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Sustainable development of West-Pomeranian region through radical modernization of inland shipping

### 1. INTRODUCTION

Analysing various trends of economical development in transition countries continues to be relevant after two decades of post-communism. Global financial crisis has only increased It is reflected both the problems of changes period. by business activity and population prosperity. Therefore, the ex-communistic countries, including Poland, require constant research explaining a variety of the factors influencing their development. Most researchers analyse impacts of transformation policy on both financial [3] and non-financial aspects such as social [7], ecological [1], and legislative priorities [8] of community life. Adding information for outlook policy formulation and implementation, these researches ignore the diversity of Polish development as ex-communistic economy. It specially concerns the West-Pomeranian region as one of the most advanced industrial zones of second half of XX century. The future of this region depends both on harmonisation of political, economic & social transformations and on precision of strategically solutions.

On 28 March, the European Commission adopted a comprehensive strategy ("*Transport* 2050") for a competitive transport system that will increase mobility and remove major barriers in key areas such as fuel growth and employment. Special attention is given to the modal shift from road transport to rail and/or waterborne transport, including sea and inland shipping.

Inland waterways have to play an increasing role both in European transport system and development of economics as well as the solution of social issues in the West-Pomeranian region. One of the ways to revive business activity is a development of sustainable tourism, especially water tourism by inland waterways. It enables to increase sustainable mobility and minimizes negative impact on the environment. In accordance with the provisions of the new

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European Transport Policy, mobility is vital for the internal market and for the quality of citizens life as they enjoy their freedom to travel [10]. This corresponds to the brand strategy for West-Pomeranian region so-called "*Szczecin 2050 as Floating garden*".

Tourism is a multibillion worldwide industry differing by its height growth. Water recreations as individual and mass tourism are considerable contributors to the GDPs of many nations, so. it concerns the Baltic Sea Region (BSR) countries, too. The BSR is a transnational region, considered to be one of the rapidly developing regions in Europe. Poland has the inland waterways network with the biggest lakes and lengthy coastline, enabling population prosperity through tourism development. Attraction of Poland for travellers and tourists is held back by poor transport and touristic infrastructure, obsolete fleet and equipment, which are not supportive of the water tourism's development [9]. Current situation requires considerable efforts to attract both the foreign visitors and the Polish residents.

The business of the West-Pomeranian region undergoes critical changes:

- the erroneous decision about state aid (2002 year) has led to one of the most radical reshaping in the Polish shipbuilding;
- small and medium-size businesses face financial difficulties that often end with the loss of paying ability;
- raw material and energy prices as well as wages and salaries have tended to increase. It was reflected in the bottom-line costs of goods and services, reducing demand. For that reason the enterprises try to reduce expenses, e.g. layoff of employees.

In strategy of the West-Pomeranian region development, approved by regional parliament in July 2010, among the most important goals until 2020 is the creation of open and competitive society, increase of regional investment attractiveness and rational management of natural recourses, but an urgent task is the reduction of unemployment as quickly as possible [9].

The unemployment reduction is vital task for Poland. This problem requires special attention in West-Pomeranian Voivodship. As, in February 2009, average unemployment rate amounted to 15.3%, in February 2011 it increased to 18.6%, but several counties have high unemployment, e.g. unemployment rate in Kamieński, Świdwiński and Drawski Counties amounted to 27.4%, in Białogradski and Łobeski Counties amounted to 30.0% & 31.1% respectively. The unemployment problem touches cities in a lesser degree, but increasing tendency affects the urban areas, e.g. unemployment rate( 01, 2009) amounted to 5.2%

in Szczecin and in February, 2011 increased to 10.4% [2], [4]. Unfortunately, some reasons for a sad forecast do exist:

- considerable number of employees lost work following a liquidation of the Szczecin shipyards (summer 2009);
- approximately 40% of fishing fleet will go for scrap and demolition;
- more than 100 enterprises have declared bankruptcy in 2009 and 2010, while during the next months some 20 enterprises faced the same trouble in West-Pomeranian Voivodship, i.e. the situation worsens.

Therefore, the attempt to contain the poverty through increase of inhabitants' employment deserves special attention and application of common efforts for the turn of tendency. Central Yachting Centre in Szczecin, the inland waterways network with the biggest lakes of region and the link with sea, the presence of small river ports and marines, the high-quality food, warm hospitality, admirable beauty of natural landscapes of the area, the pure air, coniferous and mixed forests, fishing opportunity, create the perfect holiday destination and fine conditions for improvement the inhabitants' well-being through water tourism's revitalising.

The tourism offer expansion is a key to renewing economic growth, strengthening competitiveness and boosting employment in West-Pomeranian Voivodship. The best way to success is the close co-operation between authorities of various ranks and private capital in the ranges:

- the research, education, innovation, the so-called "knowledge triangle",
- the creation, development, commercialization, the named "innovativeness triangle".

However, various obstacles hamper the progress of water tourism development in West-Pomeranian Voivodship. Their identification plays decisive role so as to take timely steps and not to lose the chances to withstand the negative impact of current crisis through creating new jobs.

## 2. PREREQUISITES FOR DEVELOPMENT OF WATER TOURISM

The West-Pomeranian Voivodship during the second half of XX century had monoindustrial development [7]. This fact, as well as poor support of private business and the experience shortage in private business, underdeveloped both transport infrastructure and vehicles' fleet which became some of the most important barriers of progress. The author's five-year research of the West-Pomeranian Voivodship potential revealed seven advantages of transformations of industrial centres into recreation area.

- 1. Water tourism protects the residents' health. Rising food and fuel prices, especially in recent months, along with employment insecurity are among the factors leading to decreasing welfare of inhabitants. Therefore, at this period the quick marginalisation of such social groups as the poor, chronic illness, families having many children, single women, disabled, and the elderly people take place. On one hand they demand financial support, and on the other it cuts out the big group of potential clientele of water tourism by inland waterways. Stronger social protections are urgently needed to save from harm the most vulnerable inhabitants of Poland including West-Pomeranian Voivodship.
- 2. Water tourism is able to weaken crises and induce economic revitalization. The water tourism sector perfection is a direct investment into human capital, and indirect investment into economic development and social stability. This industry is the top-ranked sector of economy which should get unanimous private-public support.
- 3. *Water tourism is able to support social stability*. Equitable accessibility to water tourism services is a key factor of social cohesion, and as consequence, the best protection against domestic social conflicts and international tension. Self-confident, ready to work, and prosperous inhabitants are asset of any country.
- 4. Water tourism is able to generate future richness. Re-investment of current tourism incomes with purpose of natural resources development is the most reasonable way of financing future budget. Waste of profits is the least efficient and the most short-sighted action which have already pushed some countries to high unemployment. Coherent and vigorous support of tourist industry is universal way to protect the domestic in habitants as well as the most rational way of efficient using of limited budget.
- 5 Water tourism stimulates the creation of new business environment. A world that is consumer's unfriendly is neither stable nor secure. Success of tourism in inland waterways is the essential factor of maintaining economic balance and creation of job places in the face of a financial crises and social threats. Therefore, it is very important to create effective management system of tourist business.
- 6. *Water tourism protects the natural environment.* Tourism in inland waterways requires introduction of innovative approaches to environment safety through environmentally friendly technologies and energy-saving fleet. Clear water and fresh air, wide variety of flora and fauna as well as beautiful landscapes expand opportunities for prosperity of touristic business.

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7. *Water tourism is well-compatible with other activity types*, e.g. retail trade, fishing, education system, communication services, green urban and rural transport, business, agriculture, life and health insurance, etc.

# 3. OBSTACLES IN DEVELOPMENT OF TOURISM USING COASTAL AND INLAND SHIPPING

Experience of West-Pomeranian region development over the last two decades shows numerous barriers to development of water tourism (Fig.1).



#### Fig.1 Barriers to water tourism development

The multilevel analysis of compatibility between requirements for development of water tourism, offered conditions, safety level [6] and tourist preferences is necessary in order to forecast future needs' and to timely decision-making, as well as the best choice of techniques for overcoming above mentioned obstacles. Constituents of multilevel analysis are shown in. Fig.2

	<i>Geographic level</i> . This level of analysis provides investigations of the tourists' preferences by the most-used points for the beginning tourism activity.					
MU	<i>For example</i> , the town of Kamień Pomorski is localised on the Kamień Bay shore. It has a direct link to the Baltic Sea by the estuary of the Dziwna River that attracts cruise lovers, yachtsmen as well as fishing fans.					
	<i>Infrastructural level.</i> This level of analysis provides investigation of capacity and availability as the nodes as well a linear infrastructure according to scale of tourist flows, considering ecological requirements.					
I L E	<i>For example</i> , every necessary renovation of embankments or building of new roads, marinas, hygienic infrastructure and other installations for tourists' needs, should be accompanied by a preliminary environmental impact assessment and planning of ecological protection.					
V E	<b>Organisational level.</b> This analysis provides investigation of interoperability between tourists' wishes and potentials of tourist events' organisers.					
L A	<i>For example</i> , the organisational success of the Tall Ships' Races final (Szczecin, 2007) would not be possible without compatibility of various transport modes and numerous service branches as well as training the personnel and planning of the accompanying programme.					
N A	<b>Technological level.</b> Technological level of analysis provides investigation of compatibility between tourist aspirations and tourists' safety/security as well as necessary facilities.					
L	<i>For example</i> , the Tall Ships' Races 2007 have demanded building of the Safety and Security Management Centre. This level also provides the analysis of fleet availability exploited for water tourism. Updating of the actual fleet is the important task because ships construction is the most accepted factor for travel tour choice by waterways network.					

#### Fig.2. Constituents of multilevel analysis

Tourists' preferences for water recreation are very important [5]. Taking into account both today's wishes of tourists and their possible future needs are very essential for adequate and timely decision-making. Neglection of preferences identification, as well as untimely and lated counteractive steps are the critical causes of a failure.

Researches have shown that the choice of activity form for water tourism is closely related to the tourists' age and pocket size as rule. The researched preferences of 542 people (simple random sampling), including inhabitants and tourists that visited the West-Pomeranian Voivodeship in the last year at the age from 18 to 78 have allowed to identify their priorities. It is illustrated by Table 1. As this table shows, the wishes and real choices for water tourism do not coincide.

The Table 2 shows the reasons of inconsistency between wishes of tourists and their real choices. The researched preferences of tourists have allowed identifying active recreation as a priority of overwhelming majority while at the same time the activity form's choice depends on age and prosperity of tourists, although crisis impact is distinctly traced.

	. Wishes and real choices for coastal recreation categories according to tourists age									
		Age								
N⁰	Category	17- 25		25 - 44		45 - 65		65+		
		wish	choice	wish	choice	wish	choice	wish	choice	
Ι	Active recreation									
	1.1. Water tourism (boating, sailing, windsurfing, diving, canoeing)	43	4	21	12	9	6	2	2	
	1.2. Beach - sport (jogging, rock- hopping, volleyball, aerobics)	12	35	11	13	7	7	1	1	
	1.3. Swimming, incl. sea, indoor and outdoor pools	11	41	5	26	9	28	8	34	
	1.4. Walking	1	1	3	4	5	5	4	24	
	1.5. Cruising	14	3	29	4	26	5	47	2	
	1.6. Hunting and deep-sea fishing	2	0	6	2	9	9	7	2	
	1.7. Games (golf, tennis)	3	4	5	3	7	3	1	1	
	1.8. Museums, exhibition and heritage activities	4	3	2	2	4	4	2	2	
	1.9. Horseback riding on the beaches	2	2	3	1	2	2	1	1	
Overall:			91	75	66	78	69	73	69	
II	Passive recreation									
	2.1. Sun bathing	2	5	8	27	10	22	6	12	
	2.2. Gambling	4	1	3	2	4	1	10	1	
	2.3. Parade shows	1	0	2	3	3	3	9	9	
	2.4. Rest in bars, pubs, cafés	1	1	2	2	5	5	7	9	
Overall:		8	7	15	34	22	31	32	31	
Total:		100	100	100	100	100	100	100	100	

Table 1. Wishes and real choices for coastal recreation categories according to tourists' age

For example, swimming is dominating choice for all age groups in spite of the fact that this traditional recreation is not in the most preferable wishes. Young people are interested in adventure activities such as water-sport, but tight pocket compels them to choose the lower priced activity forms.

	_	Age						
№	Reason	18-25	25 - 44	45 - 65	65+			
1	High acquisition price	85	44	57	73			
2	Negative opinion of friends, eyewitnesses	9	12	8	4			
3	Discrepancy between price and quality	3	21	10	3			
4	Low level of safety/security	2	15	12	2			
5	Unstable weather/hard to foresee	1	6	9	13			
6	Poor advertising	-	1	3	3			
7	Prejudices and stereotypes	-	1	1	2			
	Total:	100	100	100	100			

Table 2. Reasons of inconsistency between wishes of tourists and real choices (%)

# 4. CONCLUSION

Touristic activity in inland waterways is an ideal alternative to traditional sunbathing, swimming, and sand tourism. Cruises are preferable wishes of the senior tourists, despite the low old age pension. Therefore, the budget oriented forms of activity are required to develop for the purpose of success attainment during crisis, as they are usually popular among tourists with average and low earnings.

Main problems are lack of finances, shortage of an adequate access and as critical "bottlenecks" of transportation infrastructure. Successfully overcoming of these barriers maybe done through close co-operation in public- private collaboration, development integrated information systems for travellers and tourists, and modernization of inland navigation for increasing the safety and efficiency.

All of these require both creation of new management methods and implantation of proven management technique. The West-Pomeranian region requires competitiveness raise through creation of consolidated strategy which provides every opportunity for quick redevelopment of the depressed areas; increase of social mobility; infrastructure improvement under condition of pollution minimization; perfection of legislation for accidents prevention and safety/security increase. Such strategy should be created using the so-called "the integrated approach to development".

### SUSTAINABLE DEVELOPMENT OF WEST-POMERANIAN REGION THROUGH RADICAL MODERNIZATION OF INLAND SHIPPING

#### Abstract

Sustainable development has become a leading approach to human activities at the present. In order to manage the development strategy, it is necessary to conduct a comprehensive analysis of the current state, to set main objective and to define the activities that will make their realization possible. This research is based on the analysis of development necessity for the waterway transport, as well as necessity of inevitable modal shift. The results have shown that the inland waterway navigation should get the higher share of the total transport where there is an alternative. The paper explores the West-Pomeranian region potential and revival chances of industrial zones through the water tourism development in inland shipping under effective use of natural resources. Analysis leads to understanding the correlation between the behavioural preferences of tourists as well as the need for rethinking investment policy and the use of new approaches to sustainable development of West-Pomeranian inland shipping

Key words: inland shipping, tourism development, people mobility, environment protection.

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# ZRÓWNOWAŻONY ROZWÓJ REGIONU ZACHODNIOPOMORSKIEGO POPRZEZ SZEROKĄ MODERNIZACJĘ ŻEGLUGI ŚRÓDLĄDOWEJ

#### Streszczenie

Zrównoważony rozwój stał się jednym z głównych narzędzi wspierających dalszy postęp naszej cywilizacji. Dlatego koniecznym staje się wszechstronna analiza obecnej sytuacji gospodarczej, wyznaczenie podstawowych celów oraz zdefiniowanie działań zmierzających do ich osiągnięcia. Przedstawione wyniki badań oparte są na analizie trendów rozwoju transportu wodnego jak również perspektyw jego zintegrowania z innymi gałęziami transportu. Wykonane badania pokazały, że transport wodny jest chętnie i często wybierany w całościowym procesie transportowym, jeśli tylko istnieje możliwość jego wykorzystania. W pracy zbadano potencjał dróg wodnych regionu zachodniopomorskiego oraz szanse rewitalizacji stref przemysłowych poprzez rozwój turystyki wodnej szczególnie żeglugi śródlądowej w ramach efektywnego wykorzystania zasobów naturalnych. Przeprowadzona analiza pozwala zrozumieć zależności pomiędzy preferencjami turystów a potrzebą podwyższenia skuteczności polityki inwestycyjnej oraz opracowania nowych podejść do zrównoważonego rozwoju zachodniopomorskiej żeglugi śródlądowej.

Słowa kluczowe: żegluga śródlądowa, rozwój turystyki, ochrona środowiska.

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