# In a search of an optimistic way to Sustainable Development

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## An Introduction

The Humankind now stands before an inevitable paradigm shift towards the sustainable development both in developed and in developing countries of the World. To stop heading for a disastrous ecological and social catastrophe a new optimistic model of the sustainable future based on commonly shared values is urgently needed. This model should be founded on the practical philosophy, because controversial and contradictive nature of the sustainable future cannot be forecasted on a common sense or a straight scientific logic basis. While the Humankind is relatively careless about its future, the Life itself sends us dangerous warnings, such as terrorists' attacks that are quickly changing their role from local conflicts to a Global war of a pour part of the Earth population against wealthy societies.

*My conviction is that to foresee the development of complex phenomena in unpredictable situations we should reorient the philosophy from apologizing for the said unpredictability into a mighty constructive instrument opening new ways of thinking. To illustrate this thesis I am trying to show here how contradictive situations can give birth to constructive meta-systems controlling and governing the mentioned contradictions in Global Economics.*

The author of this article develops a novel approach to dialectics – an orthogonal analysis of contradicting phenomena with a panoramic (helicopter) view on a contradiction from the third dimension of a more complex meta-system. Only this view can result in the harmonic resolution of contradictions and in the predicting of crisis situations, where the conditions for a harmonic equilibrium disappear. It is necessary to develop a systematic and philosophical view on the problems of the future human development coming to sustainability as to inevitable decision in a class of optimistic decisions.

But the resolution of the Sustainable future problem cannot rely only on an intellectual power; it requires a powerful program of global action. The Global Movement for Sustainable Development to be successful should include in parallel with scientists, educators, politicians, and public organizations also the most influential power – business leaders and managers.

The author suggests developing of new educational disciplines, such as the **Sustainable management,** that can be defined as the branch of management designed to join together two

contradictory orientations: towards competitive advantages and community needs. The article discusses the main features of this and some another educational disciplines that should make the Sustainable future a reality.

Many scholars and educators now are considering the future trends in their areas of expertise. Questions about inevitable changes in life can influence both theories and educational methodologies in the future. Good questions about the future are important parts of the answer. They concentrate our knowledge within contemporary paradigms on the most essential problems. The second part of the answer is constructive: it builds a new paradigm and a new system of worldview that arranges a set of facts in a new order emerging for the Future.

Different people have different goals: somebody strives for making prices for oil lower, somebody is afraid that with low prices this very important resource will be depleted very soon, somebody hopes that when oil resources vanish the electro mobile production will be profitable, somebody is waiting for a moment to invest profitably in the renewable resources utilization. What can philosophers make in this complicated situation? If some philosopher is sure that his/her vision of the Future is important for the human well-being, he/she can and should inspire the rest of the World by this vision.

The strategy of this article is based on the idea that a paradigm shift towards sustainable development both in developed and in developing countries of the World will inevitably influence management philosophy and practice. This article is the further development of an author's attempt to foresee the future of management, reported to the 17th Annual International Conference of the Association of Management/International Association of Management. [1]

At this conference a special section, named Project-2001 and later renamed in Project-2005, was dedicated to the future of management. [2]

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[1] Sedunov B. I. ***From a basis to perspectives of management***. AoM/IaoM Proceedings: Project 2001, v. 17, N 1. Chesapeake, Virginia, USA: Maximilian Press Publishers, 1999.

[2] Klenke K., Chaharbaghi K. ***In the Eye of the Cyclone: Millennial Provocations for Management. Education. Cybertechnology and Leadership***. AoM/IaoM Proceedings: Project 2001, v. 17, N 1. Chesapeake, Virginia, USA: Maximilian Press Publishers, 1999.

# A practical philosophy as a basis to resolve emerging contradictions of Human Society development

The goals of this article are to show that the world's inevitable transition toward sustainable development of Global Economics will inevitably influence the discipline of Management and to foresee the character of these changes within this discipline along with the appearance of new sub disciplines, such as Sustainable management. To predict future development in an unpredictable future a practical philosophy must be developed and used.

To my mind, it is applicability of dialectics, one of the most powerful philosophical techniques, to fundamental analysis of management theory and practice that may open new concepts at the core of management. Here I see the dialectics not as a simple dialogue, but as a tool to discover and to resolve contradictions that cause and determine any emerging phenomenon. The emergence and resolution of new contradictions always accompany the development of civilization. Human creativity inevitably finds answers for new challenges. Now, seeing an approaching ecological catastrophe, many thinking people are trying to discover the deep causes of growth problems and to find solutions to urgent needs. As usual an unpredictable future benefits from the application of philosophy.

The development of the philosophy of sustainable development is urgently needed to define the issues at hand, along with the methods to achieve established goals; thereby providing an ability to differentiate it from theoretical philosophy. Theoretical philosophy strays too far from the practical problems of human development, and thereby looses its influence. Science develops in fields of human knowledge when it is possible to get rid of contradictions between the systems studied. Philosophy, on the other hand, pays attention to phenomena, where the contradictions between systems are important. Hence, philosophy subjects are situations and phenomena, where inherent contradictions determine the development of phenomena that make it impossible to predict an unequivocal consequence of opposition.

**The philosophical method** is dialectics that consider the contradictions and conflicts in their development, taking into account different internal and external influences on development.

**The philosophical goal** is to supply humans with an investigative method for complex phenomena that cannot be reduced to deterministic models, to show ways from two-dimensional considerations to a three-dimensional system that operates by opposing agents as parts of an expanded meta-system.

Table 1. Methods of practical philosophy in their relevance to different fields of human activity

| Fields of action | Methods of practical philosophy |
|---|---|
| **Economic phenomena** | • To control economic contradictions,<br>• To determine and to reinforce the synergetic effect of economic subsystems merging into more complex and more effective meta-systems,<br>• To determine critical thresholds for stable economic systems interchanges |
| **Social phenomena** | • To control social contradictions and to develop social cooperation synergy,<br>• To determine the boundaries of stable social systems |
| **Business** | • To control business contradictions using a win-win cooperation synergy,<br>• To display and resolve emerging conflicts and contradictions |
| **Scientific-technical** | • To foresee scientific-technical progress and contradictory directions of development,<br>• To select the most promising directions at the earliest stages of emergence |
| **Finance** | • To determine at the earliest stages the most profitable directions of investments,<br>• To forecast the possible decay of some of currently profitable businesses |
| **International, Interethnic, Interreligion** | • To determine the causes of existing and emerging international, interethnic and interreligion conflicts and contradictions,<br>• To show the civilized resolutions of conflicts and contradictions based on a peaceful cooperation synergy and on a common will to a better life |
| **Self-management** | • To determine the causes of personal development contradictions,<br>• To suggest ways for harmonious development through personal strengths synergy,<br>• To find a harmonious matching of personal and social goals |
| **Ecology** | • To distinguish contradictions between human activity and the Nature,<br>• To find ways to create a harmonious Human/Nature coexistence,<br>• To suggest a Sustainable society model |
| **Spiritual** | • To determine the causes of existing and emerging contradictions in cultural, intellectual and spiritual spheres,<br>• To suggest ways for a harmonious coexistence and cooperation of different spiritual directions in a global intellectual meta-system |

The philosophy has for its subject socio-economic and civilizing processes, in which emerging and developing conflicts and contradictions require the methods of a civilized resolution. The relevant goal of the practical philosophy is to show ways to resolve global humanity contradictions through the acceleration of socio-economic and civilizing processes and the urgent need to stop the global ecological and social catastrophe threat.

To resolve contradictions the philosophy should not eliminate opponents, but should find and implement mechanisms to regulate contradictions. Marxists, in spite of their stated dedication to dialectics, distorted it by eliminating one of the opponents in any contradiction. So, contradictions between science and religion resulted in the crushing of religion in the former USSR, which resulted in increased crime, alcoholism and corruption. The contradiction between individual and collective development in the USSR resulted in a total prohibition of individualism and a ban on entrepreneurial activities and a disregard of authors' rights.

Consequently highly educated and talented people of former USSR have had to start at the very beginning in studying the basics of a socially oriented market economy.

On the other hand free market science followers overestimate market spontaneity, forgetting that this spontaneity results in finance pyramid schemes and global financial crises, causes the depletion of natural resources, leads to ecological catastrophes and tensions between pour and wealthy countries, and substitutes spiritual values with advertisement clips.

***Contradictions and conflicts***

We should define the differences between contradictions and conflicts. Charles W. L. Hill and Gareth R. Jones define conflict 'as a situation that arises when the goal-directed behavior of one organizational group blocks the goal-directed behavior of the another.' [3]

They examined:

- 'the effect of the conflict on the organization performance,
- the sources of conflict,
- the ways in which the conflict process operates in the organization,
- the ways in which strategic managers can regulate the conflict process using effective conflict resolution practices so that it yields benefits rather than costs.'

This kind of situation may be called linear or face-to-face opposition. But practical situations may have a rather different kind of opposition that may be called 'orthogonal' opposition. These kinds of opposition may occur between:

- Traditions and Effectiveness,
- Stability and Flexibility,
- Standardization and Innovation,
- Business and Human Values,
- Individualism and Co-operation,
- Conformity and Leadership,

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[3] Hill C. W. L., Jones G. R. ***Strategic management. An integrated approach***. Boston, Toronto: Houghton Mifflin Company, 1995, pp 418-427.

- Immediate Profit and Long-term Investments,
- Profitability and Reputation,
- Narrow Professionalism and Fundamental Education,
- Free Market Economy and Governmental Regulations,
- Free Trade Model and Global Regulations.

In this article the term ‘contradiction’ means similar cases where there is no direct opposition between two forces, but opposition develops between different system values or directions of development/behavior. The term ‘orthogonal’ means that direction or value may be changed rather abruptly. In some cases an orthogonal opposition may be faced as direct opposition. For example, contradiction between Traditions and Effectiveness may turn out to be a direct conflict between traditionalists and business circles.

Now, with emerging the crisis of terrorism, we should see a difference between a system coming to its critical point and a system in a normal situation, where exists some kind of equilibrium between government and the governed. In a successful country, such as European or North American State, there is some sort of a harmony between hierarchical power and the bulk of a country. Any shift to strengthen hierarchy is compensated by democratic movements. And hierarchical management is stopping any shift towards chaos.

In a country or a region in its critical point of development quite another laws govern the processes of the power and subordinates interaction. In a critical situation the conditions for equilibrium disappear. We can see it in a trigger that can not stay in an intermediate point between '0' and '1'. It quickly falls in one of stable states, such as mentioned '0' or '1'. Or, it is impossible to be pregnant on a half.

When a country approaches its critical point, both powers - hierarchical and democratic, strive to establish their own vision, values and goals. But the mechanism for equilibrium between these strivings vanishes. And some occasional factor, negligible before, may launch a dangerous movement towards one or another final state, really final both for harmony and democracy. It has happened in Roman and Soviet Empires. The finish of harmony after the Roman Empire decay was so deep and disastrous that people for a whole millennium did not notice beautiful sculptures under their feet, used to break them. Only after a thousand years of Gloomy Middle Ages they started noticing the beauty of Venus. Hope the Humankind will not repeat the Roman mistakes and is able to collect own intellectual power to avoid the coming catastrophe. My conclusion is: in a critical situation it is useless to strive to an old equilibrium point. The

main problem is, how to escape safely a critical situation, how to restore former or to establish new conditions of equilibrium. To find the best direction of run away from the crisis requires to collect together human intellectual power and to rely more on philosophy, rather than on a straight logic. Because the common sense in a critical point does not help any more.

Any direct fight against terrorists spreads new seeds of a larger terrorism. It is urgently needed to understand deep roots of the current terrorism and to eliminate the basic conditions of its emergence.

## Global Economics Sustainable development

A quickly accelerating development of humanity at the end of the Second Millennium based on the ideas and strivings that come from the depths of history and on assumptions of unlimited natural resources, has encountered a number of contradictions that may launch a global ecological catastrophe. Having stepped into the Third Millennium, many thinking people, under the pressure of civilization's conversion into a mighty transforming natural power, understand the necessity to change the paradigm of humanity's development. With each year most responsible people are increasingly striving toward the concept of sustainable development.

According to Sir Crispin Tickell, the chairman of the International Institute for Environment and Development, 'Sustainable development… represents a most productive way of thinking'. It explains why, discussing the Sustainable development, so much attention in this article is invested in the Practical Philosophy. Sir Crispin Tickell says also: 'We need to change the culture. Many have lamented the division between the cultures of science and the arts. They are right to do so. But neither is now in charge. Our real bosses are the business managers'. [4]

So, without involving managers in World transformation the Global Economics sustainability can not be reached.

**The concept of sustainable development**, according to Johan Holmberg and Richard Sandbrook 'is that we should leave to the next generation a stock of quality of life assets no less than those we have inherited'. [5]

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[4] Sir Crispin Tickell, in the Foreword to ***Making Development Sustainable. Redefining Institutions, Policy, and Economics***. Edited by Johan Holmberg. Island Press, Washington, D.C. and Covelo, CA, 1992, pp 11-12.

[5] Johan Holmberg and Richard Sandbrook *'Sustainable Development: What Is to Be Done?' ibid.* pp 19-38.

But the sustainable development idea meets some contradictions with existing market mechanisms. Edward Barbier, Joshua Bishop, Bruce Aylward and Joanne Burgess point out: 'Market mechanisms determine the prices of natural resources, and of products derived from them, by reconciling demand and supply. However, *markets do not automatically account for environmental values,* such as the subsistence use of natural products for food, fuel, medicines and building materials, the protective and supportive roles of ecological functions, or the use of biodiversity for agricultural and medicinal research. Nor do markets capture *option and existence values*, values derived from preserving certain natural environments, species and resources today as an option for future use or simply because their existence is valued'. [6]

In this statement we can see the key point of philosophy of sustainable development – the contradiction between current profits and revenues and long term potential of development. As it was recommended by being developed here contradiction resolution mechanism via the meta-system synthesis, the discussed contradiction might be resolved through the enlarged public and state's responsibility for potential values for future generations. This responsibility cannot be achieved without change in the electors' culture towards a greater interest for future generations' needs. These needs should be and inevitably will be accounted for by changes in pricing mechanism for natural and environmental resources. And the initiative to change prices on the vanishing resources will belong to the local or state governments, reporting before their electors. Thus, in parallel with the labor theory of cost for the production, based on the renewable resources, should appear the resource theory of cost for the production, based on the non-renewable resources.

The most obvious principles in the transformation to sustainability, taking into account that to achieve sustainable development humanity will be forced to accept a number of additional limitations, are:

- Wide utilization of renewable resources, [7]
- Non-renewable resources consumption diminishment, ideally to zero,
- Maximal utilization of secondary resources,

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[6] Edward Barbier, Joshua Bishop, Bruce Aylward and Joanne Burgess *'Economic Policy and Sustainable Natural Resource Management', ibid.* pp 65-90.

[7] Daniel Deudney and Christopher Flavin, ***Renewable Energy. The power to Chose***. W.W. Norton & Company, New York, London, 1983.

- Non-renewable resources substitution by renewable ones as widely as possible,
- Careful development of expertise in resource renewability,
- Natural mechanisms launched to renew some previously non-renewable resources,
- International and interregional labor divisions to produce production based on renewable resources,
- Demographic pressures on territory limitation with criteria, based on resources renewability thresholds,
- Competitive development of renewable resources with utilization effectiveness,
- A public control of the non-renewable resources conservation,
- Forecasting and prevention of Global financial crises,
- Reserved territories creation and conservation with their total area exceeding the actively used in economy area,
- A biological diversity reservation,
- A national cultures diversity reservation,
- Aided development of undeveloped and underdeveloped countries.

During the transition period to the Global sustainable development a limited utilization of the non-renewable resources should be put under the public control. In these conditions the state acquires a new function – to regulate non-renewable resources utilization. Ideally the future state may be a keeper of the non-renewable resources at its territory, and the market economy may limit its field by the renewable resources utilization. To regulate finance relations between market and state spheres a new pricing mechanism for non-renewable resources may be introduced with regard to the corresponding depletion factor.

I see only one way to limit consumption of vanishing natural resources – to put limits for their minimal prices, taking into account not only their extraction costs, but also their real values from the future generation's point of view. The modern pricing practice for depleted natural resources is as absurd as the price for a golden ring covering only expenses to open the box and to hand this ring to a buyer.

As the basis of this order I suggest the **Constant Natural Wealth Law**, which should determine the unit price for a vanishing natural resource at a growing level that keeps constant the total price of the resource's stock. By introducing a new pricing method for deficient resources we can stimulate the development of new progressive technologies, based on the renewable resources development. These new technological developments and their implementation and dissemination can give a new driving pulse for further development.

It is not a Utopian proposal, but a foreseeing of inevitable changes in the state-to-market relations. But when we see this inevitability, our duty is to act more decisively implementing this regulating mechanism where it is now possible and where the voters can provide their effective control after the governmental bureaucracy. An ideal state of Global Economy sustainable development must be characterized by a number of principles, which may provide a reservation of conditions for everybody's normal life. One of the most important technological factors in transition to sustainable development is a wide implementation of Renewable Sources of Energy. This innovation may change whole branches of industry, noticeably influencing managers and workers in both old and newly created industries.

**The power of the contradiction** between an overconsumption of natural resources and their potential exhaustion is growing with increasing speed. Some of the most important natural resources are totally exhausted. For example, it is not enough to say that free land for agriculture has disappeared, but existing agricultural land is shrinking constantly because of desertification, urbanization and industrialization. The estimated time to use up some other of the most important resources – such as discovered stock of oil, is measured by tens of years. This means that not only our grandchildren, but also already our children, will feel the growing lack of natural resources.

But the idea of the limited natural resources is not widely accepted yet. An excellent critical platform of the Club of Rome (D. H. Meadows, D. l. Meadows, J. Randers, and W. W. Behrens III, 1972 [8], 1992 [9] ) managed to touch minds of only a small part of intellectuals. To stop heading for a disastrous Global ecological catastrophe should be launched a new model of the sustainable future based on **commonly shared values**. After the Earth Summit (Rio de Janeiro, 1992) a number of new international organizations have been created to find the proper ways to

[8] Meadows, D. H., Meadows, D. I., Randers, J., & Behrens, W.W. ***Limits to Growth***. New York: Universe Books, 1972.

[9] Meadows, D. H., Meadows, D. I., & Randers, J. ***Beyond the Limits: Envisioning a Sustainable Future***. Post Mills, Vermont: Chelsea Green Publishing Company, 1992.

sustainable development. One of them, Earth Council, has prepared for a common adoption the Earth Charter – the collection of ethical norms for a sustainable future. [10]

New communication modes and media such as Internet are helping now to elaborate and adopt these values that will be the basis for a future global political will.

**The contradiction** between a current self-satisfaction and potential threat for future generations touches on the most intimate matters: personal life style, moral and religious convictions. But these matters are very influential: any change in life style alters the market demand enormously, morality influences the personal responsibility for civilized environment and business atmosphere and some religions are responsible for a high population growth rate. The two main threats to the survival of the human species are overconsumption in the developed countries and overpopulation in the underdeveloped ones. Overconsumption is mainly inspired by the western life style created by propaganda and advertisement. Here we see key management success factors such as advertisement working in opposition of human prosperity. The threat of spreading the overconsumption model to the underdeveloped countries is very dangerous, but these countries, like their developed counterparts, are subject to the mighty advertisement campaigns.

The threat of a quickly approaching ecological catastrophe would provide the driving pulse to develop international and interreligious regulations. For example, now it is awkward to ask some ethnic or religious groups to diminish their population growth rate. Tomorrow specially prepared interreligion managers will be able to effectively influence the family planning. Quite recently the Indian government, in spite of the religious opposition, suggested to the devoted bachelors to sign contracts that they will never marry, just to limit the population growth rate by this measure. Here interreligion management joins with the **Nursing management** that may be considered as the experimental field for developing the principles of the Sustainable management.

Or today it is strange to teach Americans how to limit their overconsumption, but tomorrow the Interethnic managers will be able to explain Americans that they are setting a dangerous life style example for other ethnic groups. It is pity to say, but many commonly shared values are produced now by advertisers and are turning around shopping habits. Corporations prefer to convert the entire population of the Earth into eternally consuming babies. It results in a childish model of behavior expressed by many adults: concentration on their own pleasures and problems, shopping vanity and irresponsible attention to the needs of future generations. If the

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[10] *Earth Charter*. Earth Council web pages: www.earthcharter.org/; www.ecouncil.ac.cr.

Earth endures the overconsumption of the USA, the spread of the overconsumption model all over the world inspired by the immoral advertisement will accelerate the Global natural resources exhaustion thus producing the irreversible changes.

This may sound strange while discussing the future development of the free market economy. But the survival of the human species carries too high a price for our trust in a free advertisement model. We should estimate the costs resulting from the free advertisement model and its propaganda from the sustainable society values point of view. We should educate future managers with respect to the values espoused by the sustainable society perspectives.

**The analogy with the traffic regulation** may lead to the correct conclusion. No driver loves the road police, but everybody understands that without regulation, traffic turns into nightmare. So, to regulate an ethical atmosphere of the competition between corporations and organizations, very influential nongovernmental organizations (NGO), regional and international organizations should be created. These organizations would have the right to punish unethical behavior, including the artificial financial crisis. A system for punishing financial market players who promote global financial instabilities should be created. This is easy to say, but difficult to realize; it is a task more challenging than the exploration of Mars. And it is a challenge to all thinking and responsible people.

But the representatives of the Earth population should control the international organizations themselves. Any bureaucracy, independent of its level, has a steady tradition to put its own goals over the organization’s goals.

## Analysis of plurality of economic mechanisms and conditions of Human living in the contemporary World

Discussing the perspectives of Sustainable Development we should estimate the degree of uniformity of the World we are living in. One of the most informative parameters demonstrating both conditions for living in a country and potential for its further development is the Gross Domestic Product per capita (GDP/capita). The USA Central Intelligence Agency (CIA) regularly publishes the World Factbook that is an excellent source of comprehensive information about economic and demographic situation in the World. [11]

A number of countries versus their GDP/capita plot show a wide distribution of conditions for living in the contemporary World, Figure 1.

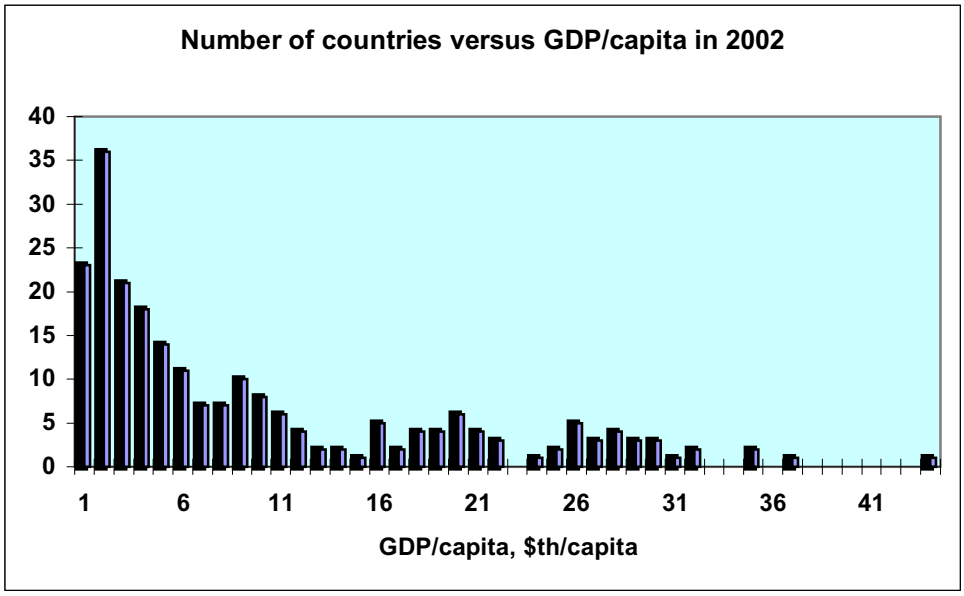


Fig. 1. Distribution of countries versus their GDP/capita according to the CIA World Factbook, 2002.

It is possible to select six groups of countries in this distribution with a step in $6 Th:

- The First group with GDP/capita < $6 Th;
- The Second group with $6 Th < GDP/capita < $12 Th;
- The Third group with $12 Th < GDP/capita < $18 Th;
- The Fourth group with $18 Th < GDP/capita < $24 Th;
- The Fifth group with $24 Th < GDP/capita < $30 Th;

[11] The USA CIA World Factbook, 2002

- The Sixth group with GDP/capita > $30 Th;

At the boundaries of these groups the number of countries in the distribution exhibits very deep falls down that points on existence of different economic mechanisms inherent to different groups. It is obvious that on the boundaries between said groups there exist some thresholds or barriers, preventing them from crossing these barriers. Otherwise, apparent falls in population in the vicinity of these boundaries could be filled.

These falls down are better seen on the distribution of the World Gross Product versus GDP/capita, shown in Figure 2. This diagram was built by summation of GDPs of all countries corresponding to the same interval of the GDP/capita.

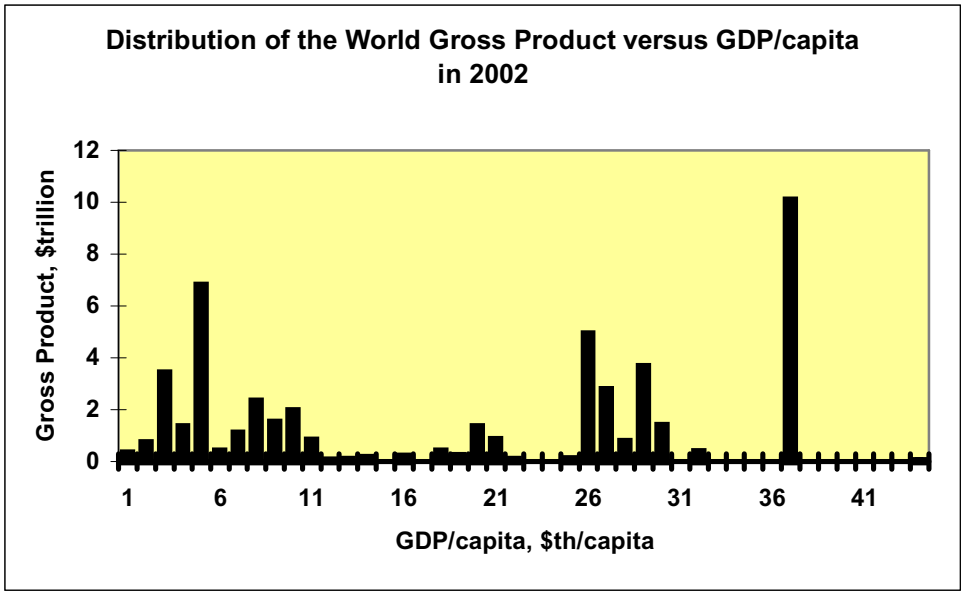


Fig. 2. Distribution of the World Gross Product versus GDP/capita according to the CIA World Factbook, 2002.

Comparing this diagram with the previous one we can see that, in spite of an extra large number of countries with a low GDP/capita level as compared to the number of wealthy countries, an economic role of countries with a high GDP/capita level in the contemporary World is more significant.

The distribution of the World population along the GDP/capita axis provides one more confirmation of the mentioned six groups clustering. This distribution was built by summation of population numbers of all countries falling in the same interval of the GDP/capita and is shown on the Figure 3. The main part of the World population lives in the First group with the lowest GDP/capita level. A huge difference in a life support level between the Sixth and the First groups explains existing tensions between countries and ethnic groups and throws a light on the terrorism nature.

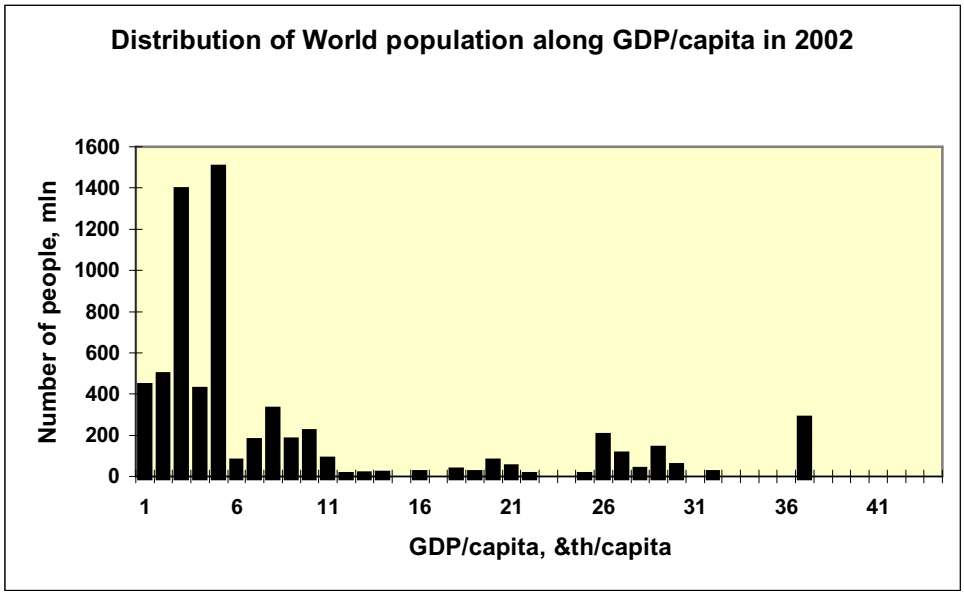


Fig. 3. Distribution of the World Population versus GDP/capita according to the CIA World Factbook, 2002.

All three diagrams, and especially two the last, show that the Third group with a GDP/capita level between 12 and 18 $ thousands is the least populated and economically influential. This group includes such countries as: Slovakia, Hungary, Czech Republic and Taiwan. These countries are in the process of converting into high-tech producers and tend to raise their GDP/capita level to the level of developed European countries.

The large, almost unpopulated, gap between developed and developing countries was explained in the previous author's paper "Sustainable Development and Philosophy of Management" [12] as the action of the "poverty trap", preventing less developed countries from rising their GDP/capita level. A country caught by a poverty trap cannot climb out of it by its own efforts. And with each attempt to jump out of such a trap the country becomes more dependent on the raw materials spending and trade that accelerates depletion of vanishing natural resources.

The majority of underdeveloped countries are stuck in poverty traps because of an extra high population growth rate and low education levels. On the contrary, the populations of Russia or Ukraine are diminishing and the education of their people remains at a competitive World level. What are lacking are managerial and entrepreneurial knowledge, traditions and skills. The former command economy banned any entrepreneurship initiative and required from the economy commanders the skills of uncritical obedience to orders from a higher level.

[12] B. Sedunov. Sustainable Development and Philosophy of Management. Proceedings of the 2001 Conference on Corporate Governance and Social Responsibility. Deakin University, Australia, 2001

I am convinced that without a wide class of entrepreneurs, business persons and modern managers a country cannot be developed. So, management development is of prime importance to improve the quality of life and to save the environment and natural resources for future generations.

## The main features of the First group with GDP/capita level less than $6 Th

A character of the First group can be seen from the list of the largest representatives of this group:

Congo, Tanzania, Ethiopia, Afghanistan, Yemen, Nigeria, Uganda, Sudan, Nepal, Burma, Bangladesh, Ghana, Pakistan, Vietnam, India, Indonesia, Egypt, Morocco, Philippines, Ukraine, China, Peru, Algeria.

Table 2. Gross Domestic Product (GDP) and GDP/capita for countries with GDP > 100 $billions in the First group of countries with GDP/capita less than $6 thousands according to the CIA World Factbook, 2002

| **Country** | **GDP, $bln** | **GDP/capita, $** |
|---|---|---|
| Nigeria | 106 | 840 |
| Bangladesh | 230 | 1750 |
| Pakistan | 299 | 2100 |
| Vietnam | 168 | 2100 |
| India | 2660 | 2540 |
| Indonesia | 687 | 3000 |
| Egypt | 258 | 3700 |
| Morocco | 112 | 3700 |
| Philippines | 335 | 4000 |
| Ukraine | 205 | 4200 |
| China | 6000 | 4600 |
| Peru | 132 | 4800 |
| Algeria | 177 | 5600 |

These countries are from different continents, mainly from Southern Asia and Africa. Their common features are a large proportion of subsistence and even shadow economy and a large proportion of agricultural sector in economic system. Many of listed countries during the last decade made a great progress in their economic development. They have some islands of a modern business and production. But their traditional life style holds them tight in their poverty. It may be stated that the nature of the poverty trap for the First group is in the contradiction

between the traditional life style and modernization preventing from a public adoption of the managerial and business mentality and modern social order. For these countries a wide popular education is a very effective lever to accelerate their modernization.

## The main features of the Second group with the GDP/capita between $6 and $12Th

The list of the largest countries entering this group is shown in the Table 3 together with their GDP and GDP/capita levels. Many of listed here countries are suppliers of raw materials or agricultural products at the World market. They also possess a large proportion of subsistence and shadow economy. Their wellbeing depends on the level of prices for their products at the World market.

Table 3. Gross Domestic Product (GDP) and GDP/capita for countries with GDP > 100 $billions in the Second group of countries with GDP/capita between $6 and $12 thousands according to the CIA World Factbook, 2002

| Country | GDP, $bln | GDP/capita, $ |
|---|---|---|
| Venezuela | 146 | 6100 |
| Colombia | 255 | 6300 |
| Thailand | 410 | 6600 |
| Iran | 456 | 7000 |
| Turkey | 468 | 7000 |
| Brazil | 1340 | 7400 |
| Russia | 1270 | 8800 |
| Mexico | 920 | 9000 |
| South Africa | 412 | 9400 |
| Poland | 368 | 9500 |
| Chile | 153 | 10000 |
| Argentina | 391 | 10200 |
| Saudi Arabia | 241 | 10600 |

The nature of the poverty trap in this group stems from the illusion that export of raw materials and agricultural products may bring prosperity without development of high technologies and from a criminal situation around the ownership rights on deficient natural resources. To overcome the temptation to rely on rich natural resources these countries should possess a realistic strategic vision and express a strong political will.

In this group Thailand and Turkey differ from other countries by an active utilization of renewable resources, such as the tourist resource. These two countries may serve as an example for countries from the First group how to improve own GDP/capita level via better social organization. They are the most likely candidates to enter the Third group.

## The main features of the Third and the Fourth groups with the GDP/capita between $12 and $24Th

As it was mentioned before, the Third group includes countries escaping from the First group by intensive development of high-tech production and improvement of own social order. A beautiful illustration of a reasonable approach to creation of a new social order is given by Fred Harrison in his investigation of the Taiwan land reform. [13]

The genesis of these countries from the First group is based on the fact that they do not possess deficient natural resources to hope on their export. There is no strong barrier between this and the next group. And a very short duration of staying in this intermediate situation explains why there are a few countries in this group. Now, with entering the European Union, the countries from the Eastern Europe posses a favorable opportunity to jump quickly in the next group.

Table 4. Gross Domestic Product (GDP) and GDP/capita for countries with GDP > 100 $billions in the Third group of countries with GDP/capita between $12 and $18 thousands according to the CIA World Factbook for 2002

| **Country** | **GDP, $bln** | **GDP/capita, $** |
|---|---|---|
| Hungary | 135 | 13300 |
| Czech Republic | 156 | 15300 |
| Taiwan | 386 | 17200 |

It took a few decades for many countries in the current Fourth group to perform the transition from a similar with the Third group economic situation. The list of the largest countries entering the Fourth group is shown in the Table 5 together with their GDP and GDP/capita levels. This group also is not very populated and includes the least developed countries of the Western Europe, such as Portugal, Greece, Spain, supported by the European Union, and also supported by the USA Israel and Southern Korea. This help gives a guarantee for supported countries to overcome the gap between them and the more developed countries.

[13] Fred Harrison. Five Lessons for Land Reformers: The Case of Taiwan. *Land&Liberty*, May-June, 1980

Table 5. Gross Domestic Product (GDP) and GDP/capita for countries with GDP > 100 $billions in the Fourth group of countries with GDP/capita between $18 and $24 thousands according to the CIA World Factbook for 2002

| Country | GDP, $bln | GDP/capita, $ |
|---|---|---|
| Portugal | 182 | 18000 |
| Greece | 201 | 19000 |
| Israel | 122 | 19000 |
| Korea South | 931 | 19400 |
| Spain | 828 | 20700 |

Many of these countries also use very actively their renewable tourist resource and possess a wide opportunity to expand more its utilization. They managed to improve own tourist attractiveness in the result of adoption of the civilized social order.

The high-tech production in these countries is based mainly on an effective utilization of scientific and technological achievements of more developed countries, supported by an active involvement in the trans-national corporations' activity. But there still exists a barrier of market competition preventing these countries from easy entrance into the next group. To enter the next group these countries should overcome the barrier of own scientific research and development institutes creation.

## The main features of the Fifth group with the GDP/capita between $24 and $30Th

The list of the largest countries entering this group is shown in the Table 6 together with their GDP and GDP/capita levels.

This group includes the most developed countries of the Western Europe, entering the European Union, and also Singapore, Hong Kong, Australia, Japan and Canada. These countries are basing their economic success on the high-tech production, excellent social order, high managerial and business culture. Many countries, such as United Kingdom, moved to this success gradually improving their social order and technology during centuries. But another, such as Singapore and Hong Kong, abruptly jumped in the social progress, thus disseminating a model of a quick social and technological development among the developing countries.

These countries utilize many scientific and technological achievements of the USA mainly through their involvement into transnational corporations' activity, but with entering the Information Society they strive to develop own science and technology.

Table 6. Gross Domestic Product (GDP) and GDP/capita for countries with GDP > 100 $billions in the Fifth group of countries with GDP/capita between $24 and $30 thousands according to the CIA World Factbook for 2002

| Country | GDP, $bln | GDP/capita, $ |
|---|---|---|
| Singapore | 106 | 24700 |
| Hong Kong | 180 | 25000 |
| Italy | 1438 | 25000 |
| United Kingdom | 1520 | 25300 |
| Sweden | 227 | 25400 |
| France | 1540 | 25700 |
| Finland | 136 | 26200 |
| Germany | 2184 | 26600 |
| Netherlands | 434 | 26900 |
| Australia | 528 | 27000 |
| Austria | 226 | 27700 |
| Japan | 3550 | 28000 |
| Ireland | 111 | 28500 |
| Belgium | 298 | 29000 |
| Denmark | 156 | 29000 |
| Canada | 923 | 29400 |

Some of listed countries possess original scientific and technical achievements in narrow fields, but none of these countries can compete with the USA in a whole complex of science and technology. And it is the main barrier preventing them from reaching the level of the USA economic development.

## The main features of the Sixth group with the GDP/capita over $30Th

The list of all countries entering this group is shown in the Table 7 together with their GDP and GDP/capita levels.

Many of listed here countries utilize favorably different financial mechanisms, such as off shore business for Cayman Islands, hosting world banks for Switzerland or printing the World currency for the USA.

Only Norway should be considered as the most successful representative of the previous group that managed to join favorably its high-tech achievements with an effective utilization of natural resources.

Table 7. Gross Domestic Product (GDP) and GDP/capita for countries in the Sixth group with GDP/capita over $30 thousands according to the CIA World Factbook for 2002

| Country | GDP, $bln | GDP/capita, $ |
|---|---|---|
| Cayman Islands | 1 | 30000 |
| Switzerland | 231 | 31700 |
| Norway | 143 | 31800 |
| San Marino | 1 | 34600 |
| Bermuda | 2 | 34800 |
| United States | 10082 | 36300 |
| Luxembourg | 20 | 44000 |

Certainly, the USA base own economic success on high technologies in a wide area of activities, including industry, agriculture, transportation, health care and military. But the additional growth in the GDP/capita level as compared to the developed countries of Western Europe may be explained only by the USA monopoly on the main scientific and technological achievements and on printing the World currency. And insistent attempts of another developed countries to share the USA role of the World currency keeper seed instability in the current World.

So, a very wide spread of the conditions for living in the contemporary World makes the problem of coming to sustainability extremely complex. To convert this process in a reality we should find a constructive way that requires involvement of the most active force – managers in this movement.

## Management development for sustainable future

I am developing here a dialectic approach to Civilization that means:

**Civilization** is a way to meet constructively all contradictions and challenges, elaborating new mechanisms to regulate new contradictions.

**Modern civilization** can be represented by three overlapping loops of human activity circulation:

- **An economic loop**, consisting of three main units – labor market, cooperative production of products and services, and market.
- **A natural loop**, representing nature coupled with the production unit; natural resources flow for production and waste returns back to nature.

- **A human loop**, representing human society coupled with the labor market; a flow of sources to support the new generation and a return flow of educated individuals from society to the labor market.

**A driving force** activating the whole civilization machine is delivered by nature and particularly by sun energy flow and sun energy accumulation in the earth during preceding millions of years. In society this driving force is transformed into the human reproduction, education, consumer, business, and entertainment activities.

Management is the central agent in human civilization, regulating multiple flows, such as: workforce, goods, services, knowledge, finances, natural resources, wastes.

***Management plays the main organizational role in the whole circulation!***

**The flows regulated by management:**

- Sun energy flow, accumulated by plants, animals, fishes and natural resources;
- Human flow from birth, through education to jobs and retirement;
- Material flow from natural resources through production goods to wastes;
- Finance flow from salary through shops and investments to companies;
- Workforce flow from labor markets to organizations and back;
- Consumer needs flow from market to product development and refinement;
- Community needs flow from society to organizations;
- Legislation flow from governments to organizations and individuals and backwards;
- Services and goods flow from companies to consumers;
- Knowledge flow from sciences to society and then to businesses and industries;
- Innovations flow from companies to markets.

**Management** is an intellectual and practical instrument to decide all contradictory challenges in real time and in the future. At any given time management must be able to adjust its methods to new conditions.

Fridrich A. Hayek has investigated the voluntary cooperation of individuals in different associations and organizations. [14] He showed that the effectiveness of a national economy depends on individuals' ability to voluntary cooperate and to respect unwritten laws and norms. But voluntary cooperation is only the first part of organizational success. The second part is management that acts on organizational synergy and enlarges its effectiveness. The importance of the second factor increased during the last half of the last century. It is interesting to note that Fridrich Hayek even did not notice this factor in the post World War II times -- in spite of great management achievements in the period before the War, such as Ford's innovations.

**A management philosophy of sustainable development**

A growing striving to the sustainable development in the World puts new goals before the management philosophy:

- recognition of the management as the central agent in the human civilization, regulating multiple flows, such as: workforce, natural resources, wastes, finances, goods, services, knowledge,
- new glance at the Human-to-Nature interaction and rethinking of the natural basis of management and its responsibility for a harmonic correlation between the human activity and natural processes,
- a novel approach to management philosophy teaching how to act in a contradictive environment, how to analyze and overcome the contradictions, how to classify the plurality of factors influencing the organization, how to select the key factors of prime importance,
- future management should be not only profit and success oriented, but also should respect emerging values, such as: community and region interests, harmony with Nature, sustainability of the World development, natural and spiritual ecology,
- future managers and leaders should possess a forecasting vision, based on the philosophy of management, supported by the computer technologies to model and visualize complex situations.

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[14] Hayek F.A. ***Individualism and economic order***. Chicago and London: The University of Chicago Press, 1948.

A dialectic interaction of manager's rights to lead an organization with the manager's obligations before stakeholders requires not only an accounting, but also philosophy, to be understood properly and to be projected on future times. But this goal is very complicated because of the dialectical contradiction between the managers orientation towards profits by all means, including the natural resources depletion, and an urgent need to concentrate the managers' forces on the conservation of vanishing natural resources. In the forecasting of harmonic cooperation of two seemingly incompatible activities I see one of goals of the Philosophy.

***Sustainable management***

As management expands its influence from the production domain to societal regulations and the relationships between people and nature, this expansion gives birth to a new discipline – **Sustainable Management** aimed at overcoming the contradictions between:

- a no egoistic, civilized atmosphere inside organizations and their no ethic fight against each other and society while struggling for competitive advantages;
- natural resources overconsumption and their potential exhaustion;
- the current degree of self-satisfaction and a potential threat of an ecological catastrophe for future generations.

**Sustainable management** can be defined as the management that is designed to join together two contradictory orientations towards competitive advantages and community needs. This discipline should teach how to respect the regional and global requirements while enforcing the organization’s competitive advantages and profit orientation.

Now there is a large gap between environmentalists and business persons. But I am sure that the way to the Sustainable future requires joining together both movements: business and environmentalism. Environmentalism itself is not constructive; it needs in business to create the new, more civilized economic infrastructure. And business itself is blind; it can without environmental control poison our Earth. So, we should look for some equilibrium between these forces. And with every step towards the natural resources depletion the environmental control over business activities should become stronger. Though this process is inevitable, but it is better to foresee its inevitability rather than to invent it after the ecological catastrophe. The main feature of a **Sustainable business specialty** is to connect the skills and knowledge useful to make money in a real world with those needed to fulfill the mission of saving the world from multiple disasters. These two approaches are very much in contradiction: by making money one forgets about the world, and working for the preservation of the world, one usually does not

make money. But with the growth of international and regional ecological regulations, this specialty will be more and more respected. In a transitional time, students of the Sustainable Business specialty who possess the practical skills on a wide scientific basis will be able to align themselves with the specific requirements of the world protecting organizations. If these organizations in particular locations were not developed enough to attract graduates, these graduates would instead join existing egoistic companies and wait for better times.

To prepare the managers for municipal, regional and international organizations may appear a Sustainable business administration discipline, which joins together administrative and entrepreneurial skills. International business management would include measures of how to prevent global financial catastrophes.

***Interethnic and Interreligion Relations Management***

To find answers to rising contradictions is one of the greatest challenges for intellectuals and all humans. Meeting this challenge requires a re-examination of morality and religions. There is a general striving common to all religions and ethnic groups – the wish of a better life for present and future generations. It gives the basis to start the development of a new discipline – the **Interethnic and Interreligion Relations Management**. An interreligion and interethnic action influencing people to turn from their concentration on their own pleasures and problems to the more responsible care about future generations is urgently needed.

***New values of the future management***

Management as a central agent of the human civilization influences all its spheres. In the natural sphere management is responsible for the natural resources spending and waste accumulation. In the organizational sphere management joins together individual efforts producing a synergetic effect of a cooperative labor. In the common information space management creates needed knowledge and uses advertisement to increase its own effectiveness. And the highest of all these spheres is the spiritual space, where management can create new emotions, values and hopes. Any talented advertisement acts at the emotional sphere and often does so unconsciously. Collected together emotions give rise to new values implemented also unconsciously. These values can seed new hopes, which are able to change the human behavior.

The spiritual space is the sphere of human emotions, values and hopes subject to different influences including those that stem from management. Not any influence should be considered as wanted and permitted. The humankind knows the disastrous role of many bad influences on the spiritual space. For example, alcohol, smoking, drugs, crime, gambling, swindle and so on propaganda. Therefore, in parallel with natural ecology should be launched the spiritual ecology,

preventing bad influences on the human spiritual space. Spiritual ecology can be determined as the complex of preventive measures to protect the human spiritual space from different disastrous influences. Spiritual ecology is of prime importance when we consider our children and future generations.

Considering the future perspectives of the sustainable management development, we are touching on the basis of the existing management – an aggressive promotion of products and services by means of the inventive advertisement. Here again we could use the traffic regulation model, introducing the spiritual space as the field and the **Spiritual ecology** as the object of regulation.

The electors' pressure on their governments should stop the overconsumption propaganda, launching in parallel with natural ecology goals the spiritual ecology requirements. For example, the requirement of not overfilling the personal emotions with uniquely material needs, or not to repeat constantly the annoying advertisement, or not to spread violence and crime propaganda on TV. And this dialogue should start from a common set of values such as the urgent need in preventing from the irreversible changes. For future generations need a common set of moral values and religion as a starting point but this model requires overcoming national egoism.

**The sustainable management values can be expressed as:**

- the balance between the competitive companies creativity and the community needs, supported by the corresponding regulating organizations,
- the prevention of financial crises and military actions and preparations,
- the openness of the bureaucratic control organizations to the public inspection,
- the respect of the future generations expressed in the pricing policy of deficient natural resources and in saving the natural beauty and diversity,
- overcoming the hypocrisy in interethnic and interreligious relations,
- open dialog on the most essential global challenges, including the population growth rate control, the adoption of common values shared by all religions – the wish of a better future for a current and future generations,
- the protection of the natural and spiritual ecology,
- the promotion of the intellectual and spiritual values instead of the material overconsumption.

**A new leader** of the organization to be understood by his personnel should join the company's profitability with the environmental protection goals. It results from the fact that many employees spend one part of their lives as members of a company, but another, equally important part, as members of a community. For this person, the profitability of the company is of the same importance as the community and regional environmental perfection. With the growing interest of the population in the needs of future generations, leaders should reorient their goals in the corresponding direction. The talent of the leader depends on his or her skill to meet mutually contradictory challenges facing the companies' successes and to the creation of a civilized environment.

## Conclusion

Countries, communities and regions need their own leaders, capable to improve the environment while at the same time supporting local business activities. Movement to the sustainable future is impossible without an active involvement of the business people and managers. So, the challenging task before sustainable business administrators is to inspire local businesses movement towards sustainability. Facing the approaching ecological catastrophe the world needs leaders who can express a global mentality and quick and decisive actions to save the Earth.

The start of a new global mentality necessitates the correspondence of viewpoints of at least a small group of thinking people that can foresee the sustainable future. A new comprehensive worldview opening the perspectives of evolution can be implemented only after this small group agrees that a common body of a new knowledge exists and is ready for dissemination. The model proposed here including current and future contradictions helps to shape the role of management in coming to sustainable future and to predict the emergence of new paradigms of management for sustainable society.

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