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ZDENA ROSICKA

**Mendel University in Brno, Faculty of Forestry and Wood Technology, Department of Forest and Wood Products
Economics and Policy, Czech Republic**

HANA SLOVÁČKOVÁ

**Mendel University in Brno, Faculty of Forestry and Wood Technology, Department of Forest and Wood Products
Economics and Policy, Czech Republic**

VÁCLAV KUPČÁK

**Mendel University in Brno, Faculty of Forestry and Wood Technology, Department of Forest and Wood Products
Economics and Policy, Czech Republic**

CAN WE WEIGH THE INTERESTS OF FUTURE GENERATIONS?

Abstract:

Human development and sustainability are essential components of contemporary life. Each generation should take its chances and use resources without creating ecological debts by overexploiting capacity of the Earth. We always have to keep in mind the obligation to do at least as much for our successor generation as our predecessors did for us. The effect of environment on humans has both temporary and long-time affects: cultural, natural and industrial heritage preservation is an important component of sensitive equilibrium between economic, social and cultural development. Human resource departments should be able to follow requirements for qualified trained experts for both public and private sectors covering professions able to manage preserving, protecting, presenting, introducing, and improving values of sustainable, healthy and safe surrounding environment.

Keywords:

human resources, training, disaster management, environmental values, cultural heritage

JEL Classification: O15, M53, Q54

1 Introduction

The pattern of sustainable human development values human life for itself. It neither values life just because people are able to produce material goods nor does it value one person's life more than another's. Development should enable all individuals to enlarge their human capabilities to the best use in all different fields, i.e., social, economic, cultural and political.

Human development and sustainability are essential components of the ethic of life demands in general. Development means sharing opportunities between present and future generations. Equity must be available not only in opportunities and in chances offered but also in final achievements. Each generation can use these opportunities, it is a matter of its own choice, and however, there must be a choice, both now and in the future. The European Union Forestry strategy declares the fact that forestry has to be established on three equal columns: ecological, economic, social and cultural so that functions for sustainable development of the society could be ensured. The ecological function consists in preserving and improving biological diversity, integrity, health and resistance of forest ecosystems when considering landscape and global changes. Strategic goals of economic functions cover long-term improvement of forestry competitiveness and increased use of forestry products, goods and services. Social functions strategies are targeted at preserving and improving social and cultural attributes of forests and forestry, i.e. the attention is paid to cultural heritage and landscape, quality of life, recreational functions, etc.(Kupčák, Šmída 2008)

Forests, nature, landscape and cultural/industrial heritage in Central Europe, particularly in the Czech Republic are unique, priceless and non-renewable. Many people as well professionals do not often realize where and what need to protect and not to expand building plots and arable land; therefore, it is the high time to encourage introducing the beauty of "green world" and history to the public and teach both experts and visitors what should be valued in order to avoid irretrievable losses.

The effect of environment on humans has both temporary and long-time affects; long-term exposure can cause lifelong fixation relationship or feeling. People perceive cultural dimensions of space, monuments and green zones intentionally; these are cultural symbols, architectural objects, symbols, shapes, and colours typical for the territory, rural areas and landscape.

Improving and preserving social and cultural attributes of surrounding undamaged world for the population is closely related to frequent disaster losses caused by weather-related hazards; unfortunately, they have been increasing in frequency, duration, extent and consequences. By 2050, in a business-as-usual scenario, there could be nearly fivefold increase in economic losses due to flood risk attributable to heavy rainfall, climate change and human behaviour.

Production and protection are considered the cornerstones of sustainability as well as fundamental attributes of forestry and land-use systems. Economists use various techniques to estimate different kinds of values: major decisions on resource use should also consider the value of leaving the undamaged areas for future generations, which economists identify as bequest value. Existence and bequest values are essential to environmental decision-making; however, they are difficult to be a part of a monetary system.

Experienced and skilled human resource officers are in great demand nowadays. By examining environmental threats, cost-effectiveness and productivity, job analysis, personal planning, municipality departments' demands, cultural/natural heritage preservation, multipurpose specialized training and development, human resource departments are responsible for implementing policies dealing with effective use of staff in an organization. Since the current education cannot offer narrowly specialized experts, both private and public organizations are vitally concerned with productivity and cost-effectiveness in managing human resources.

2 Secure and sustainable society: reality or future?

The concern of security has for too long been interpreted narrowly or linked only to national, state or territory security. It has been more related to the state than to people. Legitimate concern of ordinary people is sometimes forgotten but people seek security in their daily lives. Human security is not a concern with weapons – it is a concern with human life and dignity. Human security is better ensured through early prevention rather than late intervention and it is always people centred. Threats to human security are also to be understood generally, e.g., unchecked population growth without development opportunities frequently followed by illegal migration, which puts enormous pressure on resources and people. To face challenges of human security, various policies can be proposed, such as the development of early warning systems and indicators indexing the levels of security or lack of specific components of human security, i.e., economic, food, health, environmental, personal, community and political security.

Mankind has been interested in human development from beginning to everlasting end. The traces of human development have been found in religions and cultures: similar ideas can also be found in writings of Aristotle, Francois Quesnay, Antoine Lavoisier, Robert Malthus or Adam Smith. At early periods, the central concept of development was dealing with income and its growth and the concern of development became the quality of people's life. In later decades, social sciences became concern more with economy rather than with society and opportunities for people: unfortunately, they concentrated more on material success such as per capita GNP and humanity was often regarded as an instrument of production. It is true that human beings enjoy being wealthy but they

also want to enjoy healthy and long lives, safe homes, clean environment, and opportunity to get knowledge.

Sustainable human development means that we have the obligation to do at least as much for our successor generation as our predecessors did for us: resources should be used in ways that do not create ecological debts by overexploiting capacity of the Earth. Sustainability has to be ensured in all sectors of the economy and at all levels of developmental action: it calls for changes in global and national policies.

Human security is people-centered and it can be said to have two main aspects:

- safety from threats such as disease, hunger and repression,
- protection from sudden and disastrous disruptions of daily life.

Human security cannot be equated with human development as human development is understood as a process of widening the range of people's choices. Nevertheless, there is a link between human security and human development: progress in one area supports the changes in other and vice versa: failure in one increases the risk of failure in the other as it had already been proved in the history. When people realize threats to their immediate security, they often become less tolerant and situation can lead to violence. The concept of human security stresses that people are able to care of themselves, they have the opportunity to meet essential needs, earn their living, feel free and have chances to their own development inside their communities (Alkire, 2002).

The concept of security has changed in two crucial aspects:

- from security through weapons to security through sustainable human development,
- from stress on territorial security to a greater stress on people's security.

Threats to human security can be categorized into further areas:

- economic security,
- personal security,
- health security,
- food security,
- environmental security,
- community security,
- political security.

Human beings rely on healthy physical environment and assume that any damage inflicted on the Earth is able to recover. Many environmental threats are long-lasting, such as air pollution, lost of forest land, deforestation and further droughts and floods, lack of access to clean and potable water, disasters and sometimes inability to cope with emergencies, increasing exposure to natural hazards. Threats within countries frequently spill beyond national borders; frustration over inequality takes form of religious fundamentalism or terrorism, displacement of population, uncontrolled migration, etc. In absence of official statistics on violence and human rights abuses around the world, there is a need for comprehensive annual reports that would track trends in these human security issues.

3 Planning is easier than managing a disaster

When we look around the world in the last few decades, we can remember numerous occasions where many people have been killed or injured, hundreds of historical buildings, architectural monuments damaged or bombed, thousands of hectares of forests burned, and negative effects have never been eliminated: chemical poisoning at Indian Bhopal, Armenian earthquake, floods in Japan, etc. Some other cases are not so dramatic, however, they occur more often or sometimes are chronic and we call them environmental or ecological. Air pollution is typical not only for faraway Mexico City: people in Silesian Ostrava suffer from poisonous smog several times a year. Toxic waste and contaminated groundwater, frequent drought periods and wildfires accompany our lives almost periodically.

It is obvious that planning is much easier than managing an actual disaster. Results of various studies show that preparedness phase is better developed than the response patterns: "What is puzzling is that after years of research focused on organizational behaviour in emergencies, local government continues to be surprised when standard procedures in lengthy, detailed plans are irrelevant in the real disaster" (Quarantelli, 1993). Nowadays, there is more sophisticated approach to issues associated with disasters, e.g., there is growing recognition that planning is not managing. The former has to do with strategy and overall approach to disasters, the latter, more or less tactics, has to do with specific contingencies, which are dealt within an actual disaster situation.

In fact, all disasters are always primarily the results of human actions. A disaster is not a physical happening; it is a social occasion. Thus, it is misnomer to talk about natural disasters as if they could exist outside of the actions and decisions of human beings and societies. For instance, floods, earthquakes, volcanic eruptions, tsunamis and other so-called "natural" disaster agents have social consequences only because of the pre-, trans-, and post-impact activities of individuals and communities. For example, allowing high density population 13-fold concentrations in flood plains, having poor or unenforced earthquake building codes for structures, delaying evacuation from volcanic slopes, providing inadequate information or warnings about tsunamis, are far more important than the disaster agent itself in creating the casualties, property and economic losses, psychological stresses, and disruptions of everyday routines that are the essence of disasters. In one sense, there never is a natural disaster; at most, there is a conjuncture of certain physical happenings and certain social happenings. Without the latter, the former, i.e., the so called "triggering events" have no social significance (Wijkman and Timberlake, 1984). In fact, a physical triggering event can totally be absent and there can still be a disaster in the social sense as can be seen in the behavioural responses to threats or false alarms of tsunamis or floods. There can be evacuation and disruption of community life. The forests that burned in past were not disasters in that had no social consequences; only those that have the latter today are disasters. This line of reasoning

is that we should think of all disasters, natural agent based or otherwise, as social occasions (Quarantelli, 1986).

Technical accidents, disasters or any emergency usually focus the eyes of the world on the ever-present risk surrounding significant cultural heritage. The power of the latest media is able to draw inhabitants in all parts of the world into a human drama being played on the site. We are ready to offer and give the money, time and energy in order to encourage measures to repair the damage and improve prevention to avoid future loss. We respond to tragedies when they occur, however, we are reluctant to commit resources to improved preparation. In addition, emergency preparedness officials, formerly reluctant to accord priority to protecting cultural heritage in the face of threats to life, property and the environment, now recognize cultural heritage as a reflection of the past lives, as extension to efforts to safe present lives (Rosická, 2007).

4 Disasters in the history

In prehistory, disasters were primarily seen as the result of astrological or supernatural forces. This is illustrated by the fact that the word *disaster* etymologically entered the English language from a word in French – *desastre* – that in turn is a derivation from Latin words *dis*, *astro*, which combined roughly meant *formed on a star*. In its early usage, the word had reference to unfavourable or negative effects, resulting from a star or a planet.

In time, the word disaster was applied more to a major physical disturbance such as earthquakes and floods or what was known as supernatural actions. With the development of secularism, particularly in Western Europe and accompanying development of science, a different perception of the source of disasters appeared and the Acts of Nature's responsibility was shifted from the scare to a secular view of phenomena.

The shift to a focus on Acts of Nature set the stage for an even more drastic shift in perception. As Voltaire said about the large casualties and losses in the 1755 Lisbon earthquake, it should not be perceived as God will but as resulting from building without heed in a seismic zone in Portugal (Dynes, 1994). However, another and different view of the source of disasters appeared: disasters resulted from Act of Men and Women and disasters were seen as resulting from inappropriate actions of human beings. The assumption was that these kinds of disasters could be prevented and their negative effects mitigated or reduced. Since this view spread, it spilled over as a possibility for all kinds of disasters.

The view developed among scholars and researchers on the topic that disasters result directly and indirectly from the actions caused by human beings. If people are living in unprotected flood zones, in non-earthquake protected proof buildings in known seismic

zones, or close chemical plants, they are creating the necessary conditions for a hazard to generate a disaster.

The earliest systematic but limited human efforts to try to cope with some disasters were generated by frequent fires and floods. Fires resulted in creating and developing fire departments, floods evoked certain kinds of specific engineering efforts. Neither of these two kinds of agent-specific social reactions constituted any kind of social invention to develop protection system generally.

The Romans were probably the first in creating organized groups to fight fires: those were known as Familia Publica and were composed of slaves; therefore, they were very slow and inefficient to respond. When a fire in 6 A.D. burned almost a quarter of Rome, the Emperor Augustus abolished them and created the Corps of Vigiles that consisted of full time and trained personnel and were fitted with specialized equipment. They were first professional fire services in the world and expanded from Rome into the rest of Europe. Unfortunately, those services slowly disintegrated with the decline of the Roman Empire. In 13th century England, building regulations started to appear aimed at reducing the threat of fires along with the later appearance of fire insurance. Nevertheless, the Great Fire in 1666 London which left 200,000 homeless and burned out the heart of the city, led to a massive reorganization of the fire services in the city. Later arrangement became the model for the structures and functions that fire departments have in most places of the world today.

In terms of floods, there have been numerous efforts to prevent or reduce their effects that go deep into the prehistory of the human mankind: the ancient Egyptians and Chinese made major attempts to control recurrent floods. In Egypt in the 20th century B.C., Amenemher II completed southwest of Cairo what is history's first substantial river control project, the irrigation canal and a dam. There are stories that a Chinese emperor 23 centuries B.C. deepened the flooding Yellow River by massive dredging. Nevertheless, historical accounts report that dams for flood control purposes were built as far back as 2,600 B.C. in Egypt and in 1260 B.C. in Greece. Although engineering efforts to cope with floods have been a function of many societies in the ages none directly led to the evolution of any long lasting organization dealing with disasters in general.

5 Risk, hazard prevention and expert teams

Cultural, natural and industrial heritage property is permanently at risk in the face of nature's occasional eruptions and irruptions, from economic and political pressures, from daily forces of slow decay and deterioration, undesirable human behaviour and neglect. We are able to deal with a catastrophe and its consequences without having to set human lives against the value of priceless heritage: lives and cultural attributes are linked and both are parts of the indivisible whole. There are however, significant differences between heritage items such as archaeological sites, cultural landscapes, afforested

protected areas, historic urban arrangements, protected industrial complexes, architectural works, monumental sculptures, cave dwellings, etc. Nevertheless, regular inspections have to be carried out regardless the type on an “object”.

In recent years, there is a tendency in hazard prevention to withdraw from rigidly defined security requirements and focus on solutions based on the results of risk evaluation conducted for a particular object or an area (Hošková-Mayerová, 2016). Such an approach allows for optimum effects, i.e., ensures security at reasonable costs. Under procedures, instructions and plans prepared for a particular circumstance, it is necessary to conduct hazard analyses and use the results to apply appropriate technical and security measures.

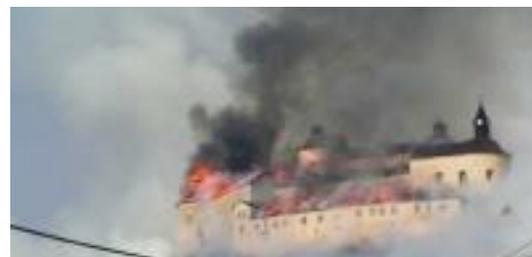
A source of particular concern is still high number of fires caused by deliberate actions, often to cover up prior robbery or other crime. Unfortunately, there are numerous cases when inadequate protection can be classified as negligence. These are, in particular, no periodic tests of technical devices, hoses, installations, sprinklers, lack of personnel’s knowledge of fire protection instructions, lack of improper operation of extinguishing equipment, unreliable communication means, irregular preventive supervision, poor staff training, frequent use of naked flames, blow-lamps, etc. In some circumstances, in order to ensure safe and adequate means of escape, physical measures to extinguish the fire and to reduce the rate of its spread may prove helpful: such provisions should include enclosure of staircase compartments, positive air pressure systems to prevent smoke and flame penetration, installation of automatic smoke vents and hatches, fire-resisting doors with self-closers, barriers should be constructed in undivided spaces, etc. The latest fast response sprinkle systems based on zone signalling can be installed without reducing the visual impact of such systems to the special interest of the historic buildings, Attic and roof spaces, spires and towers can provide suitably appropriate locations for installations of holding tanks or visually intrusive components inside buildings.

Everybody can still remember consequences of human negligence, which had caused irreparable damage to Krásná Horka (2012), a large gothic castle in eastern Slovakia. Two 11 and 12 aged boys were trying to light up a cigarette, set grass at the castle hill on fire and the castle subsequently caught fire (see Fig. 1 and 2).

Figure 1: Krásna Horka before the fire



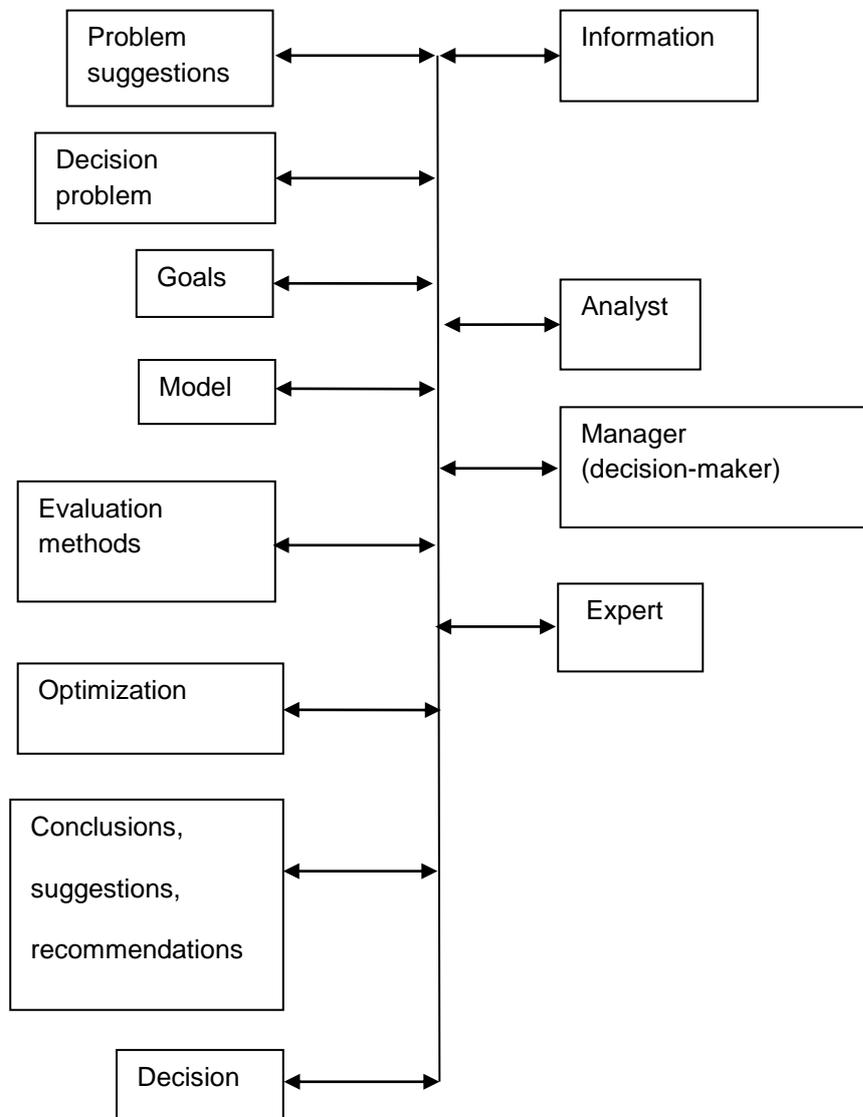
Figure 2: Krásna Horka after damage



Source: <http://www.slovakia.com/castles/krasna-horka/>

Talking about the public administration transparency, the public should know particular decision-making procedures related to emergency planning, disaster prevention policy, threats to life, property and environment, etc. Experts can generate ideas, suggestions or variants that are solved afterwards, assess and select given or existing alternatives.

Figure 3: Segments of decision-making system



Source: Rosická (2008)

Figure 3 presents a simplified chart with two-way links between the segments. The system is framed in initial information and ideas at the input section and decisions at the output. It is a time-varying system with interactive and iteration procedures. Pair hierarchy of individual steps is evident and the cycling can be arranged at creating solutions themselves. General conclusion cannot be accomplished; every step is of high importance, at decision-making those are sometimes “filled” subconsciously.

Cultural, natural and industrial heritage preservation is an important component of sensitive equilibrium between social, economic and cultural development. Every “herit “ is often exposed to the threats of demolition, alteration and burglary; however, it is an invaluable asset when properly maintained, preserved and protected: it brings benefits to local communities, employment, improved living conditions and unforgettable genius loci. Unique architectural, industrial and natural assemblages, parks and open space could offer new preservation, protection and prevention approach based on reasonable cooperation between public and private sectors in order to keep unique sites phenomena, functional diversity and variety. Residents’ attitudes towards ‘their’ environment are very important as well as considering their opinion.

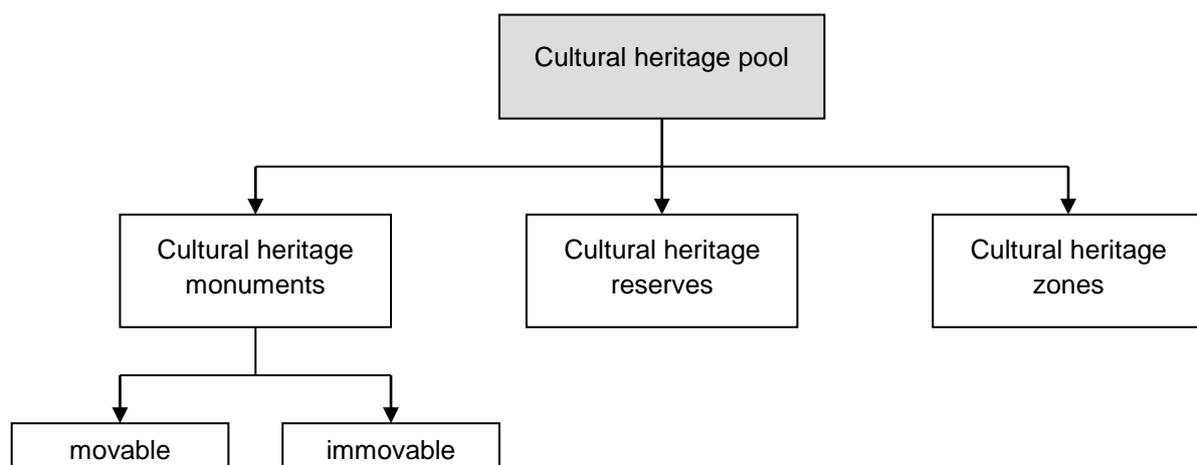
6 Emergency evacuation planning

Considering variety of emergencies and crisis situations, which had threatened and destroyed valuable historic items (1,300,000 volumes in the Florence National Library were damaged in the great flood in 1996; 400,000 volumes were destroyed and 3.6 were water damaged in the fire at the National Academy of Sciences in Petersburg in 1988; vast floods in 1996 damaged millions of pages of archived documents in the Czech Republic), evacuation may be considered one of possible ways how collections and valuable items can be protected.

Promptness and effectiveness of evacuation procedure requires from involved responsible individuals to use available means in order to save and salvage maximum items with minimum strength and means.

Cultural heritage pool (Fig. 4) covers movable and immovable items promulgated as national heritage monuments, cultural heritage reserves and cultural heritage zones.

Figure 4: Cultural heritage pool structure



Source: Rosická, Tomek (2007)

Cultural heritage monuments protection problems in the Czech and Slovak Republics are dated back to the 50ies of the 19th century; those are related to the so-called Vienna cultural heritage school. After WWII, the activities were continued by the Department of Cultural heritage protection of the Ministry of Education and National Edification and in 1951 the Ancient Monuments Department was established. The Czech Republic follows the ICOMOS documents legislation as well as Czech legislation and directives in force, in particular the heritage law effective from 1/1/1988 and the draft law on the protection of heritage fund, approved by the Government on 20 November 2015.

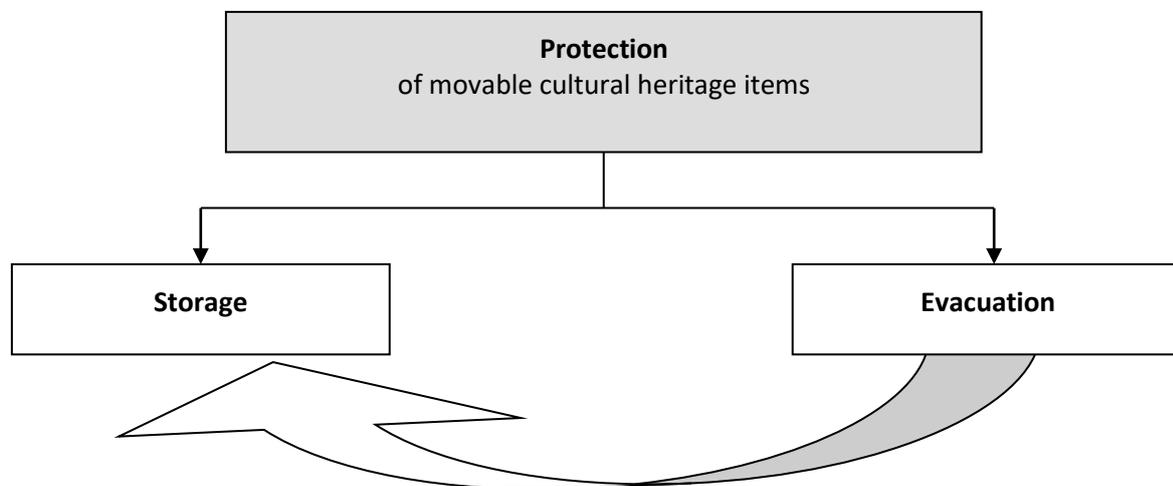
Cultural heritage evacuation, which follows the evacuation of the population, can be classified as a significant measure to save movable cultural heritage. Protection of movable cultural heritage has to be arranged in close co-operation of authorities as follows:

- state administration authorities,
- municipal authorities,
- owner (state, church, physical and juridical entities) (Kyselák, 2005)

Movable cultural heritage item can be relocated (Fig. 5) without a decision of state administration body:

- in case it is immediately threatened by damage or destruction,
- an emergency occurs,
- at the time of war or state of war.

Figure 5: Methods of saving movable cultural heritage



Source: Rosická, Tomek (2007)

A 'Plan for movable cultural heritage evacuation' is a prerequisite of good, organized and safely accomplished evacuation of movable heritage. The plan should be properly worked out and include competent assessment of all questions related to evacuation problem, applicable to ever movable cultural heritage.

Considering logistic support, there have to be solved possible problems as follows:

- to determine in advance the place for further location,
- to work out and keep instructions how to manage and handle safely particular items, tools and other technical means,
- methods of handling inside a threatened building,
- methods, how evacuated items are removed out of the building and loaded on and into prepared means of transport,
- methods and routes of transport,
- first aid help provision at injuries,
- location of the staff in relocation place where cultural heritage items are stored (accommodation, food),
- methods and routes of transport;
- professional training (theoretical and practical for those who are to control and provide cultural heritage evacuation.
- to provide personal protection clothing and equipment.

Regardless the method applied, movable cultural heritage items should not be during evacuation deteriorated, damaged or stolen. Each item has to be considered specifically because of its particular characteristics (value, age method of handling) and specificities of particular new storage location, such as storey, illumination, humidity, temperature (Rosická, Beneš, Fleissig, 2008). The main objective is to specify critical issues, which are a part of emergency response plans and what activities should be accomplished before the emergency occurs, after “surviving” and during recovery and reconstruction periods.

Resulting from the crisis situation, the staff itself as well as fire rescue brigade can participate in the cultural heritage evacuation (flood, fire). Volunteers can also be engaged if they are at that time inside a threatened building or nearby.

7 Be prepared for animal evacuation

The purpose of the Act No 246/1992 Collection of Laws of the Czech Republic covers protecting animals which are living beings against cruelty, damage to their health and killing without any reason if caused by man, even if by negligence. The act defines the activities which are considered to constitute cruelty to animals; it regulates the cruelty killing, the protection of animals at a public performance, the protection of animals during transport, which becomes urgent particularly in emergencies. The preamble to this Act specifies as follows: “Animals, like humans, are living beings and are capable of experiencing various degrees of pain and suffering, and hence they deserve attention and protection of man”. The Act also defines the animal protection authorities and their sphere of competence as well as administrative delicts and infractions in the field of animal protection. As an EU Member State the Czech Republic is also obliged, in the

framework of direct protection of animals, to comply with some more EU regulations. Detailed list of Acts, Regulations and Decrees dealing with animal protection programme, protection of pet and wild animals, transport of animals, protection of experimental animals, etc. can be found in the Information Bulletin No. 4/2009 of the State Veterinary Administration of the Czech Republic.

Birds, rabbits, cats, dogs, snakes and other pets as well as horses or bigger animals accompany some of us regularly on holiday wherever we travel, the other wait for our return. Caring for pets or other animals is a big responsibility and various requirements should be followed: sleeping habits, day and night routine, behavioral needs, medical care, exercising, walking, bathing, food or special diets. Sometimes, when being on holiday and pets remain at home, we have to make them feel comfortable using either friends or family or pet-sitting services. Before arranging our holidays, we have a lot of time to compare services of various facilities and we are able to find the best fitting service for a particular animal.

An emergency can happen anytime, regardless the season of the year, time of the day; it comes and strikes, usually without any warning. Houses can be built again, possessions can be replaced but animals, livestock and pets cannot. Therefore we should be prepared for pets' and animals' needs and think of them when evacuation plans are processed. In the Czech Republic those are particularly floods (Fig. 6), which cause most harm and damage and often result in human and living beings tragedies.

Figure 6: Water smashed kennels and other animal shelters



Source: Rosická (1985)

Keeping in mind and following several steps we are able to ensure that animals will be protected and treated adequately in case any emergency occurs. An evacuation plan incorporating animals should be in place because chaos and fear are usually accompanying factors; animals behave differently from their typical behavioural patterns and sometimes it is very complicated to control them, locate and save.

A disaster comes and we have to respond and act almost immediately; evacuation plan prepared in advance might be very useful to stop panic and encourages us to follow logical steps. There are several factors that should always be seriously considered. Micro chipped animals and pets are easier to find if a microchip contains sufficient information including a mobile phone number. Our pets should be clearly identified including a municipality registration tag (for example a dog municipality database can help to reunite us with lost dogs). In an emergency, if animals can smell smoke and a disaster approaching, they try to escape despite strict training and they are not willing to listen to us at all. We should specify where our pets will be evacuated and temporarily accommodated; we can relocate animals early rather than under time pressure and risking their safety (Rosická, 2010).

Emergency kit for animals should also be packed in advance: animals have to be kept safe, fed and warm during relocating and being temporarily accommodated. Registration document, vaccination documents, medication, safe cage, carrier, crate, blankets, nesting material, contact details for a vet, adapted vehicle, food, water, recent photos, etc., should be a part of every kit. Large water flooded in August 2002 almost a half of a Prague zoo in Troja district. When the water level culminated, at some places in the zoo the water level was more than 10 meters above the ground. Zoo employees succeeded in evacuating 1,029 animals. Unfortunately, it was not possible to save all; a total of 134 animals did not survive the flood. The public could see in the garden meaning and the tragedy has been “exploited” and the garden has been gradually rebuilt to the best of the 21st century zoo.

Having arrived at a planned destination where animals are to be temporarily relocated, we should check and ensure they are not neglected or ignored when we are away. They may feel confused being in a new place and therefore require more attention than usual. Fences, gates and other possible escape routes should be foreseen and checked; all the time should be considered the animals are left in a new environment and they might try to do their best to escape. We must always know and be sure they are secured and properly supervised.

7 Professionals are ready for emergency situations

Rescue activities and emergencies create situations causing physical, physiological and mental load and strain. Unfavourable factors affecting psychic activities of a human being have to be fully or partially excluded or minimized. Therefore, psychological preparation is

based on intentional creating stressful situations causing troubles and forcing trainees to respond adequately: they have to master extreme long-term load, fear, fatigue, inadequate demands within chaotic disorganized environment to comply with stress situations they have to face when dealing with emergencies.

Table 1: Complying with stress situations

Causes of physical load	Type of load	Psychic situations favourable for situation solution; possible expected response	Psychological components applicable to activating required load
<ul style="list-style-type: none"> -huge amount of new unauthenticated information -new activity within new environment -high demand on trainees 	<ul style="list-style-type: none"> Excessive demands intensity abruptness frustration 	<ul style="list-style-type: none"> -fatigue -chaos -fear -self-irony -stress -self-aggression and towards technique 	<ul style="list-style-type: none"> -intensity -disturbance
<ul style="list-style-type: none"> -increased threat at passing obstacles -requirement to manager goals never exercised before -excessive noise -long-term physical and psychic load -challenging monitoring and poor visibility 	<ul style="list-style-type: none"> Excessive and inadequate demands stressful situations threat abruptness 	<ul style="list-style-type: none"> -fatigue -stress -fear -conflict -problem -chaos 	<ul style="list-style-type: none"> -intensity -activity -creative approach -threat -decision-making

Source: Own adjustment based on Rosická (2006)

Good-quality and conscientiously prepared, organized and arranged practical training brings about a good basis for psychological preparation of trainees and becomes closer to realistic and probable situations. Psychological preparation training can take advantage of simulation training methods, situation-training methods, verbal-activation method, and relaxation-activation method as well as dynamic regulation of collective relations approach.

Psychological preparation performance and active introducing risk and danger components training require precise organization and following safety measures specified in relevant directives, regulations and followed by those participating in the training itself.

Danger and risk make possible to overcome undesirable emotional situations, first of all fear, anxiety, doubt and uncertainty (changing the place by night within lightless territory, passing man-made obstacles, water streams...). However, strict observing safety measures must not lead to denying challenging, risky and dangerous situations; it must be able to anticipate and exclude accident and emergencies.

8 Municipalities and local authorities

Planning is a science and its objectives are to be achieved and are situated in the future. Cultural heritage, however, is essentially the shared memory and it belongs to the past. Therefore, it is particularly important, what heritage policy criteria are applied to sensitive characteristics of every place and its inhabitants; in addition, what approach to the problems of town planning should be selected: purely quantitative, normative, economical, social or multidisciplinary.

Open borders after 1989 did not attract the expected number of foreign tourists to small picturesque towns. Municipalities in small towns know local situation and they have tools to handle the process efficiently. There are not too many members in municipality councils and they are usually able to find a consensus when discussing economical and touristic development topics. Small countryside centres are usually very cosy and compact and therefore it is necessary to investigate the potential to develop tourism there. Constructing new hotels is money consuming, and besides, they hardly fit the old development; tourist would use them up for one-two seasons a year, however, all-year maintenance is costly. On the other hand, there are homeowners and they can offer accommodation in a historic house, close the square, near the castle, in a former vicarage, wine cellar, or inside a barn.

Increasing share of tourism in gross domestic product calls for engaging local “cultural goods” into the economic process; there are required qualified experts in the field of arts, diverse cultural fields and economy knowledge being a part of municipalities, and, conversely, managers should not miss the deeper expertise in issues covering the importance of cultural resources for economic recovery.

Changes or modifications of the existing historic buildings are often hot issues, therefore local authorities prepare special guidelines to be followed; house-owners’ requirements in terms of dwelling space, illumination and sanitary components are usually not fully or sometimes partially incompatible with arrangement of old houses. City planners, municipality representatives, heritage protectors as well as public representatives have to try to find the same language how cultural heritage could be used smartly in contemporary conditions. They can learn abroad, arrange knowledge exchange with partner towns and villages; south-Moravia cross-border cooperation is targeted at shared wine cellar culture tours, and Vysočina (Highland) region has been attractive for the Dutch tourists exchange for many years.

The Czech Republic is a highly attractive tourist destination for foreign tourists. Tourism encompasses a broad spectrum of activities, utilizing the cultural, technical and natural attractions. It can help regions to support greater profitability of very small businesses; at the same time it makes regions more competitive and more sustainable, because the staff and management should better understand the problems of the sector and the level of skill is higher as well. However, tourism, especially for its dynamic growth, has inevitably to adopt a strategy and the principles of sustainable development to prevent disproportionate burden on the environment, which might lead to self-destruction.

A key element of any tourism strategy must be the promotion and marketing of tourism products and destinations as well as a whole. Even the most impressive attraction will fail without proper promotion; this is especially true for those destinations that are trying to attract more specialized markets, such as technically oriented public, secondary school students, children, and senior population segment. Cultural tourism is becoming a priority in the agenda of international organizations such as UN, UNESCO, Council of Europe, etc. It also belongs to the major themes of the negotiations and accompanying symposia of the International Council on Monuments and Sites (ICOMOS).

The Czech Republic offers the industrial heritage as an inseparable part of cultural wealth. It represents preserved examples of industrial production activities, scientific and research experience from long history of industries dated back to Austria-Hungarian times; this type of heritage has to be preserved and protected for further sustainable use and understanding by future generations. Variable routes of industrial heritage, the network of industrial facilities, which are not in regular use any longer, are able to follow requirements of the European ERIH project promoting industrial history, which can be presented, studied explored and extend the range of tourism destinations contributing to sustainable interdisciplinary education. The town of Kutná Hora is one of examples how the incentive tourism destination can bring money to a municipality budget.

A picturesque small town has a big past. In the 13th century, silver was discovered here and a few decades later the royal mint was established. The town became famous for producing the Prague Groschen coins, which were also used elsewhere in Europe at the time. Having read comments on the Internet, you start being inquisitive what is ahead. Both teens and families or adults appreciate one or both tours offered: a tour of the abandoned silver mines and a tour of the museum. The Silver Mine Tour can bring us to tight spaces with a wet trek through narrow galleries. Everybody is given a helmet with a flashlight and a white miner's overalls with drawstrings around the waist. In the middle of the tour, after a short story, visitors are asked to switch off miners' lamps on the helmets and everybody occurs a few minutes in absolute darkness. Warnings from the guide might cause some fear but you do not have to worry – these mines have been there for hundreds of years.

What makes such tours in a comparatively small town attractive and popular? Having conducted an expertise, evaluated simple questionnaires filled in by visitors, positive as

well as critical comments on trip advisor servers, and discussing the experiences with tour participants, the museum management is able to encourage promotion campaign, tailor multiple variants of tours and the guides are ready to welcome visitors from abroad and offer quality language-prepared information and not only paper brochures. Enthusiastic staff who is willing to help and open to criticism, customer care and hospitality, communication skills, quality, sustainability, relevant information technology applied, deep and broad knowledge of the site, cultural, technical and natural heritage, these just a few factors, which should be taken for granted.

Some small tourist destinations can develop fast. Why? It is the interest of stakeholders who earn direct benefit from tourism. The success and enthusiasm are driven by the belief that benefits of tourism are distributed evenly among the host community, and, on the other hand, the host community is an integral part of the tourism product. The community encourages the tourism at their place. The local authorities promote and organize related services to be delivered to tourists. The business interests of individual service providers force them to compete to offer superior services to the visitors. Tourists are enthusiastic and remember superior experience; the better experience, the higher demand for the destination and more money for further sustainable development and improvement.

9 Conclusion

Preserving and improving social and cultural attributes of “green world” for current and future generations, protecting values that are unique, non-renewable and priceless, teaching visitors, public as well as professionals how and what should be valued in order to avoid irretrievable losses should be taken for granted in 21st century. Nature, landscape, forested areas, cultural/industrial heritage objects and their content have unique character that call for an individual approach considering safety, protection, security, sustainable preservation, further development and use. The public usually know about high-value losses caused by disasters, environmental threats, and technical failures because the mass-media report them; however, physical care, including environmental and conservation control, professional rescuers, disaster and recovery plans are sometimes not reported at all.

People perceive environmental and cultural dimensions of space and genius loci intentionally. Production and protection are considered cornerstones of sustainability; however, major decisions on resources should also consider the value of leaving the undamaged areas for future generations: bequest values and existence are essential to environmental decision-making and they are difficult to be a part of a monetary system.

Increasing tourism calls for engaging local “cultural goods” into the economic process; there are required qualified experts in the field of arts, forestry, and environment; diverse cultural fields and economy knowledge professionals are becoming inseparable

components of municipalities, and, conversely, enterprise managers should not miss the deeper expertise in issues covering the importance of cultural resources for economic recovery. City planners, municipality representatives, heritage protectors as well as public representatives have to try to find the same language how cultural, natural and industrial heritage could be used smartly in contemporary conditions. They can learn abroad, arrange knowledge exchange with partner towns and villages.

The Czech Republic is an attractive destination for foreign tourists. Tourism encompasses a broad spectrum of activities, utilizing the cultural, technical and natural attractions. It can help regions to support greater profitability of very small businesses, makes regions more competitive and more sustainable, because the staff and management can understand the local problems deeper. However, tourism, especially for its dynamic growth, has inevitably to adopt a strategy and the principles of sustainable development to prevent disproportionate burden on the environment, which might lead to self-destruction. Let's hope we are able to pass at least as much to our successor generation as our predecessors did for us.

References

Act No 246/1992, Coll., Czech Republic, p.1

ALKIRE, S.: (2002). *A Conceptual Framework for Human Security*, Centre for Research on Inequality, Human Security and Ethnicity, University of Oxford, p. 48.

Decree No 4/2009 Coll., on the protection of animals during transport (took effect on 7 Jan 2009)

DYNES, R. R. (1994). Community emergency planning: False assumptions and inappropriate analogies. *International Journal of Mass Emergencies and Disasters*. 2/1994. ISSN 0280-7270, pp. 141-158.

HOŠKOVÁ-MAYEROVÁ, Š. (2016). Education and Training in Crisis Management. *7th ICCEPSY Proceedings*. www.FutureAcademy.org.uk. eISSN: 2357-1330

KUPČÁK, V., ŠMÍDA, Z. (2008). Z. Economic research of sustainable forest management in the Czech Republic. *ICABR Conference Proceedings*. 2008, Accra, Ghana. 978-80-7375-155-5, p. 461.

KYSELÁK, J. (2005). Evakuace jako jeden ze základních úkolů ochrany obyvatelstva v našem státě, její realizace a modelování. *Sborník příspěvků konference Zvládání krizí s podporou obranného průmyslu*. Brno: BVV. ISBN 80-85960-96-6, p. 129.

QUARANTELLI, E.L. (1993): Historical Development of Organized Efforts to Plan for and to Respond to Disasters. Paper # 227, Disaster Research Center, University of Delaware Newark, Delaware 19716 USA, p.19, p. 23.

Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97

ROSICKÁ, Z. (2007) Fire protection of historical buildings. *VII Conference Proceedings FIRECO 2007*, PTEÚ MV SR Bratislava, ISBN 978-80-89051-08-3, p. 308.

- ROSICKÁ, Z. (2015). Cultural heritage interests position as a part of municipality planning process. *Housing Policies and Urban Economics*, Italy. Vol. 2, No 1, ISSN 2385-1031, pp 31-40.
- ROSICKÁ, Z. (2010): Saving and Relocating Pets at Emergencies. *Deterioration, Dependability, Diagnostics*. Monograph. 1. vyd. Brno: Hansdesign Brno, 2010. ISBN 978-80-254-8377-0, p. 137.
- ROSICKÁ, Z. (2008). *Emergency preparedness related to cultural heritage*. IJP, o.p.s., Pardubice, ISBN 978-80-86530-44-4, p.29
- ROSICKÁ, Z. (2006). Psychic and Psychological Load at Problem Situations. *Conference Proceedings Fire Engineering 2006*. Technical University in Zvolen, Slovakia 2006. ISBN 80-89241-03-4, p. 142.
- ROSICKÁ, Z., BENEŠ, L., FLEISSIG, P. (2008). *Vita in societate segura*. Monograph. Pardubice: Univerzita Pardubice. ISBN 978-80-7395-117-7, p. 37.
- ROSICKÁ, Z., TOMEK, M. (2007). Logistic support of cultural heritage evacuation. *Zeszyty naukowe międzynarodowej wyższej szkoły logistyki i transportu we Wrocławiu*. ISSN 1734-2015, p.125, p.127.
- WIJKMAN A., TIMBERLAKE, L. (1984). *Acts of God or Acts of Man?* London: Earthscan, p. 18

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