

VALUABLE HABITATS IN THE REPUBLIC OF MOLDOVA FOR SOME INTERNATIONALLY PROTECTED SPECIES

Nina Liogchii

Institute of Ecology and Geography of Academy of Science of Moldova nr. 1 Academiei str., Chisinau - 2028, the Republic of Moldova;

*Corresponding author: Nina Liogchii, email: ninaliogchii@mail.ru;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8401>
UOI license: <http://u-o-i.org/1.01/ijeess/34097769>

ABSTRACT

Eight protected areas from Natural Reservations of Medicinal Plants category are the object of this investigation. The studies are based on field and laboratory researches. The ecosystems were evaluated in the main phenological development phases of vegetation and animal life. The rare species were identified and their abundance was described. As a result of the researches, it was found that the investigated areas correspond to the category of protection to which they are assigned and contain a rich diversity of medicinal plants. Although these areas are belonging to a national level protection category, they are serving as valuable habitats for many internationally protected species. Having a differentiated ecological protection regime, these protected areas serve as connection corridors with other ecosystems, ensuring the integrity and functionality of the state protected natural areas fund and the ecological balance in the location area. In the basis of the accumulated information, the Ecological Passports of the researched areas were elaborated. The Ecological Passports will constitute the scientific basis for organizing an efficient management for Natural Reservations of Medicinal Plants.

Key words: protected area, favorable habitats, rare species, international protection, ecological passport.

Vol. 8 (4): 663-668 (2018)

INVESTIGATION OF KONYA CITY CULTURAL HERITAGE MANAGEMENT AND SUSTAINABLE URBAN DEVELOPMENT RELATIONSHIP

Çiğdem Çiftçi^{1*}, Fatma Kunt²

^{1*}*Department of City and Regional Planning, Faculty of Engineering and Architecture, Necmettin Erbakan University, Konya, Turkey;*

²*Department of Environmental Engineering, Faculty of Engineering and Architecture, Necmettin Erbakan University, Konya, Turkey;*

*Corresponding author: Çiğdem Çiftçi, email: cigdemciftci@konya.edu.tr; drfatmakunt@gmail.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8402>

UOI license: <http://u-o-i.org/1.01/ijeess/01891778>

ABSTRACT

Cultural heritage protection is one of the most essential components in the transfer of the identity of cities and communities to future generations. The concrete cultural heritage items representing traditional building technologies and social order are being used with the old or new various functions of conservation principles according to the needs of today's modern cities. Literature studies have shown that systematic assessment methods for assessing the relationship between conservation of cultural heritage and sustainable urban development are lacking (Guzman et al.2017). Cultural assets also provide sustainable ecological urban habitats to cities or urban communities to which cultural heritage must be used in the direction of balanced conservation principles. In this study, cultural heritage preservation policies, implementation tools and evaluation will be evaluated with reference to sustainable ecological planning principles at the historical city center where the Konya cultural heritage is predominantly located. At the end of the study the parameters that can be used to measure the relationship between cultural heritage management and sustainable urban development will be discussed in the case of the Konya city historical center

Key words: Cultural Heritage Management, Sustainable Urban Development, Urban Development Sustainability Indicators.

Vol. 8 (4): 669-674 (2018)

SOME CASES OF NEGATIVE EXTERNALITIES IN THE TIRANA AREA AND THEIR IMPACT ON SOCIAL COSTS

Eglantina Pazaj

Agricultural University of Tirana; Department of Economics and Rural Development Policies, Tirana, Albania;

*Corresponding author: Eglantina Pazaj, email: epazaj@ubt.edu.al;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8403>
UOI license: <http://u-o-i.org/1.01/ijeess/58089975>

ABSTRACT

One of the main problems of Albanian society today is pollution of the environment and mainly pollution of air, soil, water, acoustic pollution and radioactive pollution. This problem feels very much to all residents of the district of Tirana. Causes or factors of environmental pollution are many. Our focus will mainly be on air and soil pollution. Such can be mentioned as pollution from cars, pollution from factories, pollution from plastic wastes, and especially pollution from individuals themselves. All of these factors that cause environmental pollution are called as negative externalities because the impacts of their actions affect the well-being of a contemplative. Negative externalities make the markets distribute resources in an inefficient way. How will social and private costs change in the presence of a negative externality? In this topic we will try to address some cases of negative externalities and we will try to give some of their solutions through private actors but also through the intervention that the government can do through different policies. We will try to answer the following questions: What are the consequences of pollution in society? Does the pollution of the environment cost you and on what does it render? What is our role in society to minimize pollution?, etc. Finding a solution to the elimination of externalities would affect the improvement of market failure.

Key words: environmental pollution, negative externality, social and private costs, political.

Vol. 8 (4): 675-678 (2018)

REVIEW ON BIOREMEDIATION PROCESS OF A CRUDE OIL IN CONTAMINATED SOIL BY LEACHING AND TOXICITY ASSESSMENTS

Mosstfa Maarooof, Sukru Dursun

Environmental Engineering Department, Engineering Faculty, Selçuk University, Konya, Turkey;

*Corresponding author: Sukru Dursun, email: mmaarooof@selcuk.edu.tr; sdursun@selcuk.edu.tr;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8404>

UOI license: <http://u-o-i.org/1.01/ijeess/94882886>

ABSTRACT

The most widely used chemicals in society today are Petroleum products. With the massive quantity of fuel required to power automobiles and heat homes, and the number of times each gallon of petroleum is stored, transported, or transferred, accidents and leakages are unavoidable. All the results of Petroleum contamination from leaking aboveground and underground storage tanks, spillage during transport of petroleum products, abandoned manufactured gasoline sites, other unplanned releases, and current industrial processes. As petroleum contains hazardous chemicals such as benzene, toluene, ethylbenzene, xylenes, phenols and naphthalene, this contamination can be hazardous to the health of plants, animals, and humans. Hydrocarbons (HC) entrance into the soil environment can take place by pipeline blow-outs, road accidents, leaking of underground storage tanks, land farming fields and uncontrolled landfilling. When released on the soil surface, HC adsorb on the organo-mineral matter (OMM) of the soil, The Removal of HC from soils can be performed using biological treatments like bioremediation if the environmental conditions are optimum (temperature, soil moisture, nutrients). The presence of high rates of organic matter and clay may affect the extent of biodegradation due to a priming effect on microbial communities and to a decrease of accessibility to microorganisms High concentrations of HC can eliminate vegetation due to their phytotoxic properties. Most country's environmental legislations are now focused on treatment and disposal of polluted soils, especially with respect to hazardous waste management. As there are no universal HC cleanup standards, the remediation end points might be in the evaluation of the impact of residual HC on the soil ecosystem and on the water quality. Petroleum-contaminated soil is currently treated using three processes: physical, chemical, and biological. The most common physical methods of treatment of contaminated soils, such as disposal in a landfill, and incineration are expensive. Incineration is also a source of air pollution Chemical treatment includes direct injection of chemical oxidants into contaminated soil and groundwater thereby altering native aquatic chemistry. Biological treatment most commonly involves the breakdown of contamination into nontoxic forms using microbiological processes.

Key words: Petroleum, soil pollution, Leached, Hydrocarbons, Hazard Waste Management.

This paper has been presented at the International Symposium for Environmental Science and Engineering Research (ISESER), Konya, Turkey, 11-12 May 2018

ASSESSING OF WATER QUALITY INDEX USING GEOGRAPHIC INFORMATION SYSTEM IN KONYA CITY CENTER

Mushtaq Abdulameer Alwan Almuslehi^{1,2}, Sukru Dursun¹, Nahida Hameed Hamza Alqaysi^{1,2}

¹Environmental Engineering Department, Engineering Faculty, Selcuk University, Konya, Turkey;

²Civil Engineering Department, Engineering Faculty, Diyala University, Diyala, Iraq;

*Corresponding author: Sukru Dursun, email: mushtaq.abdulameer@yahoo.com; sdursun@selcuk.edu.tr; nahida_mml@yahoo.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8405>

UOI license: <http://u-o-i.org/1.01/ijeess/65388970>

ABSTRACT

The objective of this study is estimating the groundwater quality for Konya city center and mapping their spatial variation in terms of suitability for drinking purposes, about 184 groundwater wells data had been taken from Konya city municipality during 2014 for Konya city center that involving pH, electrical conductivity (EC), Turbidity, calcium (Ca²⁺), magnesium (Mg²⁺), chloride (Cl⁻), sulphate (SO₄²⁻), nitrate (NO₃⁻), total alkalinity (TA) and total hardness (TH), and analyzed with reference to the World Health Organization (WHO) limits and (TS266) Turkish Standards, The geographic information system-based spatial distribution maps of different major parameters had been created by testing Geostatistical analyses within ArcGIS version 10.5 environment, the analyzed data was validated by the best-fitted models. The WQI values of the study area were found in the range of 27.28 and 72.99 that classified between good and poor water quality, about 93.413% of the total groundwater samples fall in the suitable limited for drinking water as good water quality, whereas 6.587% of the total groundwater samples get poor water quality.

Key words: GIS, Geostatistical analysis, Kriging, Inverse distance weighting, Water quality index.

CHILD MALTREATMENT IN EUROPEAN REGION AND IN ALBANIA

Rovena Daja^{1*}, Rudina Cumashi¹, Gentiana Qirjako¹

¹*Institute of Public Health, Tirana-Albania*

*Correspondent author: Rovena Daja, email: rovenadaja@yahoo.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8406>

UOI license: <http://u-o-i.org/1.01/ijeess/39865196>

ABSTRACT

Child maltreatment is a problem of epidemic proportions in the European Region and United States. Given the numbers of children affected by child maltreatment and the dire consequences that can develop, prompt identification of child maltreatment is crucial. This is a systematic review conducted by searching databases for relevant literature assessing the childhood maltreatment. Child maltreatment leads to the premature death of 852 children under 15 years in the European Region every year. Not all deaths from maltreatment are properly recorded and this figure is likely to be an underestimate. Data show inequalities in the Region with higher death rates in the east, though trends seem to be declining overall. Deaths, however, are only the tip of the iceberg; much abuse may not come to the attention of child protection services. National policies and practices on maltreatment vary between countries, making it difficult to take a regional view. Vital registration and official statistics need to be improved to provide a better picture of the scale of the problem at country level. Multidisciplinary approaches to cases, with teams using reliable and valid investigative methods, and periodic surveys to detect hidden maltreatment in the community would contribute greatly to this.

Key words: maltreatment, abuse, neglect, violence.

Vol. 8 (4): 697-702 (2018)

THE SCIENTIFIC ARGUMENT CONCERNING THE ESTABLISHMENT OF MIXED NATURAL MONUMENT IN THE REPUBLIC OF MOLDOVA

Fasola Regina

Institute of Ecology and Geography of Academy of Science of Moldova, Nr.1 Academiei str., Chisinau - 2028, Republic of Moldova;

*Corresponding author: Fasola Regina, email: reginaf21@mail.ru;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8407>
UOI license: <http://u-o-i.org/1.01/ijeess/93510044>

ABSTRACT

The paper presents the results of an ecosystemic study, with assessment of the quality and the interaction of biotic and abiotic components from the hydrographic basin of the River Cereșnovăț. On the base of field and laboratory research, during over three years, have been established the valuable natural components, the intensity and the character of the human impact on them. As a result of the researches in the investigated area were established valuable natural components (geological, hydrological, botanical, zoological) which underlie the scientific argumentation of assigning the researched area to the category of protection – Mixed Nature Monument, because it meets the requirements stipulated in the Article 37e of Law on the State Protected Natural Areas Fund, of the Republic of Moldova.

Key words: conservation, environment components, forest ecosystems, Mixed Nature Monument, rare species, human impact.

ASSESSMENT OF THE STATE OF GREENNESS AND SUGGESTIONS FOR ITS IMPROVEMENT IN PRISHTINA SCHOOLS IN KOSOVO

Gjok Vuksani^{1*}, Haki Kurti²

^{1*}*Agricultural University of Tirana, Department of Horticulture and Landscape Architecture, Tirana, Albania;*

²*Kosovo Agency of Statistics, Agriculture and Environment Statistics Department, Prishtina, Kosovo;*

*Corresponding author: Gjok Vuksani, email: gjuksani@ubt.edu.al;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8408>

UOI license: <http://u-o-i.org/1.01/ijeess/75226596>

ABSTRACT

The aim of the study is assessment of the condition of greenness in Prishtina schools and its positive role in students' life. Prishtina is the capital of the Republic of Kosovo, extending in the eastern part of Kosovo, in the geographical latitude of 42 °, 40 ', 00 "and the geographical longitude of 21 ° 20'15" with a surface of 572 km². The altitude ranges from 585 m, 640, 670 and about 700 m above sea level in some neighborhoods of the city. In Prishtina, the continental climate dominates. This study was conducted in lower secondary schools and upper secondary schools in Prishtina with a total of 38,232 pupils. In our study, we have focused on green spaces because they have an irreplaceable role, especially in the lives of children, as they have a positive effect on noise reduction, air quality improvement, air filtration from the dust, beautify the environment, lower high temperatures, reduces stress and depression, etc. For the assessment of the condition of green spaces in Prishtina schools, we were based on the Quantitative Assessment Method according to Barbosa et al. 2007, Wang 2009 [1], but also combined with the Williams and Green Quality Assessment Method (2001) [2] such as assessing the type and quality of vegetation, the safety of green spaces for children, etc. There are no defined objective criteria that can be followed for the assessment of green space, but we have combined the evaluation of quantitative and qualitative criteria so the conclusions that we will find to be more understandable and acceptable to the beneficiaries for greenness and decision-making bodies. Dozens of expeditions have been conducted on the field, where there were taken photographs and collection of floristic material, study of the state and types of greenery in all schools have been made. Our research work is supported by the data provided by the Ministry of Education, Science and Technology (MEST) and the principals of primary and secondary schools for the greenhouse inventory in the respective schools of Prishtina. Prishtina map and location of green spaces of schools were designed with the SIG (Geographic Information System) program. From the detailed study we can conclude that the green areas of Prishtina schools are very scarce, minimum 15 m² up to 2900 m², with a much reduced area for students, who in most schools do not even get 1 m² / student. We point out that in the structure of grown plants in green areas, the highest percentage occupy the flowers (Petunia spp., Begonia spp., Zinnia spp., Viola spp., Rosa spp. and Lilium spp.) up to 96% of all vegetation. Decorative shrubs occupy most of the space of the perennial plants because of the reduced surface available for greenness and the impossibility of planting tall plants because they will take large space. Among the tall plants, dominating the green spaces in Prishtina schools are: Linden (*Tilia platyphylia* and *Tilia cordata*), Thuja occidentalis 'Smaragd', Thuja pyramidalis, Picea abies etc.

Key words: Green spaces, schools, health benefits, educational benefits.

Vol. 8 (4): 711-716 (2018)

USAGE OF PHOTOCATALYTIC OXIDATION FOR THE REMOVAL OF AIR POLLUTANTS

Zeynep Cansu Ayturan*, Sukru Dursun

**Environmental Engineering Department, Engineering Faculty, Selcuk University, Konya, Turkey;*

*Corresponding author: Zeynep Cansu Ayturan, email: zcozturk@selcuk.edu.tr; sdursun@selcuk.edu.tr;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8409>
UOI license: <http://u-o-i.org/1.01/ijeess/38796960>

ABSTRACT

Environmental and social damages originating from air pollutants continue to increase day by day. These are formation of fog and smoke, negative effects on human health, acid rain, ozone depletion and global warming. Air pollutants are classified under two main classes such as organic and inorganic. Inorganic pollutants include many pollutants such as sulphur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM) while organic pollutants represent many different pollutants, including permanent toxic organics and volatile organic compounds (VOC). Especially VOC are more dangerous than any other pollutants. The VOC group contains approximately 150 different compounds, the majority of which are considered as harmful and toxic to human health. Therefore, the removal of these compounds is very important. There are several methods which may be used for this purpose such as filtration, scrubbing, adsorption and absorption. However, none of them are capable to remove toxic materials found in air efficiently. Recently, photocatalytic oxidation method emerged for the removal of both toxic VOC compounds and other pollutants. Pollutants are removed by several reactions conversion of pollutants to CO₂ and H₂O with the help of appropriate photocatalyst and light source in photocatalytic oxidation method. In this study, photocatalytic oxidation method was investigated and the effects of the method on different air pollutants were compared.

Keywords: Photocatalytic oxidation, air pollution, VOC, toxic pollutants, photocatalyst

CONFIRMATION OF THE PRESENCE OF *TRITHEMIS ANNULATA* (ODONATA, ANISOPTERA) IN ALBANIA

Enilda Shkëmbi^{1*}, Anila Papparisto¹, Bledar Pepa², Xhuliana Qirinxhi³, Kastriot Misja¹

¹University of Tirana, Faculty of Natural Science, Department of Biology, Albania;

²Elbasan University, Faculty of Natural Sciences, Elbasan, Albania;

³University Fan S Noli, Faculty of Natural and Human Sciences, Department of Nursing, Albania;

Corresponding author: Enilda Shkëmbi^{1}, email: enilda07@gmail.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8410>

UOI license: <http://u-o-i.org/1.01/ijeess/91178770>

ABSTRACT

The present paper brings the first records of *Trithemis annulata* (Odonata: Anisoptera: Libellulidae) in Albania. *T. annulata* (Palisot de Beauvois, 1807) is a widespread species in south-western Europe, in Mediterranean countries and Balkan Peninsula. Despite this widespread, this species is reported for the first time for Albania's odonatofauna. *T. annulata* is part of the family Libellulidae, which has the largest number of species in Albania, 19 species, belonging to 5 genera: *Libellula*, *Orthetrum*, *Sympetrum*, *Crocothemis* and *Selysiothemis*. *Trithemis* is the sixth genus to be added to the family Libellulidae and *T. annulata* is the 66-th species in the list of Odonata for Albania (Shkëmbi et al. 2016). Nine male individuals of *T.annulata* were captured in two expeditions conducted in summer-fall 2017, in Belshi Lakes, in the central part of Albania and in Pishë-Poro, the Vjosa River Delta.

Key words: Odonata, Libellulidae, *Trithemis annulata*, Albania, new records

MOBILE APPLICATION PROJECT FOR SHARING INSTANTANEOUS & LOCATION BASED PHOTOGRAPHS FOR MAKING ENVIRONMENTAL MONITORING MORE EFFECTIVE IN TURKEY

Ertugrul Esmeray^{1*}, Sinan Savas²

¹Karabuk University, Environmental Engineering Department, Karabuk, Turkey;

²Karabuk University Institute of Natural Sciences Department of Environmental Engineering, Karabuk, Turkey;

Corresponding author: Ertugrul Esmeray^{1}, email: eesmeray@karabuk.edu.tr;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8411>

UOI license: <http://u-o-i.org/1.01/ijeess/42029205>

ABSTRACT

Environmental pollution and related problems are the first ones among the problems that humankind need to worry because of their results and the need to find immediate solutions. For preventing and monitoring environmental pollution, traditional ways such as denunciation lines are lacking efficiency. As technology got developed and used more widely, smartphones and mass communication terms got more into our lives. As an alternative to the existing methods in order to prevent and fight environmental pollution; a mobile application that lets people to share environmental pollution with photographs by providing time and location information. It was aimed to build a bridge between the prevention of and fighting against environmental pollution and to make mass fights possible. By using the mobile application, people can take pictures of “environmental pollution” acts, can add comments and captions then share with authorized bodies and other users. After sharing, pictures are stored in the cloud system and via the web interface that we created, authorized local bodies can see those acts with the location and time information, on a map. With this application, environmental pollution acts can be monitored 24/7, immediately.

Key words: Environmental Monitoring; Mobile Software; Environmental Pollution

THE PSYCHOSOCIAL CARE OF PATIENTS WITH CANCER

Suela Kalaja^{1*}, Anita Pilika¹, Artan Simaku³

¹Neuroscience Hospital, University Hospital Centre "Mother Teresa", Tirana, Albania;

²Psychiatric Hospital Hospital, University Hospital Centre "Mother Teresa", Tirana, Albania;

³Institute of Public Health, Tirana, Albania;

*Correspondent author Suela Kalaja, email: kalaja.suela@yahoo.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: <https://doi.org/10.31407/ijeess8412>

UOI license: <http://u-o-i.org/1.01/ijeess/73367856>

ABSTRACT

People with brain tumours can experience a range of symptoms and disabilities, such as psychological problems, difficulties with mobility or self care, and relationship and work issues, which can substantially impact their quality of life. These symptoms and disabilities may be addressed through 'multidisciplinary rehabilitation' delivered by a team of different healthcare professionals such as doctors, nurses and therapists working in an organized manner. Recognition is growing that psychosocial care is an essential component of the comprehensive care of people diagnosed with cancer. In addition to attempting to extend survival rates in people following a cancer diagnosis, the oncology community is recognizing the value of quality of life. Psychosocial care, with its goals of relieving emotional distress and promoting wellbeing, is central to efforts to improve quality of life. Individual therapy often takes the form of crisis intervention dealing with present problems or issues. Coping with changes in lifestyle, financial status, role functions, and concerns about death must be managed. Issues of dependency, disfigurement, and disability also can be addressed in therapy. Supportive techniques include gaining an understanding of the patient's prior coping abilities and determining how they can be strengthened to help the patient regain a sense of self-worth and control. Other types of therapies, such as cognitive-behavioral therapy, psychodynamic therapy, and even psychoanalysis, may be useful for patients, depending on their level of functioning and personality.

Key words: cerebral cancer, patient, psychotherapy, caregiver

Vol. 8 (4): 739-744 (2018)