REVIEW

SOCIAL SUSTAINABLE DEVELOPMENT AND ECONOMIC TRANSFORMATION

Abdoullah Bazyar
Faculty of Politics and
International Relations, Islamic Azad University, Iran.
International Supporting Association for War
Victims (ISAWV), Im Flachsgarten 15, 50226 Frechen, Germany.
Corresponding author: abdoullahbazyar@yahoo.de

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Abstract: Sustainable development is "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This definition recognizes the use of natural resources to the extent permitted and the equal right of each generation to have access to the natural capital.

Sustainable development, adopted worldwide, is a new important approach in management and public policy-making. This notion, with its various aspects, takes the future consequences of our current actions into account.

Social sustainable development can be defined as the process of radical transformation in social structures and relationships driven by such goals as social integration, social cohesion, quality of life, social equality, and accountability of authorities and public agencies. Hence, achieving a comprehensive development, capable of fostering national solidarity, is impossible without considering social dimensions to which authorities has to pay special attention.

Studies and International experience affirm that comprehensive sustainable development has to be based on human resources potentials and no development venture succeeds unless it invests in human development as its core element. The most recent data published by United Nations Development Plan (UNDP) illustrates the human resource contribution to the wealth of world countries- for example, Japan (80%), Germany (78%), Spain (78%), turkey (72%). Therefore, to attain sustainable development, 'human' should be at the center of development and the largest portion of investment has to be channeled towards human resources; this is exactly what is carried out by some less-developed countries like South Korea, China and Malaysia in order to achieve sustainable development. `

Theories and concepts of economic development in past centuries could not meet human needs and they were limited to the studies on environmental protection. This paved the way for new approaches to emerge and helped defining the nature of theories and their potential roles in solving problems related to critical human and citizenship survival.

Sustainability is a condition under which the current utility and existing facilities do not decline over time and ecosystems continue their functions into indefinite future. It is a condition under which social and natural systems work subtly together. However, this notion is still used by some international organizations, such as World Bank, to depict the vision of growth.

Redirecting the society and economy towards sustainability is a mission which cannot be accomplished by any social subgroup; it needs a larger society which lends itself to management. Cooperation of all major groups of society is one of the main innovations of an institution which is equipped with sustainability.

The principles of management in social sustainable development management are practical through focusing on the factors below: (a) intersectional perspective (b) social cooperation (c)

foresightedness (d) efficient exploitation of natural resources (e) evaluation of the effects of local, regional, and global activities (f) planning (g) holistic reasoning

With regard to the process of decision-making for sustainable development, considerable attention should be given to gathering the strategies sustainable societies make use of. Successful implementation of the strategies of sustainable societies in the intended society results in: (1) the development of other sustainable societies (2) the development of sustainable regions as a result of the establishment of the very sustainable societies (3) the development of a sustainable global society due to the formation of the very sustainable regions

Keywords: *development, economic, management, social, sustainable,*

Introduction

Development supporting such values as freedom, justice, social dynamism, human development and economic, social and cultural growth, can be viewed as the evolution of life and the realization of an ideal condition in the spheres of economy, society and culture. Development is also deemed as a mechanism to produce an evolutionary movement that creates a balance among social, economic and cultural phenomena and it shapes a new condition under which social and economic dynamism as well as justice is flourished. Development is distinct from progress in that, unlike progress, it does not attempt new directions, rather it is an adaptation to things that already exist and it suggests the continuous transformation called identity. Therefore, development essentially aims to benefit humankind by means of improving the quality of life shown through indices such as income, employment and public welfare (Griffin and McCleny). Hence, the concepts of human development and sustainable development are implicitly related and they should be compatible and not pursued per se. To this end, it is important to draw upon social capital and public participation. Thus, social welfare is a prerequisite for development to be promoted by governmental agencies and social institutions so as to achieve sustainable development in its entirety-economic, social, political and civil dimensions. Though development is endogenous in nature, it can be enriched by external help; however, a development which is exogenous is no development at all. But, this claim that development can be completely self-reliant is illusory since any transformation needs stimulus, an external force which stirs hidden forces into motion and brings about modernism and renewal as the underlying components of any sort of progress (Mark Henry). Philosophically, level of development is measured in relation to the quality of human capital identity. Attempting to rebuild such notions as social identity, human capital identity is dependent on threatened psychological, social and cultural values which need development to turn these threats into opportunities. Qualitative dimension of development, as the primary objective of development structure, may be achieved via social security which is necessary to accomplish social welfare. Thus, social welfare includes the following indices: economic condition, family condition, health and nutrition, public education, health and human development and population, hygiene, education, employment, housing and leisure. The sustainability concept calls for the right balance between current pressing needs and tomorrow's requirements, and between private motives and public actions (Jean Pranks). "Sustainability models", which emphasize intra-national and global solidarity within the framework of new world ethics, require fundamental changes in human investment and the utilization of clean and eco-friendly technology as well as the mobilization of human resources. International solidarity

Is crucial for the global economic system to allow for the flow of 500 billion dollars denied from poor nations? This is because developing countries, in terms of opportunities, face inequalities and limitations and, therefore, they cannot take advantage of human capital and human experience while developed countries, in lieu of those 500 billion dollars, pay only 35 percent of their GDP. Sustainable development is also seen as a concept which focuses on constant fulfillment of needs, satisfaction of individuals and improvement of quality of life (Elliot). Sustainable development supports an economic growth that ensures welfare and opportunities for the people all over the world since it doesn't seem just that few number of people ruin the world's natural resources for their own personal benefits (Jean prank). Accordingly, the economy of sustainable development not only values tangible capital resources, including man-made production equipment used in industry, agriculture and service sectors, but also pays particular attention to social capital resources, such as knowledge, experience, vigor and innovation and, as a result, making social capital formation the focal point in the sustainable development strategy. Sustainable development as an approach that should be applicable anywhere and anytime links economic growth and environmental enhancement without failing to notice cultural and historical dimension (Versley, 1998, p 259). Therefore, sustainable development directs pubic policies to include both environmental considerations and economic growth

(Ekin and Jacobsen, 1998, p26). To attain welfare, social contentment and better community life, sustainable development models have to be based on four fundamental principles: (a) People should be the center of attention. (b) Eco-friendly technologies should be utilized. (c) Right social values should be reflected in all decision-making processes. (d) public participation and community involvement are essential (Jean Prank)

The Concept of Sustainable Development

The concept of sustainable development is an attempt to integrate environmental issues with socio-economic ones. This concept indicates an important shift in understanding the relationship between human and nature and between humans themselves. This is in conflict with our approach in the past two centuries that assumed environmental, social and economic spheres isolated. In past two centuries, environment had always been regarded as an external to humankind and, hence, for the sake of human use and exploitation local issues were seen as basically local. In this approach, the dominance of human over nature shaped the core of human-nature relationship and it is believed that science and technology enables humankind to overcome all environmental and natural obstacles. This approach is associated with capitalism, industrial revolution and modern science. As Bacon, one of the founders of modern science, argues, "Nature is made for man not man for nature." Environmental management was based on natural resources management asserting that humankind needs these resources and, instead of rapid and haphazard exploitation, they should be well-managed in order to maximize their long term use. Also, economics focused on the relationship between humans and economic growth and set production increase as its top priority. This approach was thought to be the key to the welfare of humankind and promised the eradication of poverty and destitution through economic growth. Sustainable development concept was the outcome of growing awareness of the global connections, growing environmental challenges, social and economic issues, poverty, inequality and concerns over a healthy future for humankind. Since UN Conference on "Development and Environment, held in Rio de Janeiro in 1992, the term "development" has become the most critical subject of discussions. Behind this term there are several important concepts: On one hand, a struggle to resolve environmental and ecological

Problems and a concern over natural conservation, and on the other, poverty and destitution of the Third World. Sustainable development concept was proposed by the Strategic Commission for Preservation of World formed by International Union for Conservation of Nature in 1980. Furthermore, it has also been defined by World Commission on Environment and Development in its report, "Our Common Future", released in 1987. This report, commonly known as "Brundtland Report" included the most widely recognized definition of sustainable development. According to this Report humankind should pursue sustainable development in order to "meet the needs of the present without compromising the ability of future generations to meet their own needs".
Others, for example Allen Frieker, see sustainability as a road map focused on a set of values and ethical, spiritual principles that controls human behaviors.

In 1992, Earth Summit defined sustainable development as "meeting the needs of present generation without compromising future generations'". World Commission on Environment also defined sustainable development as a process of change in resource use, investment focus, technological development orientation and institutions that is compatible with current and future needs. Brundtland Commission states that sustainable development as a process is essential for improvement and progress. This process aims to improve the condition of developed societies and end their social and cultural shortcomings. It should drive world countries, especially developing countries, towards balanced, proportionate and consistent economic, social and cultural progress.

Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This definition recognizes the use of natural resources to the extent permitted and the equal right of each generation to have access to the natural capital.

Sustainable development, adopted worldwide, is a new important approach in management and public policy-making. This notion, which addresses various issues such as Greenhouse effect, climate change, Ozone depletion, land degradation, non-renewable resources decline, and pollution, takes the future consequences of our current actions into account.
In recent years, sustainability has become a common term among both scholars and the general public and the idea that sustainability is founded on scientific consensus and reformations has been criticized. Sustainability has three basic features: (a) resource sustainability that stems from productivity of populations and ecosystems (b) Sustainable abundance and biodiversity of individual species in the ecosystems and their protection against human

exploitation and interference. (c) Sustainable economic development without depleting existing resources for future generations.

Sustainability is a condition under which the current utility and existing facilities do not decline over time and ecosystems continue their functions into indefinite future. It is a condition under which social and natural systems subtly work together. However, this notion is still used by some international organizations, such as World Bank, to show the vision of growth.

According to World Commission on Development and Environment, the main issues addressed by development are "population and development, food security, biodiversity and environment, energy, industry and urban challenges". Hence, the World Commission on Development and Environment defines sustainable development as a "development that meets current needs without compromising the ability of future generations to meet their own needs". Doubtlessly, sustainable development and, in particular, urban sustainable development, manifested in concepts such as urban design and sustainable architecture, can only be realized through improving the quality of urban life and the welfare of citizens.

Emerging as very promising in past decades, development turned out to be a procedure that has only brought about poverty and inequality for the third world countries; therefore, sustainable

Development was introduced as a solution for the development dilemma in the changing conditions of late 20th century (Arnold, 1993, 21). It should be noted that sustainable development can be studied under various titles such as sustainable management, sustainable agriculture, sustainable lifestyle, sustainable life for all, sustainable future, sustainable subsistence security and sustainable consumption. Though marginal, they shed light on some important details. It is evident that addressing all these sensitive topics is beyond the scope of this paper; nevertheless, the major ones are reviewed. First, development and sustainable development are defined, and then, given the sustainable development dimensions, political dimension is studied. Finally, the conclusion and managerial implications are presented.

Sustainable Development Strategies

Sustainable development strategy includes elimination of poverty, development of mountainous areas, modification of consumption pattern, sustainable agriculture, regulation of population, biodiversity, protection of human health, sustainable biotechnology, adequate housing, preservation of oceans, integration of development and environment, preservation and management of water resources, preservation of atmosphere, management of toxic chemicals, proper land use, management of hazardous wastes, preservation of forests, de-desertification, management of atomic waste and supporting social groups (women, the youth, local people, non-governmental organizations) for participating in development plans. This approach opens new horizons and affects all sections of design, construction, maintenance, and utilization with varying degrees. Sustainable development considers all production phases from the beginning to the end and, thus, the final disposal of a product in nature is as important as the raw material used in its production. The process of technology transfer is also influenced by sustainable development which indicates the importance of proper selection of technology for any given country (Luthy et al. 1992). It also is argued that sustainable development is the proper and efficient use of base, natural, financial and human resources in order to achieve appropriate and desired consumption pattern and it is the employment of technical facilities and effective organization to meet the needs of both current generations and those of futures'.

The implementation of sustainable development is the most effective non-technological way to reduce pollution, environmental degradation, and natural resources depletion, and to use population growth as a basis for supplying future work force and to benefit the society. Traditionally, sustainable development term means protecting resources and their wise use. Sustainable development is a socio-economic change that does not undermine social and ecological systems. Its successful application requires policy, planning and integrated process of social education. The political capability of sustainable development exerted through governments, communities and private activities depends on full support of the general public (Gunn, 1994). Jay Kumor believes that sustainable society is a society in which environmental constraints are taken into consideration. This society does not reject growth but recognizes its constraints and tries to find an alternative to growth. Michael Radcliff states that the term "sustainable development" implies ecological teaching in economic processes. Turner also believes that to develop the proper growth policy, sustainable development, while recognizing growth rate of real income per capita, has to prevent the destruction of national capital reserves and natural capital resources (Eliot, 1999). Sustainable development means

an eco-friendly development that meets the present needs and does not compromise the ability of future generations to meet theirs.

Sustainable Development Dimensions- Social Dimension

(a) Social Development Concept

Social sustainable development can be defined as the process of radical transformation in social structures and relationships driven by such goals as social integration, social cohesion, quality of life, social equality, and accountability of authorities and public agencies. Hence, achieving a comprehensive development, capable of fostering national solidarity is impossible unless authorities pay special attention to social dimensions.

(b) Social Development Indices

Generally social development indices include:

(1) Education and Literacy

Education is vital if a society aspires to go beyond a local community and foster democratic participation. In many societies, education and literacy is also needed for the daily routines (such as filling out a questionnaire). Education significantly affects the quality of workforce and level of qualifications in an economy. Education also plays an important role in preventing unwanted pregnancies among women. Thus, it impacts both birth rate and women incorporation into workforce. Besides, it affects women social status and income distribution among genders. To select a set of best indices, school enrollment ratio can be used as a proper option. The number of children enrolled in primary and secondary schools, as a percentage of total number of children in that age group, is considered. Progress is increasingly becoming dependent on subjective productions in research areas, innovation and so on. Hence, education is pursued not only in research centers and laboratories but also in all spheres of life and it is, arguably, a factor which makes people more astute, educated, responsible, critical and ethical. Thus, education is the most sought-after end for humans and the most crucial means to achieve sustainable development (UNESCO, 1997, p16).

(2) Job Indices and Unemployment

Job is important for both individuals and the whole economy. National Income Account in its present form provides information about employment based on income from the job. Two points are important in this regard: first, only paid jobs are considered. Second, the jobs included in this Account are only measured in terms of money and no other indices such as the average work hours or the number of work hours per week are used. Excluding money as an index (an essential factor in National Income Accounting) from the Account will help including the unpaid jobs. Inclusion of the unpaid jobs, like housekeeping, babysitting and many agricultural tasks, is an evident issue.

(3) Consumption Indices

National Income Account allows us to measure consumption per capita GNP (GNP over population). Another way to measure consumption levels is to consider basic goods and services. For this variable three major indices include food, water and telephone. Food consumption can be measured in terms of average per capita per day (unit of calorie). These numbers look much more significant when combined with the numbers related to minimum number of calories a person needs in a day (this number is different for each country). Thus, food consumption index, used in this paper, is the ratio between these two numbers, that is, the supply of food as a percentage of minimum needs. In this process, the size of body, age and sex distribution, physical activity, population level, climate and other factors are considered.

Anyhow, some of this food may be destroyed in warehouses or at homes, while cooking, or it may be consumed by pets and domestic animals or even thrown away. Particularly that calorie-laden food is not much favored as calorie-free food since the former threatens the health. The numbers related to the percentage of people having access to potable water is also based on the information that governments provide. Accessibility in urban areas is defined as the existence of a source of water in a radius of 200 meters. In rural areas, it means that the family members are not forced to spend unusual amount of time supplying water. Healthy water comes from the surface water which is refined or it may come from wells and springs whose waters are healthy despite lack of refinement. The number of telephones per thousand people is a good index of economic development. This index reveals more advanced aspect of development. Reliable data is not available for all countries.

(4) Income Distribution and Wealth Indices

Though income distribution indices are very important, most of them are probabilistic. World Bank defines income in cash or in kind in which the percentage of household groups' income is ranked in terms of total income of the household while the data related to different countries change depending on their definition of income in kind. It is possible that the disparity among household incomes leads to a misunderstanding about the inequality in individual incomes because large income of a household may be due to its largeness not high average income of each member of household. Moreover, income distribution of household does not provide any information about the income distribution among individual members of the household. Perhaps, the simplest comparative indices can be the result of dividing the marketable wealth of top 20 percent of households by the marketable wealth of bottom 20 percent of households. This index like other information on wealth distribution is not often available and, therefore, it cannot be included in the list of indices. The discussion about collecting and disseminating this information is very crucial. Generally, it should be noted that without having access to necessary information to evaluate the effects of decision-making on wealth distribution it will be difficult to make important decisions about political, economic and strategic dimensions of development.

(5) Health Indices

Statistics can be used for many health and mortality indices. Gross Mortality Rate, defined as the total number of deaths occurred within a year to total population, is one of these indices. The mortality rate may be used as a criterion of overall health. The mortality rates for different age groups show that older people are more likely to die than younger people (except for newborns who have high rate of mortality in some parts of the world). Therefore, the higher the average age in a country, the higher the mortality rate will be; in fact, the better the health, the higher the average age. This is because people tend to live longer that it, in turn, results in higher mortality rate. These weaknesses make this index to be very poor because increase can be interpreted either as improvement or as decline in health level. There is another approach that considers the life expectancy in birth.

(6) The Role of Human Resources in Development

In 1936, Keynes published his seminal work "General Theory of Employment, Interest and Money" as one of the most influential books of 20th century. Since then the doctrines of laissez-faire and non-interventionism have become the foundation of 20th century capitalism system.
The proponents of each school of thought have founded the social order of their environment on their own school and they have thought that they provide people with the best plan for their welfare and prosperity. Generally, these schools of thought can be categorized into individualism, advocating various freedoms for humans in economic activities, and collectivism, which focuses on collective welfare and prosperity. The former represents capitalism and the latter represents socialism. It has been proved that both systems have been corrupted and none has achieved public welfare.

However, both systems essentially have capabilities, successful experiences, methods and technologies that, if used properly, can help humankind achieve prosperity.
In recent decades, much attention has been given to human resources with whose skill and creativity play an important role in the system. Efficient human force is an invaluable capital for every nation because knowledge capital is much far important than production capital. Developing countries enjoy human capital more than physical capital while, according to statistics, human capital has the most vital role in the creation of wealth in developed countries. 67 percent of wealth creation in these countries is attributed to human resources and the remaining 33 percent is the contribution of physical and natural resources. It is this capital that can champion great movements of 21st century. Sustainable development is human-centered and, given its enormous scope and potentials, has become the most important debate and challenge of the recent decades. Here, human is the center of development and they deserve to have access to health, security, culture, education, knowledge and development of communications and information.

Therefore, national knowledge and wisdom is not only the major pillars of development and educational system but also the route to achieve national wisdom. Society manages to attain its goals only through human development. In fact, the foundation of collective human life is education and we live the way we are taught. Hence, whatever our interpretation of development, to accomplish it all burden is on the shoulder of those people who has to achieve it. Since the educational system, in the contemporary world, is responsible for training human force in the society, it is

deemed as the most important context to prepare and train human force. Education, given its pervasive role, is one of the foundations of development. Development has been defined as the process of radical transformation in cultural beliefs, social, political and economic institutions in order to create new opportunities, adapt to new capacities and promote the human, educational and economic capabilities and abilities (qualitatively and quantitatively). Realization of such goals, more than anything else, needs transformation in cultural and value systems.

Studies and International experience affirms that comprehensive sustainable development has to be based on human resource potentials and no development venture culminates in success unless it invests in human development as its core element. The most recent data published by United Nations Development Plan (UNDP) illustrates the human resource contribution to the wealth of world countries- for example, Japan (80%), Germany (78%), Spain (78%), turkey (72%). Therefore, to attain sustainable development, "human" should be the center of development and the largest portion of investment has to be channeled towards human resources; this is exactly what some less-developed countries like South Korea, china and Malaysia are doing in order to achieve sustainable development. `
Theories and concepts of economic development in past centuries couldn't meet human needs and they were limited to the studies about environmental protection. This paved the way for new approaches to emerge and helped us define the nature of theories and their potential roles in solving problems related to critical human and citizenship survival.

In the early 1990s, and after the disintegration of Soviet Union, world countries were divided into two categories of developed and developing countries based on their particular development characteristics. Though, these countries, with the so-called changing economies, were limited to pacific nations, less attention was given to analyzing their particular development characteristics in the conditions of economic downturn. This analysis didn't also cover different sections of production and consumption of natural resources and environmental pollution. The shift towards market economy, dependent on the private sector investment, was pursued via economic restructuring of communist countries and modification of their activities. Rapid shift towards market economy, economic restructuring, and increase in the cost of energy and other resources posed many serious challenges in the past decades. However, the increase in the consumption of renewable resources produced many positive changes form sustainability standpoint.

Although the sustainable development concept is clear enough, its actual interpretation and definition has produced many debates over newly proposed models of social sustainable development and its management. If the concepts of sustainable development are supported by new principles and methodological pre-suppositions, understanding the nature of sustainability, offering its new definition and management approach will be much easier.

The main methods used in this paper are as follows: rational summarization which encompasses the generalization of economic theories and thoughts in the management, analysis of theoretical systems that examine issues related to the management of social sustainable development based on findings of scholars in other countries, and the comparison and study of development process of economic systems.

Social Sustainable Development Management

(1) **Principles and mechanisms of social sustainable development management**
Historically, the concept of sustainability was first appeared in economics, environment studies and some multi-disciplinary fields. Moreover, this concept is broad in terms of micro and macro processes and it includes various users and, most likely, their interaction.
Albeit "the nature of sustainable development" is somehow clear, its many interpretations and definitions have inspired intense debate. The ambiguity inherent in this concept stems from its dual nature entailing both development and sustainability. In the literature of economics and environmental studies, 70 definitions have been given for sustainable environmental development. It seems helpful to review the definition of sustainable development given in Brundtland Report: "It is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development concept has defined boundaries, but it limits the utilization of existing technological resources, social organization environment and the capacity to absorb the effects human activities."
Nevertheless, the definitional problem of sustainable development and its economic stance can be considered as an advantage in the theories of management because in all levels the scope of issues and variety of probabilistic models have been neglected. So, this is very debatable.

Three dimensions are important in the analysis of social development consequences: (1) environmental (2) economic and (3) social
According to current understanding, sustainable development has three principles: environmental protection, economic development, and social development. Hence, there are three approaches in social sustainable development management: economic approach, environmental approach and social approach.

(A) The economic approach to sustainable development management:

It is founded on the theory of capital sustainability and Henks-Lindal's concept of revenue maximization based on which the valuable, essential resources are to be saved for future generations (i.e. the execution of fair intergeneration distribution principle). This approach is frequently used in sustainable development literature such as in the analysis of using renewable natural resources. In fact, it is based on economic utility and effectiveness theory applied in the management of scarce resources (Munasinghe, 1993). But, we are faced with numerous challenges such as issues related to capital retention, identification of different species, the capacity to change and evaluation of different kinds of values such as environmental resources.

(B) Ecological approach to sustainable development management:

This approach focuses on the stability of physical and ecological systems that have been addressed in Hollings (1973) scientific works. According to this approach, the primary duty of economic development is to set limitations for natural systems of various economic activities. In this economic perspective, the life of subsystems is essential for global stability of the whole ecosystem. Thus, to emphasize the importance of biodiversity it is sufficient to know that it cannot be replaced. This reminds us that we should resist inconsiderate exploitation of resources.
With respect to the management of ecological sustainable development it should be noted that environmental issues have only been addressed from technical perspective.
In such cases, when the causes of ecological problems are numerous and disperse and the boundaries are unclear, the progress in environmental protection will be too slow. Under such circumstances, contemporary economic development which encourages environmental management plays a pivotal role. Instead of sectional approach to environmental management, this theory advocates a new environmental-economic policy that necessitates a shift towards adopting consistent environmental management. This approach allows us to formulate the principles of social sustainable development management (consistent environmental protection principles). The principles of consistent environmental management are formulated and assessed as follows: (a) Among all environmental levels: it considers economic, social and cultural factors as well as exploitation methods of natural and environmental resources and highlights the management of renewable and sustainable resources. (b) to ensure resource protection and its capability to renew for long term: this draws much attention to negative environmental impacts because these impacts have devastating consequences and accumulate slowly and within long period of time. Some examples of these unavoidable damages include Greenhouse effect that deteriorates Ozone Layer, lack of biodiversity in animal species, soil erosion and subterranean water pollution. Knowledge of these challenges is crucial for understanding global environmental issues which need global solution. (c) The opportunity to protect environment and apply alternative methods for wise use of resources which belong to future generations; it appears that this discussion, despite its importance in modern commerce, has attracted little attention.

(A) The constraints of sustainability factors in terms of their social ability to interact with natural systems and social structures (social sustainable development management approach):
The notion of democratic socio-cultural sustainability reflects the confrontation between development and dominant social norms and the struggle to maintain the stability of social systems. This approach not only considers intergeneration equality and survival of cultural diversity but also heeds potential change in destructive conflicts. To this end, "sustainable development of social justice" as an ideal option in neo-liberalism and orthodox economic doctrine is pursued.

The principle of planet accountability, which is intimately related to local development, requires global common responsibility and a cultural foundation. Practically, without strong consensus in community level to set the priorities for sustainable development, the link among economic, environmental and social systems cannot be established. Thus, the basic premises of social sustainable development management can be formulated: to realize stable social development community, involvement in process of decision-making should be encouraged.
With these three approaches to social sustainable development, the general principles of sustainable development (the complexity principle) can be formulated. This requires an analysis of sustainable development and its

environmental, economic and social dimensions. The common goal of social sustainable development is to maximize the benefit for all systems which is realized through the processes of exchange and interaction among numerous goals of economic, social and environmental systems.
Sustainable development fosters the compatibility among environmental, economic and social goals and presents a common social value to current and future generations without breaching the environmental acceptable limits.

Therefore, the notion of sustainable development combines two essential goals: A) good living condition, safe and worthwhile for all humans who are the target of sustainability B) living and working within biological-physical limitations of environment. Though these goals seem contradictory, they should be united and fulfilled together.
Sustainable development policy addresses three major issues: (a) proper socio-economic theory of development (b) comprehensive, valid database and renewable ecological, economic and social information (c) ethical values of community

As mention in Agenda 21, sustainable development includes social, economic and environmental dimensions to which a fourth dimension, i.e. institutional, should be added. (Excluding this dimension is one the greatest deficiencies of social sustainable development implementation management). These dimensions can be illustrated through Sustainable Charter.
Priorities should be defined for managing all sustainable development dimensions: (a) environmental dimension: environmental protection (b) social dimension: fostering solidarity, social justice (c) economic dimension: meeting physical and basic needs (d) institutional dimension: involvement and decision-making

It is not sufficient to define separate indices for each dimension. They just reveal some of the necessary pre-conditions for maintaining self-reproduction cycles of the related subsystems without providing any information about their features and correlation effects. These relationships often reflect the link with the most important areas of policy-making. The proper definition of ultimate goal of these relationships is essential. For instance, from two-dimensional relationships, different variables will be produced: (a) relationships between social and environmental dimensions: variability and sustainable policy (b) relationships between economic and environmental dimensions: preventive economic policy (c) relationships between economic and social dimensions: proper distribution of material values (d) relationships between environmental and institutional dimensions: co-decision-making regarding important environmental processes (e) relationships between institutional and social dimensions: appropriate condition for social self-organization (f) Relationships between economic and institutional dimensions: involvement in decision related to production and consumption.

(2) Need for Indices of Social Sustainable Development Management

Managing a society seems next to impossible if the ultimate goal whereof is not properly determined; hence, sustainability management requires defining sustainability goals which should continuously be investigated and evaluated. Obviously, no smart planning can be made for implementing sustainable development if a set of valid sustainability indices is not determined. Such indices play a vital role in the strategies for reporting and monitoring the implementation process. Indices for sustainable development reliably measure the extent of implementing the goals; however, the definition of sustainable development does not clearly determine how sustainability should be practically measured.

Index creation is a two-way process; i.e. a set of given indices not only is required for policy-making purposes but also should help determining and making the policy itself. Therefore, creating indices is not completely a technical or practical process; it needs to explicate communication and policy-making processes.

Indices need to be accurate (useful and practical) and take a proper part in the quantification of the goals. The current international sustainable development report has put forward a number of created indices for each of the triple “pillars” of sustainable tourism; e.g. a combination of environmental, social, and economic indices. However, fostering sustainable development is not simply a mathematical addition of the triple factors of the policy purposes. As a result, there should be much more unity among the goals of the policy so that their synergy and interaction could be efficiently utilized. Via well-defined indices, it would be much easier to establish a link with sustainable development, particularly with the processes of implementing the Local Agenda 21. In order to evaluate the efficiency of the strategies for sustainable development, the following indices could be used: (a) social and economic indices (b) environmental conditions and pressure indices (c) social activity indices

Utilizing the charter of sustainable development model, priority needs to be given to reducing the number of indices to 12 to 15 ones in such processes, while, at the same time, extensive and balanced attention should be given to environmental, social, economic, and institutional issues.

Attending to the principles of sustainable development and the main defaults of environmental favorability, it would be possible to more investigate into the environmental indices. An index is created by grouping the values into their specific goals and determining the priority of anything which can be measured directly; in fact, indices are functional through reducing complicated correlational quantities and simplifying them, and, in turn, making their evaluation easier.
The index model of "pressure-state-response" and "driving force, pressure-state-impact-response" is used for creating environmental indices. Here, three levels of creating environmental indices are introduced: (a) environmental pressure indices: as a criterion of the potential effect of human activity on environment (b) environmental state indices: as a criterion of environmental quality (c) response indices: referring to social reaction to changes in environmental state

Therefore, the favorable quantity of environmental indices needs to be decided upon to improve the current indexing system and the evaluation of competitive tendencies and systemic necessities.
Investigating sustainable development encompasses a large and complicated set of variables and defines different aspects of development. In order to have such a set, the mentioned variables should be selected and/or collected and the degree of correlation between the very variables needs to be analyzed. The method of selecting the index should follow a sufficiently scientific methodology and multidimensional factors and uncertainty evaluation (uncertainty is an integral part of decision-making process and makes decision-making difficult). Such a method needs to be flexible; a good indication of such flexibility is the possibility of completion or reduction of the number of indices for attaining more reliable results. Basically, in order to improve sustainable development, reliable linear indices should be identified and utilized. The indices of sustainable development are to attend to the starting point of development cycle; e.g. energy, natural and chemical resources, and other developmental resources and criteria.

Utilizing sustainability indices is an instrument for modern efforts to improve environmental protection from a variety of aspects. The next step in investigating the extent of development in different countries to attain sustainable development is to use S index. Eikain and Tamsokain (2003) believe that the index of sustainable development is a conventional one encompassing 8 indices and each of the three economic, social, and environmental sections has 6 indices. As a result, sustainability is to be achieved through the combination of four rather vague dimensions.
Although sustainability is a must for economic, environmental, and social policies, the principle of management of sustainable development (principle of solidarity) is the principle of superiority requiring social and institutional interests in environmental policy (economic interests are given way to on their own and are mostly superior). Such a principle should follow the institutional principle of sustainable development management which requires institutional decision-making at the lowest levels.
In making policy for social sustainable development, it is possible to determine four economic levels (Hinter Berger et al., 1997): (a) Micro level (owners and consumers) (b) Meso-level (institutions and networks) (c) Macro level (computational, financial, and distributional issues) (d) Meta level (social goals)

The final purpose of defining all levels of economy for policy making is somehow correlated and it is possible to use matrix for extracting sustainability scenario wherein the four dimensions (economic, social, environmental, and institutional) and economic levels (micro, meso, macro, and meta) are included in a correlated and dependant way. Approaches to modeling and utilizing different instruments indicate that such scenarios might be constructed in an interdependent and practical way (Spangenberg et al., 2000). However, it is recommended that all the processes for sustainable tourism, at all levels, start simultaneously: (a) Global (International Agenda 21) (b) Regional (Regional Agenda 21; for example, Baltic 21 which includes the purposes of regional sustainable development upon the consent of 11 nations in the region of Baltic Sea and other members of Baltic 21) (c) Government (National Agenda 21) (d) Local (Local Agenda 21)

Redirecting the society and economy towards sustainability is a mission which cannot be accomplished by any social subgroup; it needs a larger society which lends itself to management. Cooperation of all major groups of society is one of the main innovations of an institution which is equipped with sustainability discourse and Agenda 21 and success in implementing Agenda 21 is achieved only when they are working in tandem. World Summit on

Sustainable Development (WSSD), held on August 26 - September 04, 2002, in Johannesburg, introduced sustainable development as one of the most important elements of International Agenda and gave way to new issues in global measures for combating poverty and protecting the environment, resulting in better understanding of sustainable development, especially the of the interrelationship between poverty, environment, and natural resources consumption. Nations approved of a wide range of serious commitment to the goals of the Millennium of Development as well as to the final purposes for effective implementation of the goals of sustainable development; hence, nowadays, such nations, increasingly, attach their national security interests to their access to the resources. Policies and the plans for having access to sustainable development are necessary and having access to approaches and new mechanisms as a more sustainable model is indispensable for development. For example, what is of note in Latvia is reinforcing the strategy for national sustainable development in July 2002, and has recently been approved by the government. Having a clear strategy is crucial for methodical and cooperation-based implementation of sustainable national policy. Sustainable economic development, dependent on the interaction between sections and regions of a nation, is the main priority of sustainable development in Latvia. The major goal of sustainable development in Latvia is attaining the current average [standards] of the European countries which has been introduced in the 2020 master plan according to the indices of social and economic development as well as based on the efficiency in consuming resources without exceeding the accepted standards mandated by the EU upon the pollution indices, commitment to minimizing environmental pollution and its effect on the changes in global atmosphere.

As far as sustainable development is concerned, industrial firms are not to be considered as separate units as they are the main constituents of a larger dynamic system. Utilizing a systemic approach to better understanding of the complicated interactions between different sections of such a system and the ability to apply more effective strategies which make industrial development sustainably possible are essential. Analyzing the implementation of sustainable development at micro level, i.e. in economic institutions and companies, it is possible to regulate the principles of social sustainable development management (Profitability Principle). However, eventually, the economic institutions and companies are to take the following points into consideration: (a) Business and environment should support one another; however, they should not limit or destroy each other. (b) Institutions can become profitable via their involvement in social sustainable development.

In order to support industries in their adaptation to environmental challenges and sustainable development and their utilization of the opportunities of sustainable industrial development, the national plan for sustainable industrial development has been offered in Latvia.
The principles of management in social sustainable development management are practical through focusing on the factors below: (a) intersectional perspective (b) social cooperation (c) foresightedness (d) efficient exploitation of natural resources (e) evaluation of the effects of local, regional, and global activities (f) planning (g) holistic reasoning

With regard to the process of decision-making for sustainable development, considerable attention should be given to gathering the strategies sustainable societies make use of. Successful implementation of the strategies of sustainable societies in the intended society results in: (1) the development of other sustainable societies (2) the development of sustainable regions as a result of the establishment of the very sustainable societies (3) the development of a sustainable global society due to the formation of the very sustainable regions

In other words, step-by-step development of sustainability is made from local levels to global one. Therefore, the very society-based and environment-based economic and managerial theories will help modifying the economic systems of health as well as human and ecological security. Such theories are as following: (a) environmental and welfare functions contributing to the four types of capital (b) social institutions with appropriate functions (c) effective supervisory systems for implementing sustainable development vested responsibilities (d) social justice resulting in welfare improvement

(3) **Application of the Concepts of Environmental Territory and Environmental Effects**

In order to have proper response to the issue of how sustainability goals of economic development are evaluated, it is possible to use the two concepts of environmental territory and environmental effects. The two concepts enjoy a clear background; deep consideration of increase in production and consumption in the north and developmental views in the south. Environmental territory is a more complex approach in which sections of important numerous resources are analyzed at national level; thus, environmental territory faces difficulty when put into practice.

Comparing it with the concept of environmental effects, the resources are categorized under the same index and collected at a proper level. Moreover, environmental effects introduce more sustainable challenges for more changes and explicate the fact that "human's proper use of land, water, and other natural resources and attending to the extent of waste collection is a must in its use." Clearly, the concepts of environmental territory and environmental effects do not give way to a developed scenario for a certain-to-happen sustainability; however, it just provides the primary framework for the principle of implementation. In future, such evaluation needs to be completed by formal official institutions and the quantitative consumption of the world's resources takes a sustainable state.

The concept of environmental effects was introduced by Bees (1992) and, later, was developed by Wackernagel (Wackernagel, Bees, 1994). Paving the way for any process, activity, and region has effects on exploiting resources, waste accumulation, and the use of natural services and such a complicated effect brought about by utilizing resources and environment may change into a unidimensional criterion, and typically, in ecology, the land plan should be mapped as calculated. Accordingly, six types of land have been identified: proper/fertile or damaged land, orchards and gardens, prepared land, plains and ranges, forest, energy-generating land, and energy-generating marine territory.

Utilizing this method for land distribution proportional to the number of people indicate that the mean of the ecological environmental effects in the world is about 1.8 hectares in relation to the amount of capital. Environmental effects, in many developed countries, have reached 3 to 5 hectares in relation to the capital; however, in underdeveloped countries, like India, such proportion is 0.4 hectares to the capital. It should be borne in mind that the developed regions has trespassed the limitations of the environmental effects of local ecological capacities; hence, ecological capacity has exceeded the global norm.

Efforts to calculate "Potential Ecologic Territory" or the map of the really produced lands of the region are well under way (Wackernagel, Bees, 1996). Over a century, the world map has decreased from 6 hectares to 1.5 hectares on the global scale. Besides, comparing the environmental effects against ecological territory, the violation of the ratio of land to capital is 0.3 (1.8 - 1.5 = 0.3), referring to the fact that an ecological failure has occurred, expressed in terms of the quantitative index of unsustainability and the parasite-like method of human life.

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