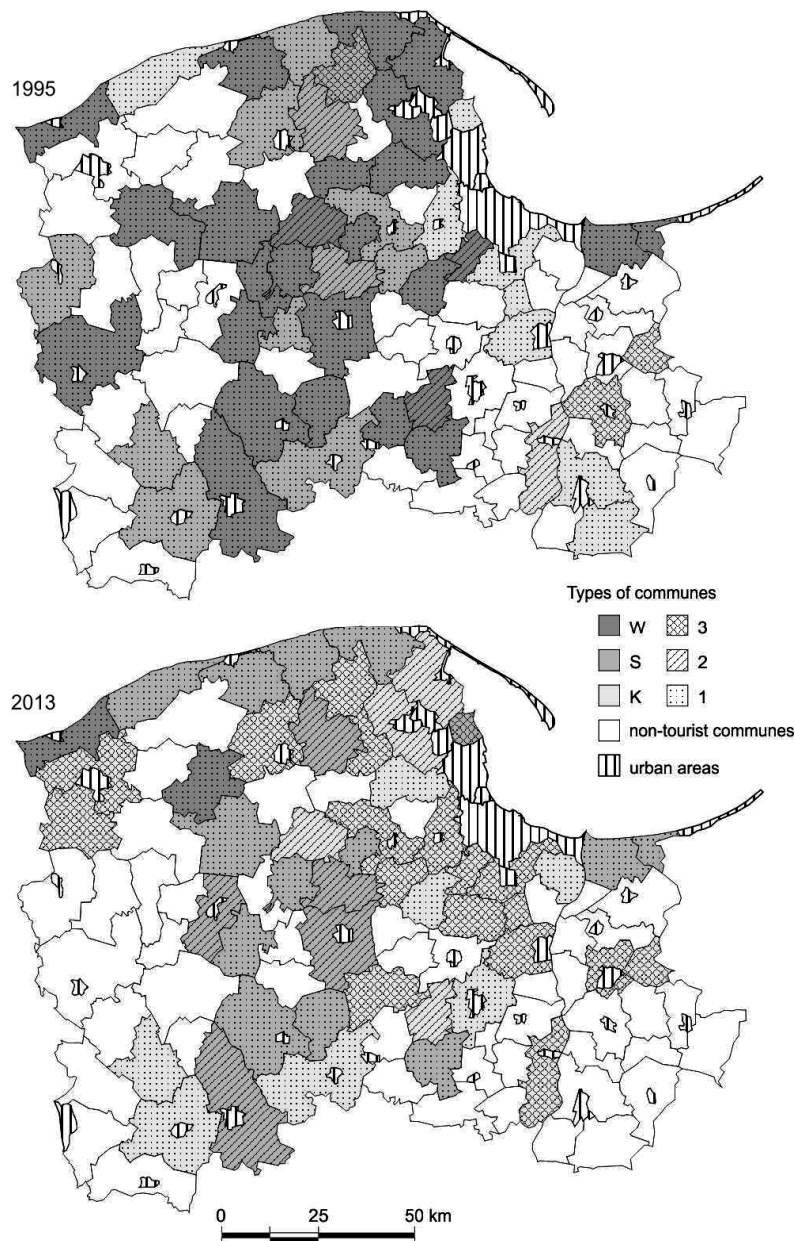


Fig. 4. Types of tourism communes according to duration of tourism stay and share of year-round accommodation in 1995-2013 (notation as in Table 1)  
Source: author based on BDL GUS

It has been assumed that the features that explain the functional diversity of tourism communes are the average duration of tourism stays in a given area (which indirectly indicates the character of those stays) and seasonality of accommodation (as a feature that represents the duration of tourism use during the year). As a result, nine types of tourism commune in rural areas have been determined (Table 1).

During the period 1995-2013, the number of rural areas with a recreational / vacationing function, i.e. related to longer stays (type W) markedly decreased. In 1995 there were 26 such communes, while in 2013, only two. On the other hand, the number of communes related to shorter stays, over the weekend (type K), increased from 11 in 1995 to 28 in 2013. This reflects a more general regularity observed not only in Polish society, of a shortening of duration of vacation stays.

Changes also occurred as regards the seasonality of tourism use in rural areas. This is demonstrated by a marked decrease in the number of communes where the share of year-round overnight accommodation was lower than 25% (type 1) and an increase in those where the share exceeded 75% (type 3). To be specific, in 1995-2013 in Pomerania province, the number of type 1 communes decreased from 40 to 22, while the number of type 3 communes increased from 3 to 18.

As regards functionality, not only quantitative, but also spatial changes have been observed in tourism communes. A significant part of those with a recreational function (type W) have been transformed into areas whose function is related to medium-term (type S) or short-term stays (type K), with seaside communes retaining their strictly seasonal character (type 1). A specific exception to this rule is the commune of Puck, which underwent a change from W1 into S2. On the other hand, communes situated around the Tri-City have been transformed, to a large extent, into areas used predominantly for year-round tourism (type 3), which is related to the development of individual vacation accommodation and of various forms of weekend tourism. This is the case, among others, in such communes as Kosakowo, Żukowo, Kolbudy, Pruszcz Gdański, Trąbki Wielkie and Pszczółki. Besides, the development strategies of many of these communes stress the necessity of further integration with Tri-City, for instance through creating recreation and accommodation facilities. Year-round use is characteristic also for communes in the vicinity of Słupsk.

In many lake district communes, on the one hand, a tendency to transformation related to the shortening of the tourism stays can be observed, and on the other hand, to longer use (over the whole year) of the area for tourism. These communes have been transformed most often from type W1 into type S1 (e.g. Sulęczyño,

Chmielno, Studzienice) or from type S1 into type K3 (e.g. Kartuzy, Somonino, Luzino).

## 5. SUMMARY

In the period under investigation a strengthening of the level of the tourism function development in many rural areas of the province can be observed. Communes whose tourism function is at least a 'moderate' level of development (so-called tourism communes) show a fairly distinct correlation with areas which have important tourism amenities, especially of a natural character. It can therefore be stated that the development of the tourism function is, to a large extent, conditioned by the natural environment resources and, to a smaller extent, by cultural resources. Of essential importance for the development of the tourism function in rural areas of Pomerania province has been the development of cities and strong administrative and socio-economic ties with the rural areas surrounding them, such as Gdańsk, Gdynia, Sopot and Słupsk. As a result, in a large part of the rural areas situated in their vicinity a tourism function was clearly formed. A significant part of those rural areas situated there, however, are areas with high natural and cultural amenities. In the case of this region, therefore, the development of the tourism function often resulted from the superimposition of two factors: tourism amenities and the vicinity of large cities.

At the same time one should stress that in the tourism communes analyzed here, marked changes of functional character have been observed, of greatest importance among them is a six-fold increase in the number of communes used for tourism purposes all year round. And this, in turn, has an important impact on the improvement of the socio-economic situation of these communes.

## FOOTNOTES

<sup>1</sup> For 1995.

<sup>2</sup> For 2013.

<sup>3</sup> The author uses the terms "rural areas" and "communes" interchangeably. It should be kept in mind, however, that the term "commune" in this paper refers only to rural communes and to the rural parts of urban-rural communes.

<sup>4</sup> This term was used for the first time at the end of the 19th century in German tourist guidebooks for the vicinity of Kartuzy. In 1913, the term was used by Aleksander Majkowski, Kashubian writer and activist, in the tourist guidebook entitled *Zdroje Raduni* (Sources of the Radunia river) (<http://www.szwajcaria-kaszubska.pl>, <http://literat.ug.edu.pl/remus/0101.htm>).

<sup>5</sup> One of the oldest narrow-gauge railways in Poland, linking Nowy Dwór Gdański with seaside towns along the Vistula Spit ([http://pomorskie.travel/Odkrywaj-Na\\_szlaku](http://pomorskie.travel/Odkrywaj-Na_szlaku)).

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