

## *Environmental Accounting, an Approach for Protecting the Environment*

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### **Abstract**

In the last decades, a great use of natural resources caused the crash of these resources. National Accounting as the accounting produce and use of the goods and services, so far has estimated benefit from use of the natural resources, and can't considerate destruction of the resources. For example, financial advantages of hunting the fish or cutting the trees is being calculated in national accounting, but disadvantages of destruction of resources aren't being estimated. Environmental Accounting (sometimes referred to as "green accounting", "resource accounting" or integrated economic and environmental accounting) is introduced as a new method for accounting the destruction of the natural resources in the national accounting, and can help the decision makers to improve the decisions related to the environment. it can be linked to economic data. Among other uses, it can help policy makers better manage resources (currently, many policymakers lack information needed to understand the potential environmental impacts of their decisions, and the economic implications of changes to their environment and natural resources); identify the implications of different regulations, taxes, and consumption patterns on environmental sustainability; and identify paths to sustainable development. Indeed Environmental accounting provides a framework for organizing environmental data so that. The latest categorization of environmental accounts by the international community includes four types of accounts: Natural resources asset account- Pollution and material physical flow account-Monetary and hybrid account, and Environmental adjusted macroeconomics aggregates.

**Key Words:** National accounting, environmental accounting, destruction of natural resources

***Environmental Risk Assessment of Product Pipelines by Use of  
Indexing System Method  
(Case study: Bandarabbas-Sirjan product transfer pipeline)***

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**Abstract**

This Study has aimed to assess the environmental risk of 26 inch transfer products pipeline of Bandar abbas- Sirjan (273 km ) using the indexing system.

In this regard, after the identification of the technical features of the project and its environmental impact through library research, risk factors were assessed and risk score was calculated based on relative risk models Muhlbauer. Then, using the capabilities of the software Arc GIS 9.3, points were classified and were located as the areas with high (0.08-0.26), medium (0.26–0.44) and low (0.44–0.62) potential risk along the pipeline route. Finally, to reduce and control the identified risks, some strategic propositions are presented.

Result of environmental risk assessment and risk zoning along pipeline route show that 7% of pipeline route meet high potential risk with a risk score range of 0.08 to 0.26 and high potential for soil movement and population density of the most important risk factors are causing. Formulation and implementation of educational programs to alert people the risks of pipeline failure, prediction programs and provide necessary training to emergency response personnel to deal with critical situations can be most effective measures for reducing mentioned risks.

**Keywords**

Risk, Environmental Risk Assessment, Geographical Information System, Indexing system, Products Pipeline.

***Application of Delphi Method for Prioritization of Mangrove  
Afforestation Site Selection Criteria  
(Case Study: Grey Mangroves on North part of Persian Gulf, Iran)***

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**Abstract**

Mangrove forests are one of the highly productive ecosystems in the world but in recent years they have been threatened by human activities and natural events. In the other hands lack of the criteria for Exito-Conservation site selection decreases mangrove forest area in the world. The aim of this paper is prioritizing necessary criteria for identification of developmental zones for *Avicennia marina* as one of the true mangrove species with many economic and ecologic values in the world. Hence, at first according to our goals, 23 essaies from Iran and other countries were surveyed and conclusion of them were attended. Then tried to identify necessary criteria and assembled them in a new structure. On the whole, 3 criteria and 9 sub criteria were identified for selection of developmental sites. Afterwards based on the Delphi method, these criteria were screened out and the important scale and line model for using in GIS estimated. According to our conclusions by the order of importance: land physical traits, land chemical traits, tidal, waves, air temperature, water quality, climate and precipitation are sub criteria for selection of developmental sites.

**Key words:** Mangrove forests, *Avicennia marina* trees, Site selection, Delphi method

## *Environmental Planning: an Epistemological Approach*

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### **Abstract**

Epistemological approach to environmental planning is focus of this paper. However, the theory of knowledge in environmental problems is scrutinized to address planner's understanding and modus operandi in the face of those problems. Multiple epistemological levels in environmental planning including episteme, discourse, paradigm, substantive and procedural theory, and praxis have been reviewed. In general, the main idea of this paper is exploration of possibility conditions of problematization of environmental concerns as an field of study with task of epistemologization of environment's current problems. Considering our society's rapid transformations in cultural aspects as well as natural dimensions, environment's planning should be treated as an interdisciplinary (or transdisciplinary) in multiple levels of epistemology and multi-scale of analysis to be helpful for transition to an ecologically- culturally possible state.

**Keyword:** Environmental planning; Epistemology; Discourse and paradigm in environmental Planning; Planning theory in environmental.

## *Assessing the Ecological Suitable Zones for Agriculture and Range Management in the Zanzan Province by Using GIS*

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### **Abstract**

Assessing ecological potential is an essential item in planning and management of land that is considered as the main prerequisite for achieving sustainable development through which capability of environment for development based on type of activity is determined. In this paper we have investigated ecological potential of Zanzan province for agricultural development and by examining current state of land use, the appropriateness and inappropriateness of various regions of the province for this activity is being known. Descriptive and analytical research methods and field data collection were applied in this survey. The overlapping maps model was utilized for determining the ecological potential and Arcgis9.3 software was used for data analysis. Our findings show that from the overall levels of potential for agriculture and ranch management, 111909.42 hectares for agricultural class II, 12765.66 hectares for farming class III, and 77257.84 hectares is suitable for agriculture class IV. Also 71458.76 hectares is proportional for ranch management class II, 68422.05 hectares for ranch management class III and 56382.03 hectares for ranch management class IV.

**Key words:** Ecological potential, Over laping map, GIS, Agriculture, Zanzan

## *Study the Status of Environmental Awareness in the Education System in Kohgiluyeh County*

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### **Abstrac**

Public informing and society training regarding the value and importance of environment for keeping on human life are important matters. This study is the result of field and descriptive research with the purpose of investigating the rate of teacher's environmental awareness kohgiluyeh schools in 2010. Random sampling through distributing a questionnaire consisting of 20 questions was performed in various schools of kohgiluyeh. The data was analyzed by excel software. Most male respondents were over the age of 40 and owned the university degree of over diploma and bachelor. Most respondents believed that environment training must be started from nursery and elementary schools and also believed that devoting some chapters of text books regarding environment is the most way for introducing environment value to students. More than half of teachers don't have sufficient information about concepts of: sustainable development, acidic rain, recognition of annihilated mammalian varieties of the country, the existence of some areas under protection of environment organization in the province or town, and ozone layer. According to these findings, increasing environmental awareness and training are necessary in society.

**Keywords:** Environmental awareness, Teachers, Kohgiluyeh county

## *Iran Situation in Environmental Sustainable Development*

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### **Abstract**

The field of sustainable development can be conceptually broken in to three constituent parts: environmental, economical and sociological sustainability. All of this sections with their subsections are relevant. Understanding of reaction between them are so important for avoiding parochial viewpoint and unilateral thought at the time of conception, composition, compilation and execution programs. It is included economical growth, extension of justice, decreasing of poverty illiteracy and approval of suitable laws for people by partnership society, kinfolks, religions, ruralist and urbanite. After providing of 21 agenda in Rio, international agreements have increased specially in sustainable development, Cario, Egypt (ICPD) (1994), fourth world conference on women action for equality, development and peace (1995), the world summit for social development, the world telecommunication (WTDC), world food summit (WFS) in Rome(1996), and United Nation commission on sustainable development (UNCSD). The goal of these commission is presenting the indices for recognizing the amount of success in the countries approaching social, economical and environmental objects. These indicators are contained moral, psychological, descriptive, organizational, quantification of life, welfare and social, economical and environmental tolerance. In this paper, the most important environmental indicators of sustainable development (environmental sustainability indicators, environmental performance indicators, indicators of environmental vulnerability and seventh goals of MDGs), criteria and indicators, each of these indicators will be introduced, Then Iran's position changes in these indicators will be reviewed in recent years, Finally, challenges and barriers to development and environmental strategies to achieve more favorable environmental conditions will be provided. Sustainability indicators and environmental performance review of published reports imply Iran's poor ranking in the stability and acceptable relative ranking of environmental performance. Iran acquired a fairly good rating in environmental performance indicators, due to our conditions in the field of environmental health, productive natural resources and biodiversity and habitat quality. Country's overall sustainable development strategies can be summarized re-engineer parts of the country's environment, implementation and development of comprehensive development programs with the provincial sustainable development, integrated system of economic calculation, environment, education and community participation in infrastructure, strengthening inter- sectoral activities and international emphasis on local projects and developing low-cost investment and the transfer of responsibilities and powers of State Policies in the communities.

**Keywords:** Iran, Environmental sustainable development, Indicators

## *Evaluation of Outdoor Recreation Potential of Zarrin Abad Forests in Neka Based on Iranian Ecological Model for Recreation*

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### **Abstract**

This research was done to evaluate the outdoor recreation potential of Zarrin Abad forests in Neka based on usual tourism use model in Iran. First, topographic map with scale 1:25000 was geo-referenced in Arc GIS 9,3 software. Then digital elevation model (DEM) with 30-meter pixel size was obtained from the geo-referenced map. The slope, aspect and height maps with 30-meter pixel size were provided using DEM. The vegetation coverage density and the soil texture maps of Zarrin Abad forests were provided from Nekachoob Company and were digitized in Arc GIS 9,3 software. All of the digital layers (maps) were classified according to the Makhdoum model. The environmental units map was provided by overlaying all of maps in Arc GIS 9,3 software. The characteristics of units in this map was compared to the characteristics of various outdoor recreation types in Makhdoum tourism ecologic model and potential of each unit was evaluated for intensive and extensive outdoor recreation and the outdoor recreation potential degree was determined. Finally the outdoor recreation potential map was prepared. Results showed that 82 percent study area have potential for outdoor recreation types. As 66 percent region have potential for degree 1- extensive outdoor recreation, 4 percent region have potential for degree 2- extensive outdoor recreation, 2 percent region have potential for degree 1- intensive outdoor recreation and 10 percent region have potential for degree 2- intensive outdoor recreation. In addition 18 percent study area has no potential for outdoor recreation that it includes the protected area (7 percent) and the improper area for outdoor recreation (11 percent).

**Key words:** Outdoor recreation potential, Tourism use model, Zarrin Abad, Geographic information system