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COMPARISON OF SWEDISH AND SLOVENIAN EXPERIENCE IN THE IMPLEMENTATION OF ENVIRONMENTAL POLICY AS PART OF SUSTAINABLE DEVELOPMENT

Poređenje švedskih i slovenačkih iskustava
u implementaciji ekološke politike kao dela
održivog razvoja

Abstract

The objective of this paper is to analyse, compare and present different practices of sustainable development in EU member states. The paper is represented as a comparative study of policies of sustainable development in Sweden and Slovenia. These two countries were selected based on the difference in their sustainable development models. Sweden is a country characterised by a longstanding tradition of commitment towards environmental protection and sustainable development. Sweden has proven in practice that it is possible to combine a high level of economic and social welfare with the protection of the environment. Slovenia is included in the comparison as a country at the beginning of the process of implementing sustainable development, and could benefit from Sweden's experience. Using the comparative method, the foundations of sustainable development policy are presented for both countries on the basis of the analysis and interpretation of documents; certain comparisons between official policies and the actual implementation and effects of such policies in practice are given based on various other sources (professional articles, internet sources, etc.). A comparison of the two countries will include: state structure, specific societal features, relation to the EU, governmental definition of sustainable development, and key sustainable development indicators and the progress achieved.

Key words: *case study, sustainable development, Slovenia, Sweden, state structure, governmental definition of sustainable development, key sustainable development indicators*

Sažetak

Cilj ovog članka je da analizira, uporedi i predstavi različite prakse održivog razvoja u državama članicama EU. Članak predstavlja komparativnu studiju politike održivog razvoja u Švedskoj i Sloveniji. Ove dve zemlje su odabrane na osnovu razlike modela održivog razvoja. Švedska je zemlja koju karakteriše dugogodišnja tradicija posvećenosti zaštiti životne sredine i održivom razvoju. Švedska je kontinuirano dokazivala svoju posvećenost održivom razvoju kroz svoje delovanje i politiku. Švedska je u

praksi pokazala da je moguće kombinovati visoki nivo ekonomskog i socijalnog blagostanja sa zaštitom životne sredine. Slovenija je uključena u poređenje kao zemlja na početku procesa implementacije održivog razvoja, a koja može imati koristi od iskustva Švedske. Korišćenjem komparativnog metoda, temelji politike održivog razvoja su prikazani za obe zemlje na osnovi analize i tumačenja dokumenata; određena poređenja između zvanične politike i stvarne primene i efekata takve politike u praksi data su na osnovi raznih drugih izvora (profesionalni članci, internet izvori itd.). Poređenje dve zemlje će obuhvatiti: državnu strukturu, određene društvene funkcije, veze sa EU, vladinu definiciju održivog razvoja, ključne indikatore održivog razvoja i postignuti napredak.

Ključne reči: *studija slučaja, održivi razvoj, Slovenija, Švedska, državna struktura, vladina definicija održivog razvoja, ključni indikatori održivog razvoja*

Introduction

The objective of this paper is to analyse, compare and present different practices of sustainable development in EU Member States. The paper is represented as comparative study of policies of sustainable development in Sweden and Slovenia. These two countries were selected based on the difference in their sustainable development models. Sweden is a country characterised by a longstanding tradition of commitment towards environmental protection and sustainable development. Sweden was already handling environmental protection issues in the first half of the 20th century, namely, the local effects of industrial emissions. In 1972, Sweden was the host of the first international conference on the environment. Within the frame of that conference the foundations of sustainable development

were built. Since then, Sweden has continuously proven its commitment to sustainable development through its actions and policies. Sweden has proven in practice that it is possible to combine a high level of economic and social welfare with the protection of the environment. This is also the reason the case study of Sweden was included in this research. Slovenia is included in the comparison as a country at the beginning of the process of implementing sustainable development, and could benefit from Sweden's experience. Using the comparative method, the foundations of sustainable development policy are presented for both countries on the basis of the analysis and interpretation of documents; certain comparisons between official policies and the actual implementation and effects of such policies in practice are given based on various other sources (professional articles, internet sources, etc.). A comparison of the two countries will include:

1. Introduction:
 - State structure,
 - Specific societal features,
 - Relation to the EU.
2. Governmental definition of Sustainable Development:
 - Definition of sustainable development in the national strategy,
 - Monitoring the strategy for sustainable development,
 - Link to the EU Strategy for Sustainable Development.
3. Key sustainable development indicators and the progress achieved.
4. Conclusion.

SWEDEN

Introduction

State structure: Sweden is a parliamentary monarchy. The Swedish Constitution declares that all public power derives from the people and that the Riksdag – the Swedish Parliament – is the foremost representative of the people. The Riksdag holds legislative power. In terms of administration, Sweden is divided into counties. Each county is governed by the administrative committee appointed by the government. Each county also has a county council with elected representatives from the

municipalities. Each district is divided into municipalities. There are no hierarchical relations between municipalities, county councils and regions, since all have their own self governing authorities with responsibility for different activities. They have a considerable degree of autonomy and independent powers of taxation.

Development situation: Sweden has one of the most globalized and competitive economies. A high-tech local economy and a comprehensive system of welfare benefits allow Sweden to enjoy one of the highest standards of living in the world. From the early 1990s until 2008, Sweden enjoyed a sustained economic upswing fueled by strong exports and rising domestic demand. In 2008, Sweden entered a recession. Heavily dependent on exports of cars, telecommunications, construction equipment and other investment goods, Sweden was hard hit by the contraction in external demand due to the global financial and economic crisis.

Exports and investments in machinery and transport equipment, chemical and rubber products, food, clothing, textiles and furniture, and wood products are rapidly increasing, and the Swedish export market is expected to grow by 8% each year through 2013.

Specific societal feature: Sweden has a history of strong political involvement by ordinary people through “popular movements”. The latter part of the 19th century saw the birth of the major popular mass movements, frequently inspired by similar movements in other countries. In a narrow sense, the popular movements in Sweden are divided into two groups. The older of these is generally associated with the powerful Swedish labour movement, but it also includes the Free Church movement. The more recent grouping includes the women's movement and the environmental movement [10, p. 224]. The significance of such movements is apparent by the state giving certain financial support to popular movements that are to the benefit of the citizen. In Swedish political discourse the popular mass movements and the non-profit sector are viewed as important schools for democracy, instruments for promoting both mutual and individual interests, and an integral part of the democratic civil society [10, p. 229].

Relation to the EU: Because of their long and positive experience with the policy of neutrality, the Swedes are

traditionally sceptical with regard to integration into the structures of the European Union. The advocates of stronger integration received their last big damper with the referendum on membership in the European Monetary Union: a clear majority of the population voted against replacing the Swedish Krona with the Euro [1, pp. 159-160].

Governmental definition of sustainable development

Sustainable development is an overall objective of Government policy. The Government introduced the concept of sustainable development (SD) in the early 1990s. The first national strategy for sustainable development, “A Swedish strategy for sustainable development”, was presented by the Government in 2002. Due to the UN World Summit on Sustainable Development in Johannesburg, the strategy was revised in 2004 and in March 2006 the Government presented the most recent strategy for sustainable development: “Strategic challenges: A further elaboration of the Swedish strategy for sustainable development” [1, p. 160].

Institutional position of sustainable development: Sweden’s sustainable development effort has given rise to institutional changes. Sustainable development was adopted in 2003 as an overall objective of Government policy. The task of implementing Sweden’s strategy for sustainable development is the responsibility of the Government Offices as a whole. The government has set up a special body in the Prime Minister’s Office, the Coordination Unit for Sustainable Development, to coordinate international and national efforts in this field and strengthen strategic initiatives.

Definition of sustainable development in the national strategy: In the national Strategy for Sustainable Development (SDS) the Government’s vision of sustainable development is defined as an overall objective of Government policy, both nationally and internationally. “The policy objectives of the vision of a sustainable society are solidarity and justice in every country, among countries and among generations”. The basic assumption is that members of one generation should not conduct their lives in a way that prevents their children or future generations from enjoying a decent

standard of living. Sustainable development is considered as a holistic approach to society’s needs and problems. The Government points out four strategic challenges to be prioritised: building sustainable communities (promoting good living), encouraging good health on equal terms for all citizens, meeting the demographic challenge (taking measures across a range of policies), and encouraging sustainable growth (recognition that growth is driven by dynamic markets, a forward-looking welfare policy and a progressive environmental policy). Since the strategic challenges extend across a number of different policy areas, the Swedish Government stresses the need to act at the local, regional, national, EU and global levels to successfully confront them.

Monitoring the strategy for sustainable development: Sweden developed a system of 87 indicators to monitor the implementation of the adopted sustainable development strategy. Twelve indicators are selected as headline indicators: average life expectancy, violence, energy efficiency, investments, employment rate, public debt, growth, risk of poverty, demographic support ratio, greenhouse gases, hazardous substances and development assistance. The main indicators cover six key areas of Sweden’s sustainable development in accordance with the strategy: health, sustainable consumption and production, economic development, social cohesion, environment and climate and global development.

Link to the EU Strategy for Sustainable Development: The European Council’s declaration on Guiding Principles for Sustainable Development from June 2005 served as guidance for Sweden’s strategy. Several areas of the EU Sustainability Strategy largely correspond to the Swedish national strategy (sustainable consumption and production, social inclusion, demography and migration, global poverty and sustainable development challenges).

Key sustainable development indicators and the progress achieved

Trends in sustainable development are positive in many areas (see Table 1). For example, life expectancy in Sweden has been consistently increasing. Sweden also has one of the lowest unemployment rates in the world, which is a result of

an active policy of settling the problem of unemployment; it is one of the most competitive economies in the world, yet it managed to separate the growth in GDP from energy consumption and greenhouse gas emissions. Sweden has been especially active in eliminating hazardous substances. Sweden participates in a range of cooperation schemes in the EU, in its neighbourhood, globally and bilaterally with individual countries. Adaptation toward sustainability is under way, but much work remains. Sweden has seen negative development in some of the traditional welfare indicators such as risk of poverty and demographic support ratio in the environment area, including limiting the positive climate impact.

Health

Life expectancy: Life expectancy in Sweden has risen by four years for men and three years for women over the past 20 years. The expectancy for years of healthy life has increased by two years for women and remained unchanged for men. Both men and women had healthy life years expectancy of approximately 62 years in 2003. The country's life expectancy is a clear sign that Swedes generally enjoy good health and well-being.

Violence: There are major differences among various groups – young men are most at risk, whereas older

men and women are rarely at risk. No general trend is discernible – except in the case of young women, for which it is negative.

Sustainable consumption and production patterns

Energy efficiency: Energy intensity has decreased during the past five years, indicating stepped-up production with less energy per unit manufactured. Over a longer period of time, oil's percentage of the total energy supply has fallen, while the biofuels' percentage has risen. The production of hydroelectric power varies from one year to the next and reflects precipitation differences.

Investments: Sweden's investments in physical capital have remained fairly constant over the past ten years, albeit lower than before the economic crisis of the early 1990s. Investments in education have been steady at 7% of GDP. Since 1993, R&D expenditures have remained above the Lisbon strategy's target of 3% of GDP. The figure passed 4% in 2001 and was down somewhat in the period 2003–2004. The private sector accounts for approximately three quarters of the R&D effort.

Economic development

Employment rate: The employment rate indicator shows no discernible positive or negative trend. The Government's 80% employment of women and men has risen in recent years. One complementary employment measure is the number of hours worked per person of working age. The measure also captures various types of absenteeism. The trend is negative for men and essentially unchanged for women.

Public debt: Sustainable public finances are fundamental to welfare systems and to the national economy as a whole. Since the budget reform of the 1990s, the public debt has trended downward. That is necessary if Sweden is to handle its rising demographic support ratio. Gross public debt, which jumped from 43% of GDP in 1990 to 78% in 1994, stabilised around the middle of the 1990s and started to come down again more significantly beginning in 1999. In 2000 it fell below the key level of 60% and had continued to decline to a level of 37% of GDP as of 2007. For the past five years, the public debt has been below the reference value of 60 percent of GDP set by the Maastricht Treaty.

Table 1: Key indicators for sustainable development and their trends

HEADLINE INDICATORS	TREND
HEALTH	
Life expectancy	Positive
Violence	Neither positive nor negative
SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS	
Energy efficiency	Positive
Investment	Neither positive nor negative
ECONOMIC DEVELOPMENT	
Employment rate	Neither positive nor negative
Public debt	Positive
Growth	Positive
SOCIAL COHESION	
Risk of poverty	Negative
Demographic support ratio	Negative
ENVIRONMENT AND CLIMATE	
Greenhouse gases	Neither positive nor negative
Hazardous substances	Positive
GLOBAL DEVELOPMENT	
Development cooperation	Positive

Source: [14, pp. 18–19]

Growth: During the 1970s and the 1980s, Sweden had a lower GDP growth rate than both the average growth of the EU and the average growth of the OECD area. The recession in Sweden in the beginning of the 1990s led to a low mark regarding economic growth as the GDP growth rate actually fell during three years. Between 1990 and 1993, the GDP fell by about 4% in terms of volume. After 1993, the growth rate in Sweden accelerated again and was comparable to the growth rate of the OECD. During the period 1998-2000, the volume growth rate was actually higher than in comparable countries, at just over 4% per year. After years of economic growth, the Swedish economy, as the rest of the developed world, was again affected by a sharp economic downturn because of the IT-crash in the beginning of 2000. The crisis was followed, however, by an economic boom. World trade increased sharply, which resulted in rapid export growth for Sweden. The Swedish GDP growth rate reached 4% in both 2004 and 2006. In 2007 the economic growth slowed down again and in late 2008 the financial crisis resulted in a deep recession. The GDP growth fell during 2009, however, it recovered somewhat during 2010 [2].

Social cohesion

Risk of poverty: The risk of poverty indicator in the area of social cohesion reflects the percentage of Swedes living in households that earn less than 60% of the country's median income. The indicator has risen to 12% since the early 1980s. But that is the second lowest in the EU and remains well below the 15% average for the EU 25 countries. The 60% cut-off point is not intended as a measure of absolute poverty, but represents an assessment of the level below which normal consumption and integration in the community are difficult to maintain. In absolute terms, such households may enjoy a decent standard of living well above what poor countries have to offer.

Demographic dependency ratio: The demographic dependency ratio indicator measures the number of children, young people and elderly who are dependent on the working age population. The ratio of children and adolescents aged 19 or less to the working age population (20–64) has been declining for a long time. The percentage of children and adolescents in the total population is expected to remain

essentially unchanged for the next 50 years. The working age population will also be fairly constant. But Sweden has the oldest population followed by Italy, amongst the EU Member States. As Swedes live longer and healthier lives, the age and size of the population increases. But that also translates into a higher support ratio.

Environment and climate

Greenhouse gases: Swedish greenhouse gas emissions per head of population are among the lowest in OECD Member States. The emissions have shown a declining trend in recent years, while economic growth has increased. This means decoupling the two phenomena which represents the desired model of low carbon growth. In 2009, Sweden emitted 60 million tonnes of greenhouse gases. Compared with 2008, this is a decrease of 3.6 million tonnes. Emissions were around 17 percent below 1990 levels. GDP has grown by around 3 percent per year since 1994, except in 2008 and 2009. Despite economic growth, emissions of greenhouse gases have still reduced over the same period. Emissions have fallen as a result of a change-over from oil to biofuels in the production of district heating. Sweden is now increasing the pace of work on the transition to a low-carbon society. The aim is to make the country independent of fossil energy, and Sweden therefore has to make its own contribution to international efforts to reduce emissions to the levels the climate requires. Sweden has earmarked SEK 4 billion over the period 2009-2012 for climate measures within their international development cooperation. This money will be spent in particular on adaptation measures in developing countries aimed at reducing the vulnerability of the population, for example, through investments in health, sanitation and access to clean drinking water.

Hazardous substances: Since the 1980s, Sweden has followed key principles for the management of products and waste: the precautionary principle, the substitution principle, the waste hierarchy and producer responsibility. Sweden has been especially active in eliminating hazardous substances from products and waste, an area of growing significance as primarily the consumer products have become a major source of pollution. Sweden stresses the role of producers in chemicals management and, more

recently, in the ecocycle policy – an approach that gives producers general responsibility and broad flexibility in implementing measures. More recent Sweden's statistics show that the number of products hazardous to health and available to consumers is already decreasing. Among the chemical products available to consumers which were imported and produced at the beginning of the 1990s, about half were qualified as hazardous to health. By the end of the 1990s, this share had decreased and now is 39 percent [15].

Global development

Global environmental cooperation is important to Sweden. The country has very effectively promoted international cooperation on environmental protection issues and has supported its international programme with significant levels of human and financial resources.

Official development assistance: The Swedish sustainable development policy presented a policy for global development, the goal of which is to contribute to equitable and sustainable development. It is proposed that this goal should apply to all policy areas. It focuses on those who have not benefited from the prosperity generated by globalization. Poor people and countries, especially the poorest among them, must be empowered and have greater opportunity to benefit from the advantages that increased global trade has yielded. Sweden contributes 1 percent of its GDP to development assistance. That is high in comparison with the rest of the world. Only a few countries have met the UN target of at least 0.7 per cent of GNP. As a percentage Sweden is the largest donor among developed countries.

Conclusion

Awareness of one's own involvement in the causing of environmental problems is a prerequisite for a person to change to a proper behaviour pattern. With such awareness, it is easier to implement the system measures of environmental policies which can change the existing development trends. The example of Sweden proves that environmental protection is not in contradiction with the goal of high competitiveness in the economy. Sweden

is one of the most environmentally aware countries in the world; the Swedes have ecologically incorporated awareness in their lifestyles, and Sweden is one of the most competitive countries in the world. A high level of public awareness of environmental problems has dictated the changes in the behaviour of the state and the enterprises. The Swedes did not focus on solving the environmental problems, but they saw in them a challenge to introduce preventive social, technological and economic reforms. Sweden has managed to connect environmental and economic challenges by creating new sources of growth. Environmental policy for Sweden is a part of sustainable development. Sweden represents an opportunity for innovation, and it has been using this opportunity. Due to strict environmental standards, Sweden is forced to search for advanced solutions to environmental problems. New and innovative environmental technologies contribute to economic growth in various ways. By decreasing the costs of environmental protection, Sweden enables "more environmental protection for less money", i.e. reaching the accepted environmental standards in a more cost-effective way. Financial resources saved in this way can be used anywhere in the economy. Innovative technologies, on the other hand, also create new markets by promoting the demand for green technologies, goods and services. Environmental technologies have contributed to the breaking of the causative connection between pollution of the environment and economic growth, along with respecting the limitations of environmental standards. This is the essence of sustainable development.

SLOVENIA

Introduction

In terms of political system, Slovenia is a democratic republic; with its powers divided among the legislative, executive and judicial. The highest legislative authority is the National Assembly (90 members), which passes laws. The President of Slovenia represents the Republic of Slovenia and is the Commander-in-Chief of its armed forces. The National Council (40 members) is appointed to carry out the advisory role and represents the social, economic,

professional and local interest groups. The Government represents the executive authority and reports to the National Assembly. In January 2011, Slovenia comprised 211 municipalities, which represent a form of local autonomy set forth by Articles 138 to 144 of the Constitution of the Republic of Slovenia. Municipalities are usually financed by the municipal budget, and for certain purposes, the Financing for Municipalities Act envisages co-financing from the national budget. A municipality is also a holder of power within its competences, which are a reflection of the decentralisation of public administration; however, a municipality is a part of the state and is thus not a sovereign power holder but dependent on the state. Local issues, which fall within the competence of municipalities, are being sufficiently implemented and the system rather works well. At the local level, the municipalities are responsible for sustainable consumption and production issues. The problem is that the competences of municipalities are actually never finally determined. Limitation of tasks to national and local is performed in every legislative procedure, and this is not followed by the provision of financial resources for the performance of municipal tasks and even less by the adaptation of organisational possibilities and types of task performance.

Development situation: By entering the European Union, Slovenia started to catch up with the EU and gradually increase its national competitiveness. At the beginning of the 1990s, macroeconomic stability and institutional changes of the transition economy were at the forefront. Until 1999, Slovenia recorded a high level of economic growth. At the beginning of the recession, its own developmental inconsistencies led to a significant drop in the economic growth along with more expressed macroeconomic imbalances. This applies particularly to the above-average level of inflation as compared to the EU and aggravation of the state's financial position. In the last decade, Slovenia has gained a significant lag in the area of structural reforms, especially the public, financial, and entrepreneurial sectors [4, p. 1]. The Slovenian economy is based on traditionally work-intensive industrial branches and privatised post-socialist enterprises; its share of modern technological areas and economically successful small and medium-sized private enterprises is too small. Therefore,

Slovenian productivity, export competitiveness and added value per employee are still substantially lower than in comparable EU-15 members. Orientation on technological restructuring, innovation and the increase in added value were too low, which strongly aggravated Slovenia's competitive position during the economic crisis. This explains why the Slovenian economy is still recovering more slowly than the average of the EU Member States.

Specific societal feature: The greatest direct impact on changing perspectives on environmental issues in Slovenia was its accession to the EU, when Slovenia was adopting its legal order and standards in the area of the environment, and ecological awareness of the Slovenian population was developing. Serious ecological problems raised awareness in Slovenia indicating that the environment needs attention and protection. The key problem of Slovenia is that a developed ecological awareness does not necessarily mean suitable orientation of people towards the natural environment and appropriate actions. It is not enough for an individual to only be aware of problems, but he/she must also act in accordance with the requirements of the natural environment. The path from awareness to action can be very long. In Slovenia, we cannot refer to a developed ecological awareness: in many cases, people fail to see a direct connection between daily decisions and actions, and ecological problems, and they might not even know that some products harm the environment. The key role in this context lies in different interest groups. In Slovenia, the number of activities of civil society participation has been increasing: NGOs, local communities, and other interest groups are focused in solving problems and satisfying the current needs in the area of environmental protection and nature conservation. Such encouraging facts are accompanied by obstacles due to the lack of available resources to finance such activities.

Relation to the EU: On 1 May 2004, Slovenia became a member of the European Union. The year before, the accession to the EU was supported at a referendum by 89.64% of voters. On 21 December 2007, Slovenia entered the Schengen area. On 1 January 2007, it further deepened its ties with other EU Member States by adopting as the 13th state the single European currency. In the first half of 2008,

Slovenia presided over the Council of the European Union. Today, Slovenia participates in community programmes in various areas that are primarily focused on social and economic progress and their interconnection. It contributes a part of its gross domestic product (GDP) to the common EU budget and in return it receives financial support, among other things for the development of agriculture and the countryside, for sustainable growth and for economic, social and more balanced development of regions within the framework of the European cohesion policy.

Governmental definition of sustainable development

In 2005, the Government adopted Slovenia's Development Strategy by 2013, which meets the standards of sustainable development strategy. Sustainable development has thus become an integral part of the selected development model in Slovenia. The National Council for Sustainable Development (NCSD) was involved in the preparation of the NSDS. The NCSD organised five thematic discussions, including one with regional and local representatives. Inter-ministerial coordination was established during the preparation of the NSDS. Moreover, the NCSD fosters cross-sectoral coordination. According to the Government decision of 14 June 2007, the NCSD is chaired by the Minister of the Government Office for Growth and co-chaired by the Minister of Environment and Spatial Planning and by the Minister of Local Government and Regional Policy. It is composed of 34 members, comprising 9 representatives of Government offices and 25 representatives of civil society. The renewed EU Strategy for Sustainable Development (EU SDS) that was adopted in June 2006 foresees that Member States report bi-annually on how they address the priorities of the EU SDS. Slovenia published its first national report on implementing the EU SDS in the summer of 2007.

Institutional position of sustainable development: The lead ministry/institution in the SD strategy process is the Government Office for Growth. The implementation of the NSDS is monitored in the form of a Development Report that is prepared annually by the Institute of Macroeconomic Analysis and Development and adopted by the Government of the Republic of Slovenia as guidelines

for the formulation of national economic and development policy. It is an independent professional service of the Government of the RS in the area of economic and social policy, development strategy and policy, national-economic balances and other tools for analysis and prognosis, and international cooperation and inclusion into economic integrations. The Director of the Office is directly accountable to the Prime Minister.

Definition of sustainable development in the national strategy: Slovenia's Development Strategy includes four dimensions: economic, environmental, social and cultural issues. In accordance with Slovenia's Development Strategy, the principle of sustainability in the economic and social domains primarily concerns the achievement of a sustained increase in the capacity for economic growth, human development and improved welfare. Among other things this presupposes cross-generational sustainability of social insurance and public finance systems, the creation of conditions for sustained population growth and the prevention of developmental isolation of certain social groups or regions of the country [18, p. 19]. In the area of spatial development, the principle of sustainability translates into such an organisation of the economy, infrastructure, land settlement and way of living within the capacity limitations of the environment, space and natural resources that the spatial and settlement-related needs of the population are effectively satisfied [18, p. 19].

Monitoring the strategy for sustainable development: The Development report, which is prepared by the Institute of Macroeconomic Analysis and Development, is a document in which the realisation of the Slovenia's Development Strategy is presented once a year. The report is divided into two parts. The first part comprises a concise overview of Slovenia's Development Strategy realisation in the area of five developmental priorities: a competitive economy and faster economic growth, an effective generation, two-way flow and application of the knowledge needed for economic development and quality jobs, an efficient and less costly state, a modern social state with higher employment and Integration of measures to achieve sustainable development. The second part of the report provides a detailed presentation of the progress by the

development indicators of Slovenia. The key development indicators are joined in three areas: well-being, balance and moderation, and intergenerational cooperation. Each field is described through environmental, economic and social aspects.

Link to the EU Strategy for Sustainable Development:

With the accession to the EU, Slovenia faced different development frameworks for the realisation of Slovenian national development. Slovenia had to find a way to realise its national goals in a sustainable way by considering the EU rules, policies and strategies. In accordance thereof, it prepared Slovenia's Development Strategy. The Slovenia's Development Strategy (SDS) is an umbrella strategic document, which determines the developmental vision and priorities of Slovenia's development. The main point of the Slovenia's Development Strategy (SDS) is prosperity of its citizens. Despite this, it needs to be emphasized that the key objective of Slovenia's Development Strategy for 2013 is economic growth and employment rate and four of the five SDS development priorities would contribute to achieving this objective, while the revised EU strategy emphasises the structural economic changes, which are necessary for a more sustainable production and more sustainable consumption patterns. Concerning the content, this strategy brings together the fundamental starting points and principles of sustainable development, it defines the objectives and tasks in seven key areas: climate changes and pure energy, sustainable transport, sustainable consumption, preservation and management of natural resources, public health, social inclusion, demography and migrations, and poverty in the world.

Key sustainable development indicators and the achieved progress

In November 2010, a set of key national sustainable development indicators was published by the Statistical Office of the Republic of Slovenia under an international project with financial support from Eurostat. The selection of the indicators tried to achieve the maximum compatibility with structural indicators developed by the EU to monitor the Lisbon Strategy (see Table 2).

Table 2: Key indicators of sustainable development and their trends

Areas		Indicators	
WELFARE	QUALITY OF NATURAL RESOURCES	Air quality Drinking water quality Organic farming	Negative Negative Positive
	ECONOMIC GROWTH	GDP, Household income	Negative
	SAFETY	Registered unemployment rate Access to social protection Access to education Access to health care Crime	Negative Positive Positive Positive Positive
BALANCE AND MODESTY	NATURAL RESOURCES	Energy consumption, Water consumption from public water supply Municipal and food waste generation Passenger transport	Negative Positive Negative/ positive Negative
	RESEARCH AND DEVELOPMENT	Expenditure on development	POSITIVE
	POPULATION, GENDER EQUALITY AND POVERTY	Total increase of population; Earnings of men and women, At-risk-of-poverty rate	Negative Negative/ Positive
INTERGENERATIONAL COOPERATION	INTENSITY OF USE OF NATURAL RESOURCES	Energy intensity Greenhouse gas emissions Consumption of mineral fertilizers in agriculture Intensity of tree harvesting	Negative Negative Negative Negative
	GOVERNMENT DEBT	Government debt	Negative
	CARE FOR ALL GENERATIONS	The age dependency Childcare Care for the elderly	Negative Positive Positive

Legend: The dark gray colour shows the environmental determinant, the light gray denotes the economic determinant, and the medium gray colour shows the social determinant.

Source: [12]

Welfare

Quality of natural resources: Slovenia is a moderately polluted European state. Obvious issues are the pollution of surface water resources. The first big problem is the pollution of surface water resources. Drinking water in Slovenia is not very good – suffering microbiological pollution with the exception of NE Slovenia, where drinking water is also polluted with pesticides and nitrates due to intensive farming. Consumption of water from the public waterworks is also increasing. The second big problem is air pollution. The biggest sources of pollution are the energy and transport sectors. The cause for the latter is especially (too) slow restructuring of the Slovenian economy and non-sustainable consumer patterns, which

largely contribute to an increased use of the final energy and of personal vehicle transport. The growth of organic and integrated farming practically halted in 2008. In 2008, Slovenian farms included in standards for sustainable (organic and integrated) farming cultivated almost 18% of total UAA, of which one third was cultivated using organic methods and two thirds using integrated methods. The total areas increased in 2008, too; however, growth was modest: in integrated farming by 1.3% and in organic farming, which is one of the most efficient methods of sustainable agricultural use of natural resources, by 1.8%. The share of organically farmed area in the total UAA thus rose from 5.9% to 6.1%. Although the share in Slovenia in 2007 was higher than the EU-15 average, it was much lower than in two neighbouring countries (Slovenia 5.9%, EU-15 4.7%; Italy 9.0%, Austria 11.7%, Hungary 2.5%). The consumption of NPP fertilisers decreased again in 2008; 10.4% less NPP fertilisers were used in agricultural production than in 2007 and 30.8% less than in 2000. Consumption of nitrogen decreased most (by 15.4%), followed by phosphorus with 6.4% and potassium with 3.9%. Measured per hectare of utilised agricultural area (UAA), total consumption of NPP fertilisers amounted to 104.9 kg, which is 9.3% less than in the previous year and the least in the whole analysed period since 1995. According to the latest comparable data for 2007, consumption of NPP fertilisers in Slovenia was higher than the EU-27 and EU-15 averages as well as in higher than the level in the three neighbouring EU Member States (Slovenia 115.6 kg/ha, EU-27 103.9 kg/ha, EU-15 106.1 kg/ha, Italy 95.2 kg/ha, Austria 48.6 kg/ha, Hungary 93.6 kg/ha). In 2008, sales of pesticides increased. The total quantity of active ingredients of pesticides sold in Slovenia, which, however, was not only used in agriculture, decreased after 2004 but then increased by 5.4% in 2008. The environmental burden of livestock production in Slovenia is slightly higher than the EU average, while the average milk yield per animal is lower and decreased further in 2008.

Economic growth: Slovenia's economic growth since 1997 has been dynamic and continuously approaching the OECD average, measured by gross domestic product (GDP) per capita. The high growth was a reflection of a

favourable business environment and important structural reforms, which served as the foundation for the entry to the European Union (EU) in 2004. Economic policies helped maintain the economic growth without creating big imbalances. The global crisis affected Slovenia the most through international exchange, as foreign demand, especially German, experienced a severe drop. The contraction of GDP that started in the final quarter of 2008 accelerated in 2009. Affected by the global crisis, Slovenia's GDP dropped by 0.8% year-on-year in the last quarter of 2008 and by as much as 7.8% in 2009. Competitiveness of the Slovenian economy is diminishing; it declined on the scale of competitiveness in the period from 2008 to 2010 by 14 places, therefore faster convergence with the EU is needed but this is only possible with structural changes. Sustainable development in Slovenia has not been reached yet.

Safety: After independence, Slovenia experienced a shock and a high rate of unemployment. The conditions started improving only at the end of the 1990s, when the rate of unemployment started dropping and all other living standard indicators started showing positive growth as well. Two years ago, the quality of life indicators for Slovenia started dropping very fast due to the global financial and economic crisis. The employment rate dropped in 2009 due to declining economic activity, yet remained above the EU average. In the first three quarters of 2009, it averaged 67.5% (i.e. 1.3 p.p. below the level of 2008). Until 2003, the employment rate had hovered around 63%, which was slightly above the EU average, but in 2004 it recorded a significant jump and even exceeded the average of the old EU Member States (EU-15). It was continually increasing as long as until 2008. In 2009, the number of people in employment decreased in most market activities.

Social-protection expenditure in Slovenia increased somewhat in real terms in 2007, while it fell again as a share of GDP, mainly as a result of rapid GDP growth. Slovenia allocated EUR 7,381 m or 21.4% of GDP to social protection in 2007, which is 1.3 p.p. less than a year before and 4.8 p.p. below the EU average. The 2007 reduction resulted from GDP growing faster than social-protection expenditure, which increased by close to 5% in nominal

terms and by a solid 1% in real terms. In terms of share of GDP, health expenditure in Slovenia in 2007 fell below the EU average; health expenditure per capita also shows that Slovenia lagged behind the advanced European economies. In 2007 (the latest internationally comparable figure), health expenditure as a share of Slovenia's GDP decreased to 7.8% (8.3% in 2006), while it rose again in 2008, to 8.1%, which has been approximately the average level in the EU for several years. Unemployment rose while employment declined, which pushed Slovenia further away from the realisation of the target of reaching a 70% employment rate by 2013. Wage growth in 2009 was lower than in previous years and the number of recipients of various social benefits increased significantly as a result of higher unemployment. Consequently, the level of social disadvantage in Slovenia has been increasing, while the government has at the same time been decreasing the share of public financial expenditure in GDP connected with social development and social security. This is still below the EU average and amounts to 28% of GDP; we intend to allocate 15% of GDP for social security, which is also below the EU average. The social-protection system experienced no systemic changes in 2009, but the situation again confirmed that the pension, health care and long-term care systems were in a pressing need for changes to improve their efficiency and to ensure sustainability of the public finances. If you are unemployed and live in Slovenia, the probability of living under the poverty threshold is almost 40%. This means your monthly income is less than 545 euros. If you live in a household without active working members and have children, the probability of living under the poverty threshold is almost 60%. Over the past three years (2007-2009), the share of the population with a tertiary education ranged between 22% and 23%, thus considerably widening the gap to the EU average. According to the Labour Force Survey (LFS), the share of the population with a tertiary education aged 25-64 totalled 22.5% in the second quarter of 2009, which is 0.6 p.p. more than the year before, yet still lower than in 2007 when it was the highest to date. On this indicator, Slovenia lags behind the majority of economically more developed countries. In 2000-2009, this share rose by 6.7 p.p. but Slovenia nevertheless failed to notably reduce its

gap to the EU average (it lagged by 3.1 p.p. in 2000 and by 2.5 p.p. in 2009). Due to the stagnation between 2007 and 2009, the gap behind the European average grew from 0.5 p.p. in 2007 to 2.5 p.p. in 2009.

Expenditure on educational institutions per student measured in EUR PPS1 in Slovenia exceeds the EU average, and recorded further growth in 2006 (latest available data). Total public expenditure on education as a share of GDP² is relatively high. In 2007 (latest domestic data), it accounted for 5.19% of GDP, while in 2006 (latest international data) Slovenia exceeded the EU average by 0.63 p.p. The ratio of students to teaching staff in Slovenia is improving, yet the gap behind other European countries is still considerable. In 2007 (academic year 2006/2007), for which the latest international data are available, the ratio of students to teaching staff was 21.0 in Slovenia, lagging notably behind the average of the 19 EU countries (that are also members of the OECD) where this ratio was 16.0. In that year, Slovenia lagged significantly behind the economically most developed Northern European countries, such as Sweden, Norway and Iceland, where the ratio is the lowest, and was only better than Greece. The average number of years of schooling of the adult population recorded no increase in 2008 and continues to lag behind the most developed countries.

Balance and modesty

Natural resources: Overuse of natural resources and creation of different forms of load on the environment and space is typical of Slovenia, as the Slovenian market applies the environmental policy only partially. Despite certain positive shifts in terms of decreasing some environmental pressures and the improvement of the quality of some of the ingredients of the environment, the data for Slovenia from the viewpoint of environmental pressure are unfavourable or non-sustainable. In 2008, environmental pressures increased most notably in transport. This was also reflected in a deterioration of the energy intensity of Slovenia's economy in 2008, which is nevertheless much higher than the EU average, despite the improvement in 2006 and 2007. Significant growth in greenhouse-gas emissions, which has also mainly resulted from increased traffic in recent years, continued in 2008. However, energy consumption

per unit of value added in manufacturing continued to decline, most notably in precisely those industries that are most burdensome for the environment. The share of the use of renewable energy sources increased in 2008, and also in 2009 (according to our estimate), after declining for several years. In 2009, pressures on the environment diminished, amid the decline in economic activity, and there was also progress in policies supporting electricity generation from renewable sources and efficient energy use. Waste management also improved slightly, according to the most recent data (for 2008), but a decisive move towards more sustainable development has yet to be made, particularly in the field of municipal waste.

Research and development: After a one-year decline, gross domestic expenditure on R&D expressed as a percentage of GDP increased in 2008. Gross domestic expenditure on R&D (GERD) as a share of GDP rose by 0.21 p.p. over the preceding year to 1.66%, also owing to the higher number of reporting units in the Slovenian business sector in 2008. In real terms, GERD increased by 16.6%, reaching EUR 616.9 m in 2008. Slovenia's gap behind the European average narrowed to 0.24 p.p. in 2008, the lowest value so far. Slovenia thus overtook some of the countries that ranked higher in 2007 (Luxembourg, the Netherlands and the Czech Republic), maintaining its position as the highest-ranking new Member State. In terms of number of patent applications filed at the European Patent Office (EPO), Slovenia is narrowing the otherwise significant gap to the European average. According to available data, Slovenian applicants in 2008 filed 63.7 patent applications per million inhabitants, compared with 131.1 across the EU. Slovenia ranks 14th among the EU countries and exceeds almost all new Member States (with the exception of Malta and Cyprus) and some Southern European countries (Spain, Portugal and Greece). The other new Member States have reduced the gap in this area much more slowly and are far behind the EU average.

Population: Regarding sustained population growth, the period since 2005 has been characterised by a growing number of inhabitants, particularly due to increasing net migration, with the fertility rate also increasing since 2004. Life expectancy continues to rise. After brief stagnation in the early period of transition, life expectancy in Slovenia

has been constantly increasing since 1994. In 2008, life expectancy for men was 75.4 years and for women 82.3 years. Infant mortality in Slovenia has been falling for a number of years. In 2008, the infant mortality rate was 2.8 infants per 1,000 live births, which was the same as a year previously. On this indicator, Slovenia was fourth among EU Member States in 2007, behind Luxembourg, Sweden and Finland.

Poverty and gender inequality: In 2008, the risk of poverty slightly increased in Slovenia, yet it remained low compared with other countries, as did income inequality. The at-risk-of poverty rate was 12.3% in 2008, 0.8 p.p. higher than in 2007 (11.5%). Despite a slight increase, the at-risk-of-poverty rate still shows that inequality in Slovenia is fairly low. Even compared with EU countries, Slovenia maintains a low at-risk-of-poverty rate, since lower figures were recorded in only three countries: the Czech Republic (9%), Slovakia and the Netherlands (11%), whereas Austria, Hungary and Sweden have the same rate as Slovenia. Inequality of income in Slovenia is also low according to some other indicators of inequality of income distribution. In 2008, the Gini coefficient for Slovenia was 23.4%, whereas the quintile-share ratio (quintile coefficient) was 3.4, ranking Slovenia among those countries with the lowest level of income inequality in the EU-27.

Intergenerational cooperation

Intensity of use of natural resources: After several years of strong growth, the output of emission-intensive industries in Slovenia declined by 2.4% in 2008 and by as much as 18.6% in 2009. The total output of emission-intensive industries in Slovenia, i.e. sectors with the highest emission intensity (into air, water, earth) per unit of output, has been growing faster than the output of other manufacturing industries in the whole period since 1999. Energy intensity in Slovenia is relatively high and is improving too slowly relative to other EU countries; in 2008, it even increased somewhat. In 2008, Slovenia consumed 258.5 toe (tonnes of oil equivalent) of primary energy to produce EUR 1 million of GDP (in constant prices and exchange rates of 2000); the EU as a whole consumed 169.4 toe in 2007 (compared with 253.3 toe consumed in Slovenia that year). Slovenia thus spent approximately 50% more energy per

unit of GDP than the EU average. Slovenia's high energy intensity is partly related to a high share of energy-intensive manufacturing industries in its economy as well as the lower general level of its economic development. The share of the use of renewable energy sources (RES) in Slovenia fluctuates depending on hydro-energy use; in 2008, it increased mainly due to favourable hydrological conditions. According to SORS data for 2008, the share of RES accounted for 11.3% of total energy consumption in Slovenia, while in the EU in 2007 this share was 7.8%, according to Eurostat. In Slovenia, the greatest contribution to the use of RES comes from biomass and hydro-energy, while in the EU, growth is dictated by alternative sources. The increase of the share of RES in electricity consumption was, along with favourable hydrological conditions, also impacted by lower economic activity. Forest area also expanded in 2008, but the increase was the lowest in the past decade. Total tree removal increased in 2008; due to significant damage caused by wind, the share of removal for sanitation purposes increased. The intensity of tree felling slightly improved in 2008; however, it still lagged way behind levels targeted in forestry-management plans. In the period 1995-2006, the production of roundwood in Slovenia increased faster than in the EU and in some comparable Member States (in Slovenia by 70%, in the EU-27 by 27%, in the EU-15 by 22%, in Austria by 33%). However, the structure of production of raw-wood categories in Slovenia is not very favourable.

Government debt: General government debt stood at 35.9% of GDP at the end of 2009. In 2009, gross external-debt growth came to a rapid slowdown as private-sector debt contracted. The share of long-term debt increased. Slovenia's gross external debt rose 0.9 bn to EUR 40.1 bn at the end of 2009, a massive slowdown given the increases of EUR 10.7 bn in 2007 and just under EUR 5 bn in 2008, which were underpinned by strong borrowing by domestic commercial banks.

Care for all generations: The age-dependency ratio increased further in Slovenia in 2009. The old-age-dependency ratio rose by a further 0.5 of an index point in 2009, while the total age-dependency ratio increased for the fifth consecutive year.

Conclusion

Membership in the environmentally aware EU brings to Slovenia the need for and commitment to a systematic integration of environmental principles into the economy, and a method organization of daily life. Slovenia has adopted the EU acquis at a formal level, but it goes wrong on specific movements, which are usually painful. Slovenia never adopted its strategy for sustainable development. The field of sustainable development in Slovenia is a part of Slovenia's Development Strategy. Slovenia Development Strategy is based on the assumption that the main developmental lag of Slovenia behind the average of the extended EU is still in the area of economic development. It focuses on economic and social conditions and to a lesser degree on the segments of the environment. Under the sustainable development policies priorities the focus is mostly on the reduction of pressure on the environment. It is a matter of a development model of pollution control, which represents the initial phase of a more environmentally adapted economic and regional development [9, pp. 63-75]. Since the strategic documents are already designed not to include the comprehensive, economically, socially and environmentally balanced concept, the concept of balanced development in Slovenia is also not entirely realised. Since the date of Slovenia's accession to the EU, the European Commission has opened 61 procedures against Slovenia for violations in the areas of waste, air, chemicals and biocides, water, judgment of environmental impacts, nature conservation, climate change and more. Eight procedures for such violations are currently open. Since becoming an EU Member State, Slovenia has been convicted of violating environmental legislation three times. The Court of Justice convicted Slovenia for the first time in March 2009 for having disrespected the Directive on Environmental Responsibility. The Court of Justice in Luxembourg delivered the second judgment on 7 October 2010, for not having adopted in the determined period all the necessary measures as regards the issue of licenses for industrial plants in accordance with the Directive concerning integrated pollution prevention and control. In July 2010, the Ministry for the Environment and Spatial Planning was served through the State Attorney's Office

of the Republic of Slovenia by the Court of Justice of the EU the third lawsuit by the European Commission against Slovenia on account of alleged non-fulfilment of some of Slovenia's obligations from the Council Directive 1999/30/EC, relating to limit values of sulphur dioxide, nitrogen dioxide, particulate matter and lead in ambient air, as the daily values for annual and daily concentrations of PM10 in ambient air had been exceeded in Slovenia several years in a row.

All of the above points to two key challenges for Slovenia if it wants to achieve its sustainability objectives:

1. Slovenia's problem is that it does not have supervisory mechanisms to monitor and implement the environmental protection legislation. The most effective supervisory mechanism in Slovenia is currently the Court of Audit of the Republic of Slovenia. Other institutions are not doing their job, which is proven by EU lawsuits against Slovenia.
2. Slovenia's priorities are clear. It has to change the pattern of expansiveness with a quality model. However, that will not be enough. In order to be closer to the concept of sustainable development it has to change its mentality globally. The key question is how to achieve this. The change required is paradigmatic but the timing is not right.

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