

THE OPEN UNIVERSITY OF SRI LANKA

NEP 1201- M.Sc. IN ENVIRONMENTAL SCIENCE/ POST
GRADUATE DIPLOMA IN ENVIRONMENTAL SCIENCE

FINAL EXAMINATION 2007

DURATION - 3 HOURS



Date: 1st November 2007

Time: 9.30 a.m. - 12.30 p.m.

Illegible handwriting will be penalized

Answer FOUR questions only.

1. "The various principles and concepts of environmental law ultimately have one objective - that of sustainable development."

Do you agree with this statement? Analyse the principle of sustainable development and discuss whether and how other environmental law principles further the objectives of sustainable development.

2. Bharatha is a under developed country which is seeking to further economic development by industrialisation. For this purpose it needs to increase its power generation by over 200 per cent. Additional power is required to provide electricity to both households and industries. The government of Bharatha has promised to provide electricity to 90 percent of households within the next ten years and reduce the current unemployment rate of 12 percent.

Since Bharatha is rich in water resources, the government has decided that hydro electricity is the cheapest and most efficient option by which to achieve its target of power generation. The National Electricity Board has planned to dam the Yamani River in seven places to construct reservoirs which will serve the following purposes - to meet 80 percent of the power generation target for both industry and households and to open up several thousand hectares of land for agriculture. These in turn would provide jobs for thousands of people.

The EIA for the project has been completed and approval for the project granted by the Central Environmental Authority. The Environmental Defenders, a public interests non governmental organisation had studied the EIA and submitted several objections to the Technical Evaluation

Committee which will grant approval for the project. The objections were as follows:

- Over 20,000 hectares of forests would be cleared/ felled in order to build the Dam and open up new lands for agriculture. More forest land would be submerged by the reservoirs.
- More than one million people would be displaced from their homes. Many of these people had been living on these lands for generations.
- Much valuable agricultural land and two big towns would be submerged by the reservoirs.
- The forests are the habitat of large herds of elephants which would be displaced, aggravating the human elephant conflict.
- Hydro-electricity is not the only option for power generation and other options were not considered.

The Technical Evaluation Committee must decide whether or not to approve the project. You are the Chairperson of the Committee. You are required to write the report setting out the decision and the reasons for it. In the report you must refer to the principles relating to EIAs that you have studied; relating them to the issues in this problem.

Most environmental laws of Sri Lanka are based on a principle of "command and control," i.e. they lay down rules as to how natural resources can be used and impose punishments if these rules are violated. However, this type of law does not take into consideration the needs and interests of people; particularly local communities whose lives are tied up with these resources. Further, these laws do not consider them as stakeholders in environmental conservation.

Do you agree with this statement? Consider some of the laws that you have studied in your course in the light of this statement. Discuss how you would amend them so that the objectives of environmental conservation and management are balanced with the interests of communities and other stakeholders in having access to natural resources.

- (a) Consider the Environment Protection Licensing system under the National Environmental Act and the related regulations. Consider whether the law as well as the way in which it is implemented adequately addresses problems of pollution in Sri Lanka? Give reasons for your answer with suggestions for amending the law to make it more efficient.

- (b) Wimal wished to invest money in a tile making factory. He applied to the Local Authority for a license to build and operate this factory and submitted all the required documentation. The Local Authority informed him that the chimneys of his factory should be at least 200 feet high and also should be at least 100 metres away from the nearest neighbouring house. Wimal found that he was able to comply with the first requirement. However, he could not comply with the second as the furthest he could keep the chimney from the nearest neighbouring house was 85 metres.

Wimal informed the Local Authority that he could not comply with the second requirement and the Local Authority agreed to waive it and issued him the license to begin work. However, six months after Wimal began work the owner of the house close by complained that the fumes from the chimney were affecting her. The owner also complained that the Local Authority had not informed her of the construction of the factory. The Local Authority withdrew the license it had issued to Wimal. Wimal appealed to the Central Environmental Authority (CEA) which upheld the decision of the Local Authority.

Wimal has now taken action in court alleging that the Local Authority and the CEA were guilty of arbitrary and discriminatory action. You are required to make a decision on his complaint giving reasons to justify your decision.

5. Biodiversity loss has been attributed to a number of issues including:

"habitat loss or modification (including actions such as land clearing, forestry operations; non-natural incidence of fire and the actions of pollutants such as pesticides and acid rain); over-exploitation of species (including commercial harvesting for meat, skins and other products and the trade in live species); and introduction of exotic species (including those which prey on other species, compete with them for food or which alter the natural environment). Other processes which may threaten species include the incidental take of species such as dolphins killed in fishing operations and the confinement of species to limited areas which may make them more vulnerable to other impacts such as natural or human induced fire."

Consider the international environmental conventions you have studied and analyze how they address these issues to prevent biodiversity loss.

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