

Sustainable development – content, results, perspective

Trvale udržitelný rozvoj – obsah, výsledky, výhledy

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Abstract: Sustainable development is regarded as the issue and method of solution of a number of global problems, which originated namely in relation to dynamic industrial development and the prominent growth of world population. Sustainable development is, above all, the concept closely related to human attitudes and values. The contribution presents the definition of sustainable development, its modern concept, sustainable development dimensions.

Key words: sustainable development, concept of sustainable development, human, economic, technological and ecological dimension, sustainable development realisation

Abstrakt: Trvale udržitelný rozvoj je považován za východisko a metodu řešení řady globálních problémů, které vznikly především v souvislostech s dynamickým industriálním rozvojem a výrazným růstem světové populace. Trvale udržitelný rozvoj je především koncept s úzkým vztahem k lidským postojům a hodnotám. Stať uvádí definici trvale udržitelného rozvoje, jeho moderní koncepci, dimenze trvale udržitelného rozvoje, výsledky a výhledy.

Klíčová slova: trvale udržitelný rozvoj, koncepce udržitelného rozvoje, dimenze lidská, ekonomická, technologická, ekologická, realizace trvale udržitelného rozvoje

SUSTAINABLE DEVELOPMENT

At the opening of the UNCED in 1992, G.H.Brundtland, former prime minister of Norway, said: “We have to manage the most important global transformation since agricultural and industrial revolution – the transition to sustainable development”. The change the starting of which the so-called Summit of Earth attempted, is really such a basic and at the same time very difficult matter. However, the world public agrees that this is the only way how to overcome the global crisis, which can reach a really formidable scope in the very near future. The comparison with industrial and agricultural revolution is relevant, since also here it regards a very basic transformation. However, the historical transformation “revolutions” had lasted for many decades, centuries and even millennia, while the transition to sustainable development has to be managed by this or at the utmost by the next two generations.

HISTORICAL EXCURSE AND DEFINITION OF THE NOTION – THE HISTORY OF SD

The pioneers in the development of the modern understanding of sustainable development were

Germans and that through the sustainable forestry. New discussions on sustainability issued from the environment protection. The World Protection Union (then called the International Union of Nature Protection), co-operating with the World Nature Fund, published a study on sustainable utilisation of resources at the beginning of the 80ies, the central slogan of which was sustainability. From that, the concept was taken over into the U.N. Committee for Environment and Development (UNCED). The U.N. thus took over the role of the world co-ordinator of the environmental issues. In 1992, it organised the top meeting (then on the ministerial level) in Rio de Janeiro under the title the Summit of Earth. This conference followed ideologically the first meeting in Stockholm in 1972 and become its substantial and almost revolutionary deepening. The central idea of the Rio meeting was the declaration of such a relationship of man towards the environment, which would enable a continual sustainable development without deterioration the quality of environment. The final resume of this meeting was formulated into a several-hundred-pages document called the Agenda 21. It is a strategic plan identifying the key global problems and admonishing the world governments which had signed the Agenda to implement its ideas.

After this world summit, world public agreed on the fact, that in no country could the present way of economy be called sustainable. However, reaching of this goal is the condition for the revival of humankind and thus the way to it becomes the categorical imperative.

Developed countries admitted unanimously, that it is mainly their task to change their un-sustainable way of economy, to offer help to the developing countries and to behave in accordance to their leading position in the world. At the end, neither delegation protested even against the long time discussed item 7 of the Declaration, the second part of which reads "Developed countries admit their responsibility in the international endeavour for sustainable development with regard to the impacts on the world environment effected by their societies and with regard to the technologies and financial resources at their disposal".

Developing countries stress their primary regard for development, they admit, however, that no development should devastate the environment. Even if during the preparation of the UNCED they strongly opposed the endeavours of the developed countries to take into consideration the population policy, the G-77 speaker, the highest representative of Pakistan, proclaimed at the closing of the conference, that the accelerated population growth in developing countries is a problem of high importance which has to be solved without further delay.

The hitherto biggest international activity regarding sustainable development was the Johannesburg Summit on August 26–September 4, 2002, the so-called Summit of Earth II., in which there participated about 60 thousand delegates from the whole world including heads of the states, governments as well as non-governmental organisations. The main goal of the summit was strengthening of the political obligations to the implementation of sustainable development.

THE NOTION OF SUSTAINABLE DEVELOPMENT (SD)

The present classical definition of the SD was brought by the declaration of the UNCED "Our Common Future" in 1987: "Sustainable development satisfies the present needs without limiting the possibilities of future generations to satisfy their needs. Economic development always brings about the risks of environmental damages. However, the leading actors of the political and economic life are obliged to endeavour for close tie of the developing economies with their environmental roots. Environment care is an

inseparable part of sustainable development and has to concentrate more on the reasons of environmental problems than on their signs and consequences".

Of course, there exist many definitions of the SD, for example Pavel Nováček in his book "The strategy of sustainable development" defines it as "an aimed process of changes in the society behaviour towards itself as well as towards its environment (countryside and its resources) leading to increasing of the present as well as future potential of human needs and aspirations satisfaction with regards to the possibilities (limits) of the countryside and its resources".

According to Ivan Rynda, the SD is "the complex of strategies which enable, through utilisation of economic means and technologies, to satisfy human needs (material, cultural as well as spiritual) with full respecting of the environmental limits. To enable it on the global level of the present world, it is necessary to re-define, on the local, regional and global level, their socio-political institutions and processes".

Sustainable development, as a new paradigm, is a set of the abstract principles and patterns which can function only in the concrete spatial and time harmony with the local natural, historical, social and other conditions. It is not defined, whether the higher importance is put on value attitudes, economic tools, and economic co-operation of environment-friendly technologies. In the complex of SD, all spheres of life are important, while the decisive criterion is sustaining nature with the simultaneous developing of the human life quality.

SD is the supra-cultural concept as well as strategy and also its principles and paradigms are of the same nature. For example, basic is the preliminary carefulness principle defined also in the Principle 15 of the Rio Declaration: "Where there exists a danger of a serious or irreparable damage, the lack of scientific certainty must not be misused for postponing the relevant measures which could prevent environmental damages". Among other principles, there are the principle of irreversible change, analysis of costs and benefits, product life-cycle analysis, system of sustainability indicators and other.

The combination of both parts of the term, that is sustainability and development, is very important, since one loses its meaning without the other. We must not forget, then, that the SD idea is the answer for the basic contradiction, which seemed to be unconquerable, that is the contradiction between economic development of a certain type and environment protection (Moldan 2001: 79).

If talking only about sustaining the dignified and valuable life and omitting thus economic and civi-

lisation development, it is more appropriate to use the term sustainable life. Sustainable life is only the responsible life, not the wasteful one, and the regardful life, not the egoistic one.

Sustainability includes the long-term and global perspective and represents the integration of four basic components – aims, which have to be reached: social progress, effective environment protection, regardful utilisation of natural resources and sustaining the high and stable level of economic growth. All these goals have to be reached simultaneously.

THE PRINCIPLES AND PILLARS OF SD

The successful transition to the sustainable development path asks for the shift of social goals. These goals should be based on the following eight principles:

- Enlivening of economic growth
- Change of the growth quality
- Sustaining and enrichment of natural resources
- Sustainable population level
- New orientation of technology and removal of risks
- Integration of economic aspects with environmental aspects in decision-making
- Reform of international economic relationships
- Strengthening of international co-operation

In the book “Beyond the Limits to Growth” (Meadows, Randers 1995: 232), the authors state several main features which the world system restructuring towards sustainability should fulfil, while each of them can be elaborated into hundreds of concrete ways on all levels, from household through communities and nations up to the world as a whole. Any step in any of these directions is a step towards sustainability:

Improved signals – information level of government as well as the public on the same level on the state of environment as an economic situation. The real environment protection costs should be included into economic prices.

- Accelerated reply – to decide in advance, what is to be done in the case of problems and to have available the institutional and technological measures necessary for the efficient action
- Minimal utilisation of non-renewable resources
- Prevention of the renewable resources erosion
 - such resources should be utilised only in such intensity in which they can be regenerated

- Maximum efficiency of all resources utilisation
- Slowing down and eventually stopping the exponential population and physical capital growth – which includes institutional and philosophical changes and social innovations (Moldan 2001: 79).

The gradual crystallisation of the sustainable development concept results in the present agreement in the idea, that sustainability is based on three pillars. In other words, sustainable development has three dimensions or it has to fulfil three criteria: environmental, economic, social. The pillars are mutually influencing each other; there are many relationships among them. Sustainability means, above all, the harmony of development in all three dimensions, balance among them as well as in the frame of the individual dimensions¹.

Humankind, which is as a species only a short episode in the long history of the Earth biosphere, has managed to destroy the biosphere considerably during the several last decades. Therefore, the beginning of the 21. century is marked by the hitherto unseen growth of conflicts among human economic activities and environment. If the natural nations and ancient civilisations had not brought about the global environmental crisis, it was not because of their wisdom and responsibility, but because of the insufficient strength and the simple fact that they were not global civilisations. In the history of humankind, several civilisations destroyed themselves in consequence of their irresponsible utilisation of environment; the present time is different only in the fact, that environmental problems have spread all over the Earth.

At present, environmental economists are trying to spread about the principle, according to which the nature and its systems are understood as multi-functional assets (natural capital) in the sense that they supply a wide spectre of economically valuable functions and services to humankind (some of which are substitutional, other complementary).

Economic functions of nature – as the stock of natural resources and the ability to assimilate the refuse of human activities – are getting still more into conflict with the environmental functions – the multitude of natural countryside assets and beauties and the system of life support in the Earth. The vital function of nature is still more damaged and limited by people and namely their economic activities in such a measure, at which sustaining of life at this planet becomes to be endangered.

¹ In some resources, there are mentioned four mutually functioning dimensions instead of three pillars: economic, human, technological and environmental.

Conclusion

Sustainability cannot be reached without people in the whole world accepting the basic importance of sustaining natural resources and the vital systems of the planet including bio-diversity. Among the important values they accept and according to which they really behave, there must be included the quality of environment in which themselves, other people as well as other living organisms live. However, people accept this new dimension only very slowly and not very willingly, since its prerequisite is the outlined change of values. The prerequisite of such a change is the complex change of human personality, the dignified and in all dimensions secured human life (Moldan 1996: 42).

The economic pillar – natural capital

Besides the so-called natural resources, which exist on the Earth surface or beneath it (soil, waters, forests, mineral resources, area), nature contains also numerous resources which serve as the environment and source of life preservation. There belongs atmosphere, oceans, sunshine, genetic diversity of plant and animal species and all relationships among them, but also the original natural parts of the areas. These resources which in most cases are hitherto left outside the frame of the economic system and are most often utilised as the free resources, can be called environmental resources.

The exponentially growing world population utilises hitherto the natural sphere of the world (natural capital), from the viewpoint of its vital functions, as free goods with zero value. People have inherited the natural capital stocks (the favourable conditions of life), which had been created for approximately 3.8 billion years; however, during the last 100 years they managed to destroy a great part of it by their economic activities and pursuing their economic welfare. Thus, economic evaluation of the natural capital stocks and flows, however approximate, is the first step towards including the eco-system services into planning, politics and public behaviour. It is the first prerequisite of the future generations' survival (Životné prostredie 2000).

As already mentioned in the previous, economic and environmental functions of nature are getting still more into conflict. The macro-aggregates of the economic activities results, as for example GDP or GNP, include only prices of the utilised natural raw materials, they do not include, however, the decreasing stocks of the natural and environmental resources as a consequence of human activities.

In this free, without charge way, nature was utilised namely in the former centrally planned economies of the Central and Eastern Europe. Also the traditional neo-classical economics of the main stream in market economies evaluates only economic functions of nature, but greatly omits the environmental functions. At present, both the specialists and the public in many countries of the world agree, that the system of expressing the results of national economies through the conventional National Accounts of the U.N. Statistical Office does not express appropriately the depletion of natural resources and environmental damages (environment pollution).

Conclusion

The economists will probably gradually leave the approach of evaluating economic development only according to the traditional indicators, some of which will probably lose importance or will be complemented by other indicators. Namely GDP is criticised, as its positive development can be caused also by the environmentally strongly negative events and the consequent need of their alleviation, as for example the well-known Exxon Valdez catastrophe. Another example can be also productivity of labour: it may be revealed, that there is more important a certain material, spatial or energetic productivity, rather than the productivity of human labour.

The issuing of theoretical ideas in the frame of the economic pillar leads to a series of practical recommendations for economic policy, such as evaluation of the negative external costs caused by pollution and other devastating human activities, further also recommendations to governments to stop subsidizing of the environmentally negative activities.

Social dimension – the development of human personality as well as the whole social sphere

The social dimension regards both the people as individuals and the human society. Human development means removing poverty, improvement of health, longer average age, less diseases, education, proper living conditions, and security. Social development regards above all the institutions of democracy, ensuring human rights and freedoms and the just social system.

The quality of life, development of human personality belongs among the basic goals of SD. The U.N. program for development (UNDP) mentions sustainable human development. Its part is human health, which is undoubtedly a basic condition of dignified human life. Another important component

is education. Important is also material security: if people are not enough satisfied in the material way, they suffer from poverty. Its removing is obviously the really basic goal of human development. This goal is included in a number of documents, which unanimously state that SD is in no case thinkable without removing poverty.

Every year, the UNDP publishes a statistical publication called Human Development Report. Since 1990, it incorporates an aggregate indicator called Human Development Index (HDI), which is the complex of the following factors: human health, education level and material level of living².

For human life, namely the average life span is decisive. Also the birth and baby mortality are taken into consideration. The education level is ascertained as the rate of literate people or children attending different types of schools. Material level of living is given by the per capita GDP in purchasing power parity.

An often discussed and controversial question is the question of social justice both in the frame of one state and among the states. Even if with regard to SD the attention is namely paid to the questions of just approach to resources, finances, the level of consumption etc. for individual states, the differences among people in the frame of individual states are in reality much deeper. Even in the most developed countries, a certain part of the population lives under the poverty level. However, the differences between the rich and the poor are generally bigger in developing countries than in the developed ones. There exists a deep inequality between the North and South. Outside this being ethically unacceptable, the present situation is the source of serious conflicts. Politically still more sensitive is the question of freedom and human rights.

Conclusion

For SD, the social progress and development of social institutions are important. A further progress is basically equal to building of democratic structures and institutions and social coherence. In legal documents, this is called participation of public in the social decision making process.

It does not regard only fulfilment of basic human needs, but also the spiritual needs with full respect to the cultural and civilisation specifics and needs. A really higher quality of life which is not based only on consumption leading to alienation, but on the

own full approach to the world, is enabled namely by the paradigm of self-realised modesty which can with regard give up all unnecessary. Education to the sustainable knowledge, abilities and attitudes is obviously the most important point and its quality is sine qua non in the SD concept.

TRANSITIONALISTS AND TRANSFORMATIONALISTS

There exist several explanations of sustainable development and several different approaches to its implementation. According to the most basic division, it is possible to divide the SD concept representatives into two big groups. One of them can be called transitionalists, the other transformationalists. The difference between both groups lays in the understanding of the goals of development and in the relative stress put on economic growth and social welfare as the primary aims of the sustainability activities.

Transitionalists

Transitionalism represents the dominant approach applied by the most powerful actors of global economy. It includes the governments of most (if not all) developed countries, trans-national societies, international institutions like the World Bank and the International Monetary Fund and other development banks.

The main endeavour of this group is to find the ways of sustainable development through economic growth. The representatives of this explanation of sustainability are basically persuaded that economy can grow without any limits. They argue for their opinion by the explanation, that the ongoing economic growth will supply all resources necessary for solving the existing environmental and social problems. An integral part of their strategy is the reform of the theory and practice of economic policy, which would issue from the system of National Accounting underlining the environmental and social variables.

Further aspects of the reformist policy include creating of the political system which would be compatible with the new economic approaches. Thus, a special stress is put on the development of institutions which would be able to realise the reform. Because the transition to sustainable development asks for the integration of economic, social and environmental goals, political

² To evaluate whether the processes develop in the positive way, rate and according to the SD concept needs developing of the relevant indicators. The U.N. Committee published the list of 130 indicators in 1995 which are structured according to the OECD frame: pressure-state-answer.

subjects in countries where such integration is not possible have to be able of making agreement among themselves. A very widely formulated social goal of the political reform is extension of public participation in decision making, so that it is ensured that the aspirations and interests of the whole civil society are taken into consideration to the widest scope possible. The further goal is the necessity of integrating the inter-generation justice as an ethical and moral principle into planning and all activities implementing the sustainable development relationships.

The driving force of the call for the activities and measures leading to sustainable development is that the present social and environmental problems endanger the international political order. It issues from the prerequisite that if the mentioned problems were not solved, they would impact national security of individual states (i.e. food deficit, lack of drinking water etc.)

Another motivation is that implementing the sustainability relationships answers the interest of developing countries to solve the problems of poverty. The goal is to improve the level of living of the inhabitants of these countries by approaching the standards of developed countries.

By the series of international negotiations, there should be set the priorities and the frame for the necessary measures and activities. For all interest areas connected to SD, international agreements should be signed and the endeavour of international organisations should be aimed at the aid with their fulfilment. National governments will develop and implement their own strategies of SD, which will be set based on the consultations with independent advisor of combined structure (economists, ecologists, social problem specialists). These will supply their services with regard to the concluded international agreements (Mezřický 1996: 156).

Transformationalists

The transformationalist approach differs basically from the previous one both regarding the premises and the attitudes of its representatives. The representatives of transformationalist approach are different non-governmental organisations (NGOs) and regional initiatives and organisations of the civil society both from the developed and developing countries. Certain governments, institutions and administration of lower regional units also support certain elements of the transformationalist solutions.

The impulse for the increased activity of NGOs was given by the success and experience learned

through the proceedings of the U.N. Conference on Environment and Development in Rio de Janeiro in 1992. Immediately after its concluding, a whole series of sustainable development projects aimed at the local and communal level were initiated by them. Just these projects are characteristic for the transformationalist approach, since their aim is to create sustainable communities. The content of the projects issues from the realisation, that even if the developed and developing countries have to cope with the same environmental problems, the social processes evoking them are fundamentally different.

Transformationalists refuse the dominating paradigm of development and its simplifying stress on economic growth. They are persuaded that it has to be replaced by a new and pluralistic paradigm of development.

“One of the greatest dangers of the present world is, that the same ideas on environment and the development goals which caused that developed countries are consuming an non-proportional share of world natural resources which made them the slaves of economic activities which probably are not sustainable, are transformed as the goals and patterns for copying into the developing countries” (Rhodes et al. 1997: 84–92).

According to transformationalists, it issues from this that the goals of sustainable development cannot be reached by adaptation to the standard development models. The sustainability concept has to be understood rather as an alternative to the prevailing attitudes than as their modification.

Also transformationalists state, that a new system of political and economic management has to be created. However, the strategy of this system creation lays in the renovation of the traditional social structures and systems, namely in the developing countries, the structures which were disturbed by the powers of modernisation and implementing of the western forms of economic development and environmental management.

The transformationalists underline, that the sustainable development activities have to be started immediately, since they are persuaded that the life of the endangered communities is on stake. The economic goal has to be ensuring of the basic human needs by the sustainability of the base represented by local resources. These two goals should be implemented into realisation of the social goal which is ensuring of the generation and inter-generation justice, increased importance of communities and strengthening of their function. These goals issue from transformationalists attitude to the problem of critical non-sustainability.

Transformationalists are persuaded that the traditional structure and management system were replaced by the impact of international economic process. It led to the local communities having lost the control over their local resources and decision-making process. The shift of power from the decentralised communities to the centralised national and supra-national subjects led to the origin of non-sustainable conditions of life of the rural population in developing countries. Moreover, consolidation of global economy undermined state control over the national economies. Decision making, which influences local communities, went over to the hands of few people and organisations which are not representative from the community viewpoint, do not feel any social obligations towards them and usually have no long-term interest in their welfare.

Similarly as transitionalists, also transformationalists underline the need of civic participation. The scope and reasons of the reasons of this participation are different, however. Transformationalists are persuaded that participation is not only vitally important at the fulfilling of their sustainable development strategy, but also in recognizing, finding and formulating of these strategies. Therefore, compared to transitionalists, their idea of participation is highly pluralistic. The transformationalist localisation of activities is characterised by the stress put on local and regional initiatives.

Conclusion

Even if the two concepts of SD are rather differing from each other, it is valid for both of them that no strategy can ignore the continuity and historical development which represent the base of the problem of critical non-sustainability. That obviously will determine the future frame of the concept which will have necessarily to define more precisely its base common to all countries. At the same time, it has to be presupposed that each country or region will define the sustainable development criteria in dependence to its own culture patterns and its own disposable resources.

Notwithstanding the existing differences in interpreting the concept of sustainable development, there exist certain basic and frame principles by which the states and societies could and should be directed at forming and realisation of their environmental policies. These are contained in the already mentioned document Agenda 21 passed by the participants of the II. U.N. Conference on Environment and Development in Rio de Janeiro in 1992. However, this document corresponds rather to the ideas of transitionalists than to the approaches and concepts of transformationalists.

THE PRESENT DEVELOPMENT, GLOBAL TRENDS AND FUTURE DEVELOPMENT

The present development is not of sustainable character. The volume of world economy, measured by the sum of all countries GDP, grows continually, even if more slowly than before during the last two decades. Economic growth enables extended satisfying of material needs and the overall growth of welfare. As has been already outlined, the present development is of non-proportional character. The analysis of long-term trends in the division of incomes shows, that the difference between the richest and poorest country was 3 : 1 in 1820, 34 : 1 in 1950 and 74 : 1 at present. The average growth of the most developed countries was about 2.5% p.a.; the growth of the poorest stagnates approximately on the same level for the whole period of 180 years.

It shows that less rich countries have less means for development and thus are not able to compete with the rich ones in technological innovations.

If people are to live in economic prosperity and healthy environment, then already the present generations have to cope with the trends which might still worsen the mentioned problems. According to B. Moldan, the main trends of the present world are:

Economic growth – the consumption patterns are changing, people eat and are housed better, utilise a higher share of their means for mobility, comfort, entertainment.

Changes in social sphere – the level of human development, education, health growth, people live longer. However, important problems are the growing world unemployment and deepening inequality in incomes and the social position of the individual strata of society, and that also among individual countries.

Globalisation – a still strengthening process multiplied namely by liberalisation and the exceptionally quick growth and explosive development of all kinds of communication.

Demographic development – population growth is slowing down considerably on the world level, but in connection with the quickly growing average life span it evokes fears of the population ageing.

Technological development – an accelerated development of science and technology brings about the change of production patterns and natural resources utilisation.

The growing stress on natural eco-systems – the vital planet systems are showing negative trends in consequence of the still higher burdening of environment by the economic activities (Moldan 2001: 79).

Economic growth

For economic growth, it is necessary to ascertain not only suitable conditions, but also suitable resources. Monetary policy is important but not limiting for economic growth. For that, resources are important. What, then, is the main resource leading up the economic growth? On the examples of countries like the Saudi Arabia, it can be shown, that is neither raw materials nor capital. These countries have them to their disposal; still they do not belong among the richest countries. Neither is this resource the simultaneous utilisation of democracy, since we would hardly find it for example in China – the country with the highest growth during the last years. This resource is education. Education and educated population are that what is not lacking in the economically developed countries but what is, on the other hand, costly for the poorest countries. In the South-West Asia, education is highly evaluated and these countries reach a considerable growth even after the Asian crisis.

U.S. economist Lester C. Thurow said lately: "I would say that the time has come when the division of world into the rich and poor is already overcome. People are still more divided into educated and non-educated. Those with competencies on the world level can earn big money every time and everywhere. The worker in a car factory will have to reconcile to the fact that his incomes will gradually get to the level of the workers in Indonesia or Malaysia".

Changes in the social sphere

As has been mentioned already, the differences between the rich and poor are deepening, and that not only among states, but also inside individual states. This is a very considerable problem. This social inequality does not constitute anything positive for the future. If all cannot take advantage from the growing product, it always creates a social tension, notwithstanding the fact that the children of poorer parents have worse chances for the future and the society thus deprives itself of the potential of these young people. Therefore, it is necessary to offer education to the widest number of people possible. Education for all is one of the U.N. slogans and it is the remedy towards unemployment.

Globalisation

Globalisation is the process of society integration on the world level which newly roofs the present national, regional and local systems. The globalisation process has two driving forces: technology and the persisting wave of deregulation, privatisation, growth policies

based on export which followed the breakdown of the Brettonwood system of firm exchange rates at the beginning of 70ies (Henderson 2001). The main element of the present integration is globalisation of economic activities which interlinks the production and markets of different countries through the trade with products and services, flow of capital and information and the mutually interlinked net of ownership and management of supra-national companies. Other forms of integration are still lagging behind. The character of the present phase of global integration of society is given by the temporary non-equilibrium between the global dimension of the ongoing economic integration and the limited scope of the supra-national political integration and regulation frames of the society development (Jeníček 2002).

Among the most important social consequences of globalisation, there belongs the multiplication of the non-balanced social and economic development which issues from the fact that the firms, individuals and through them also the localities, towns and states have a different power and ability to incorporate actively into globalisation. The most important social impact of globalisation is the influence of supra-national companies and world financial markets and on the changing share of power between the public and private sector. Globalisation multiplies the non-balanced spatial development. Almost all places on the Earth are at present influenced by globalisation in a certain way, but most of them are mere recipients of the globalisation processes. The majority of the active actors of globalisation are located in the big cities of developed countries (Sýkora 2000: 62).

Technological development

A mere increase of the technological processes efficiency will not be sufficient. Important is to think over the own production process. Of late, there is therefore often discussed the need to change the patterns of consumption in the developed countries. These proposals lead to the decrease of natural resources and the total burden of the environment through modern technologies for which lower inputs will suffice, as well as a lower amount of different refuse.

Growing stress on natural eco-systems

The growing human population uses for satisfying its needs still higher amount of material and energies. In the rich countries of the North, where the human population is already stabilised, where the increase is minimal or even negative, the consumption of goods and energy is still growing. The change of patterns

presupposes the change of the value orientation and is therefore a long-term question.

In some resources, this is enlisted as one of the elements and prerequisites of SD. The eco-system approach works from “inside”, it searches, evaluates and quantifies the frame and function of eco-systems from the first level satisfying of human needs up to the ensuring the global functioning of nature. SD, on the other hand, works from “outside” and asks after the entitlement of these claims and after the limits with which man is confronted in satisfying his needs and claims. The eco-system approach means an integrated approach in the ecosystems utilisation. It issues from the prerequisite that eco-systems work as a whole and cannot be managed only from the one-sided utilisation viewpoint. At present, we use and manage eco-systems with regard to the one or a few goods or services most needful for man – fishery, timber, water energy – without the knowledge of the fact which other goods and services we are losing.

We try to maximise utilisation of one given asset without regard to this influencing the further functioning of the eco-system, further goods or services, which we neither do nor regard as the priority from our present human viewpoint.

RESULTS

Fulfilment of the negotiations accepted at the Summit of Earth in Brazil in 1992, as evaluated by the following Summit of Earth in South Africa in 2002:

Poverty and international aid

Obligation: To spend more money on development aid. Rich countries donate in average 0.7% of GDP.

Reality: In 2000, rich countries donated in average only 0.22% of GDP

Result: 1.1 bill. people live in extreme poverty, 850 million suffer from hunger.

Diseases

Obligation: To limit considerably deaths by contagious diseases, for example up to 90% at measles.

Reality: A certain progress was reached, but only 26% less people died by measles in 2000 compared to 1990. On the contrary, the number of deaths by malaria increased. Regarding AIDS, the increase was by the unbelievable 600%.

Climate changes

Obligation: By 2000, the glass-house gasses emission should have been decreased to the 1990 level (the Rio obligation); the Kyoto protocol was still more strict in obligations.

Reality: In the years 1990–2000, the carbon dioxide emissions grew by 9.1% per year. The only bright exceptions are Great Britain, Germany and – unwillingly – also Russia (drop of production). The worst examples: Australia, Canada, U.S., Spain.

Biodiversity

Obligation: The agreements on biodiversity which should protect living organisms were signed by 182 states in Rio.

Reality: Only 120 states elaborated the connected strategies and plans. The number of those who really fulfil them is still lower.

Result: There exist a number of successful projects, still one third of species are endangered, at least 11 000 species are acutely dying out.

Water

Obligation: Clean drinking water should be available for all.

Reality: 1.1 bill. people have no approach to clean water, 30 000 people die daily by diseases of polluted water.

Deserts

Obligation: The agreement on the fight against the extension of deserts is valid since 1996.

Reality: There is not enough money for its realisation.

Fishery

The Rio obligations were not ratified by 15 from the 20 biggest fishing countries. One third of industrially caught fish is endangered by extinction.

Future development

The concept of sustainable development can be implemented, if it is accepted by the big enough part of the society. Pushing through of this concept presupposes educated people; therefore the future outlook is mildly optimistic. The reasons for optimism:

- Healthy environment, nature protection, reasonable utilisation of natural resources are gradually becoming an important part of the set of human values, as testified by sociological researches.
- The knowledge of the vital planetary systems endangering brought about new approaches on the enterprise, national and international level. They are reflected in the widely implemented rules of behaviour, legal frame, and efficient international agreements.
- There considerably grows the feeling of responsibility for the environmental impacts of any human activities on the level of individuals, enterprises,

governments. The wide public demands this responsibility and the quick development of information technologies considerably supports and accelerates this trend.

- Ecological efficiency of technologies is growing in all sectors and industries. The final goal, the absolute decrease of the burden even with growing performance, is generally accepted and in some cases it was already reached.

One of the ways how to change economy and get it into harmony with environment is the fiscal system reform, so that prices include the costs of the damage alleviation. The satiable future centre of gravity lays, simply said, in free enterprising using new technologies, in the combination of the renewable resources potential, hydrogen utilisation, afforestation and material recycling.

The overview of the obligations and initiatives of the Johannesburg Summit on Sustainable development (WSSD) 2002

The listed obligations are part of the implementation plan accepted by the governments.

Water and hygiene

- By 2015, to lower the number of people without access to hygienic facilities by half, the same as the number of people without access to clean drinking water.
- The U.S. announced investments into projects connected with water and hygiene at the amount of 970 mill. USD during the next 3 years.
- The EU announced starting of the initiative “Water for Life” the aim of which is fulfilment of the goals regarding water and hygiene in Africa and Central Asia.
- The Asia development Bank supplied a grant of 5 mill. USD to the U.N. affiliated organisation Habitat and 500 mill. USD for the project of so-called quick loans in the frame of the program Water for the Asian Towns.
- The U.N. registered 21 further initiatives in the area of water and hygiene of the total value of 20 mill. USD.

Energy

- To extend approach to the modern energy services, to increase energetic efficiency and to extend the renewable energy resources utilisation.
- Gradually decrease subsidies for energy.
- To support the NEPAF (New Partnership for Africa Development) goals, which presuppose to ascertain approach to energy for the minimum of 35% Africa population in 20 years
- 9 biggest electricity producers from the G7 signed a series of agreements with the U.N. regarding

co-operation in the renewable energy utilisation projects in developing countries.

- The EU announced a partnership energetic initiative of the value of 700 mill. USD and the U.S. announced that they would invest 43 mill. USD in 2003 on the same goal.
- The South Africa energetic company Eskom announced creating a partnership with the goal to secure modern energy services in the neighbouring countries.
- The U.N. received 32 announcements on partnership initiatives in the area of energy, the resources of which reach 26 mill. USD.

Health

- By 2020, the chemicals will be produced and utilised in the way not damaging human health or environment.
- Strengthening of co-operation on decreasing air pollution.
- By 2010, improvement of the approach of developing countries to the ecologically acceptable alternatives of the materials causing ozone layer hole.
- The U.S. announced that they would spend 2.3 bill. USD for the global health matters in 2003.
- The U.N. received 16 registrations of partnerships for projects in the sphere of health amounting to 3 mill. USD.

Agriculture

- The Global Environmental facility will regard implementing the Agreement for Fighting Deserts as a key area in need of financing.
- By 2005, the strategy for securing food for Africa will be prepared.
- The U.S. will invest 90 mill. USD into sustainable agriculture in 2003.
- The U.N. registered 17 partnership initiatives with the resources of 2 mill. USD.

Biodiversity and eco-systems management

- Up to 2010, to limit the plant and animal species extinction.
- To stop the present trend of natural resources depletion.
- Up to 2015, to renew the numbers of fish to a maximum sustainable level.
- By 2010, to create a representative net of protected sea areas.
- By 2010, improvement of the approach of developing countries to the ecologically acceptable alternatives of the chemical materials causing ozone layer hole.
- The U.N. received 32 registrations of partnerships with resources of 100 mill. USD

- The U.S. announced investments of 53 mill. USD for forest protection for the period 2002–2005.

General obligations and initiatives

- Accepting of the fact that approach to the markets is the key factor of development for many countries.
- Support to the gradual abolishment of all kinds of export subsidies.
- Setting of a 10-year strategic program for forming sustainable production and consumption.
- Active responsibility of private enterprises.
- Development and strengthening of the activities of natural catastrophes prevention and the ability of reacting to them.

CONCLUSIONS

The common feeling of the necessity to solve global problems is not carried out very much, however, and the world progress towards sustainable development was slow. The negative non-sustainable trends of the world development continue and in some cases even deepen (Jeníček 2003). Notwithstanding the fact, that in many cases humankind has got the necessary knowledge and technologies to its disposal, the financial means as well as the political will are often insufficient to stop the further worsening of the global problems and to aim the necessary means just to those questions of environment and development, which have to be solved without further delay. Understanding of global problems as the long-term, cumulative and mutually interconnected problems

which bring about the serious global and security implications is obviously still limited. The real policy of most industrial as well as developing countries is further oriented on the classical economic growth, therefore, the demands sustainable development has not yet started on the global level.

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