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HISTORICAL AND PRESENT ENVIRONMENTAL SUSTAINABLE DEVELOPMENT IN V4 COUNTRIES

Lubomir Pana, Richard Riha

The College of European and Regional Studies

vul. Zizkova 6, Czech Budejovice, 370 01 Czech Republic. E-mail: pana@vsers.cz

The paper deals with the environmental issues that are sorted out in the Visegrad Group countries. It focuses on the historical consequences which caused the problems that are to be solved as soon as possible because the damage of the environment could be destroying for the society itself. Thus the paper concentrates on the contemporary situation as well because people have to live in the symbiosis with nature and cope with its features typical of every single region now. Thus regional issues become nationwide ones.

Key words: environment, Visegrad Group, history, restoration.

СТІЙКИЙ РОЗВИТОК ВИШЕГРАДСЬКОЇ ЧЕТВІРКИ: ІСТОРІЯ І СУЧАСНІСТЬ

Любомир Пана, Ричард Рига

Вища школа європейських та регіональних досліджень

вул. Жижкова, 6, м. Чеське Будейовіце, 370 01, Чехія.

E-mail: pana@vsers.cz

У статті розглядаються економіко-екологічні проблеми країн Вишеградської групи. Ви-світлені історичні наслідки даних негативних явищ, виділені чинники, що їх спричинили. Підкреслено, що проблеми мають бути вирішені найскоріше, оскільки понесені збитки для навколишнього середовища і суспільства можуть бути масштабними. Головною метою статті стало дослідження сучасної ситуації, розгляд можливих шляхів взаємин людини із навколишнім середовищем. При цьому виділені особливості цих взаємин для кожного регіону.

Ключові слова: навколишнє середовище, Вишеградська група, історія, відновлення.

THE RELEVANCE OF ARTICLE. The Visegrad Group was established in 1991. Although these countries have very much in common it is quite difficult to compare the development of the environmental situations in each country of the group because the data that having been provided since the beginning of the existence of the group differ due to the methodologies, in long time periods especially.

We are going to deal with the issues which the group members consider to be essential to cope with the aftermath of the communist era and compare with the standards in Western Europe. To reach such goals certainly means to provide a great deal of finance for programmes and projects which can help improve the current situation in all the countries mentioned above.

MATERIAL AND RESEARCH RESULTS. Thus the V4 countries set the following priorities to get the financial support: Using Our Environment Responsibly – the Operational Programme Central Europe (2007-2013), all V4 countries are involved there; Protection and Improvement of the Environment – the Operational Programme South East Europe (2007-2013), Slovakia and Hungary engaged; Three Components of LIFE+ Programme: LIFE+ Nature and Biodiversity,

LIFE+ Environment Policy and Governance, LIFE+ Information and Communication – LIFE+ Programme (2007-2013), Slovakia and Hungary are involved there or the Operational Programme Cross-Border Cooperation Czech Republic – Poland (2007-2013) [1, 2].

Speaking about the recent history of environment in V4 countries we have to mention the air pollution, water management and management of the areas subject to special organization. Coming from the Czech Republic we are going to deal with the situation in our country more in detail but we are also going to talk about the situation other countries.

In the communist era the meaning of heavy industry was emphasised in all V4 countries. Large areas located near the coal resources provided enough energy sources for mass iron production, power plants were built there and such areas provided employment opportunities for plenty of people. Thus pieces of land which used to be poor and little populated for centuries gained the meaning and improved their positions throughout the country in a few years. Unfortunately, the industrial growth did not bring the increase of population and nationwide significance of previously forgotten regions only. All bodies of government neglected the issue of environment which was connected with the industrial growth inseparably. Therefore the second half of 20th century could be called the darkest period in the environmental development in North and North-Western Bohemia, in Silesia (speaking about the Czech Republic) and Southern Saxony (speaking about the former German Democratic Republic) and Lower Silesia (speaking about Poland). It was one of the most polluted areas in Central Europe at that time. If we connect these regions with straight lines, we get a triangle – so called the Black Triangle. The main sources of pollution came from power plants, iron and steel works and heating plants there. Thus there were large emissions of sulphur and dust, often accompanied with foggy weather, and the air pollution increased inevitably up to the figures that made living almost unbearable and the living standard decreased. The country was devastated and people's health worsened in these regions.

Since 1990 the V4 countries have done a lot to improve the air quality. Sulphur emissions have been reduced in the recent years because large industrial complexes stopped their production and the remaining ones have been desulphurized. All the V4 countries have also done a lot to reduce their greenhouse gas emissions and have also phased out chemicals which are widely known as ozone-depleting substances. These chemicals damage the ozone layer. Nowadays, the issue of air pollution is subject to local regional government bodies mainly because these are familiar with specific local problems and thus they can also get financial resources from the EU funds more easily. Nevertheless, such problems are considered to be sorted out by the central governments as well because they provide every single region with financial resources available in country budgets.

The issues often mentioned in all the V4 countries have very much in common with water management [3, 4]. The communist era was characterized by high water

consumption and high water pollution as well. Heavy industry always consumes plenty of water and at the same time it damages water resources. However, mentioning water management, we cannot forget the former socialist agriculture. Irrigation, a typical feature of agriculture in the second half of the 20th century in Central Europe led to inevitable decrease of water supplies. Luckily, since 1990 water management has introduced environmentally friendly technologies, enhancement of environmental awareness and a unification of the national environmental legal frameworks with the EU laws and directives, after the V4 countries became members of the EU in 2004 especially. The biggest attention is drawn to the danger of floods, pollution of border watercourses, protection of water-related ecosystems and, as mentioned above, water supplies. As the land changes, the places which were used for flooding for hundreds of years are settled, the risks of floods grow steeply. Therefore the Visegrad Group countries cooperate very closely and the integrated and international systems of protection have developed a good flood control during the recent 20 years.

Because Visegrad Group countries' borders consist of mountain ranges mostly in which rivers spring and these headwaters are not affected by pollution that much it is highly important to monitor the quantities of pollution coming downstream. It is necessary to say that the quality of water has improved in the last 20 years because there is a decrease in water abstraction, surface as well as groundwater, and people have learnt to collect and treat wastewater properly. Sewage disposal plants have been built in small rivers to clean the large ones supplying municipalities and town with drinkable water [5]. Thus point sources generate less pollution and contribute to the improvement in the situation. According to European Environment Agency (EEA) water pollution has been reduced four times in the monitored border stations in the last 20 years. Generally speaking about water management, the V4 countries cope well with the directives of the EU ordering the countries to comply with high quality water standards.

Last but not least, we have to mention protected areas as the symbol of the V4 countries' efforts to improve the environment [6]. The protection of landscape was limited in the past, no wonder the ecosystems were exposed to acidification and eutrophication and a lot of original species and flora habitats disappeared. Nowadays, politicians try to change the situation, they focus on remarkable areas which could be proclaimed as the rare ones due to many reasons. They also try to implement NATURA 2000 to stop the decline in biological diversity and they strive for a reasonable use of soil to reduce the pesticides and fertilizers in agriculture.

Most of protected areas are situated in boundaries. This is because of the unique geographical features resulting from the geographic location of the countries in the middle of Europe between the Alps and the Carpathians, and also in the river basins of the three large rivers (the Danube, the Odra and the Elbe) flowing into three seas (the Black Sea, the Baltic Sea and the North Sea) [7, 8]. Nature conservation and landscape protection are now strongly linked among all the V4 countries, realizing the cooperation in saving the rare species and important forest, rock, lake districts,

i.e. landscape areas should be one of the priorities of every government body. Therefore the number of national parks or any other forms of protected areas increases in all the V4 countries.

CONCLUSIONS. All three issues discussed above have something in common. All of them are the “heritage” of the days past which is necessary to be solved to improve the standards of living for future generations. All the countries engaged in the V4 Group have similar experience and thus can cooperate at several levels to improve their individual situations. It is essential that the countries involved in the V4 Group have improved the quality of environment during the last 20 years and that the trend is expected to continue. The international cooperation is about to be paid off inevitably.

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УСТОЙЧИВОЕ РАЗВИТИЕ ВЫШЕГРАДСКОЙ ЧЕТВЕРКИ: ИСТОРИЯ И СОВРЕМЕННОСТЬ

Любомир Пана, Ричард Рига

Высшая школа европейских и региональных исследований
ул. Жижкова, 6, г. Чешские Будейовице, 370 01, Чехия.
E-mail: pana@vsers.cz

В статье рассматриваются экономико-экологические проблемы стран Вышеградской группы. Освещены исторические последствия данных негативных явлений, выделены причины, вызвавшие проблемы. Подчеркнуто, что проблемы должны быть решены как можно скорее, поскольку ущерб для окружающей среды и общества может быть масштабным. Главной целью статьи стало исследование современной ситуации, рассмотрение возможных путей взаимоотношений человека с окружающей средой. При этом выделены особенности этих взаимоотношений для каждого региона.

Ключевые слова: окружающая среда, Вышеградская группа, история, восстановление.

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