

CONSERVING LOJING HIGHLANDS FOR SUSTAINABLE DEVELOPMENT

Editors

Ibrahim Che Omar and Zulhazman Hamzah



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PREFACE

Lojing Highlands will always be one of the treasures of Kelantan. Its cool environment with the serenity of its forest, rivers and mountains, will remain to be the major attractions of the highlands. The richness of the flora and fauna and also the so-called *Orang Asli* from the Temiar Ethnic adds colour to the magnificence of the Lojing Highlands. The highlands is also the home of the great *Rafflesia kerrii*, a parasitic flower which is highly popular among the *Orang Asli* and the international eco-tourists. However, all these will change gradually with the increasing human activities within the highlands. Now, Lojing Highlands has show signs of transforming itself, as physical development is beginning to show detrimental effects to the lustrous beauty of the highlands. The construction of human settlements and infrastructures, opening of agricultural lands, and the unlimited exploitation of the forests and rivers have been the contributing factors for the transformation process. If this will to continue without check and balance, it will not be a surprise that our future generation will not be able to appreciate Lojing Highlands the way we have been experiencing all these years. Thus, it is important for Lojing Highlands to remain as an exciting and adventurous eco-spot for nature lovers and tourists both local and from abroad.

Universiti Malaysia Kelantan has taken this bold step to make conservation of Lojing Highlands as one of its agenda to be part of the programme on sustainable development of the highlands. The strategy undertaken was *via* the documentation of the flora, fauna, rivers, forest and hills, current environmental situation, the socio-economic of the community, the status of economic activities and the extensiveness of the physical development. A scientific expedition was undertaken and some of the findings are documented in the book. The book comprises of four sections namely, general aspects of Lojing Highlands, the flora, fauna and the socio-economic aspects of the *Orang Asli*. In the general section, topics on the importance of conservation of Lojing Highlands and the future of the highlands were discussed. The section on the flora and fauna of Lojing Highlands, describes the richness and diversity of the flora and fauna of Lojing Highlands. The socio-economic aspects focus on the *Orang Asli*, their life and their roles as the custodian of the forest of the Lojing Highlands. We hope the book will be one of the references for academicians and policy makers to join hands and work together in determining the future of Lojing Highlands.

The editors would like to express their appreciation to Universiti Malaysia Kelantan and for the commitments shown by the participants of the Lojing Highlands Scientific Expedition 2008 and their willingness to share their findings. Our sincere gratitudes are also due to Universiti Malaysia Sabah, Shell Malaysia, South Kelantan Development Authority (KESEDAR), Kelantan Forestry Department, Department of *Orang Asli* Affairs and Kelantan State Education Department, UMK Publisher and individuals who have directly or indirectly assisted in ensuring the success of the expedition, seminar and the publication of this book.

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CONSERVATION OF LOJING HIGHLANDS: THE ROLE OF EDUCATION AND RESEARCH

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ABSTRACT

Lojing Highlands, the treasures of South Kelantan, is gradually under threat. The alarming rate of human activities in the highlands have caused concerned to environmentalists and for UMK this is indeed a great challenge which must be addressed amicably. The solution UMK offers is through education and research. The communities and policy makers need to fully understand the importance of conservation and preservation of The Lojing Highlands. Although, the highlands offer great opportunities for economic activities including agriculture and tourism, but without concerted efforts on the conservation of the highlands by many parties, Lojing Highlands will gradually face rapid destruction in a short period of time. Thus, in order to ensure Lojing Highlands will continue to contribute significantly to the economic development, it must be exploited based on sustainable approaches. Government intervention and enforcement must be strengthen. The environmental management based on the concept of sustainable development becomes the key element in exploiting the richness of the natural resources of Lojing Highlands without causing detrimental effects to its environment. It is important that what we see and appreciate the Highlands today will also be seen and appreciated by our future generations. Education and research will be the major instruments for ensuring that our future generation will have the opportunity to appreciate and subsequently preserve our mother nature.

INTRODUCTION

Lojing Highlands in the State of Kelantan is considered to be one of the strategic locations which can be exploited for economic generation, mainly in the fields of agriculture and eco-

tourism (Plate 1). However, before any economic activities can be thought of, Lojing Highlands must be conserved and thus if any development is to be implemented, sustainability must be given the utmost priority. What is conservation? Conservation is about ethical use of resources, allocation and protection; thus maintaining the health of the natural world. The most important conservation effort is the restoration of the biological diversity of its forest, flora, fauna and its ecosystem, although conservation can also mean material and energy conservation. The idea of conservation is to maintain our environment as to allow to be enjoyed and benefited by our future generation for many years to come. Conservation to consumers means differently. Consumers advocate the concept of 4R, rethink, reduce, reuse and recycle which is vital not only in reducing wastage but also ensuring that the environment is free from any forms of pollution. Conservation can also be referred to the conservation of the cultural and genetic diversity. The conservation of our natural resources is regarded fundamental and important for the sustainable of our future generation. In doing so, problems and challenges are inevitable, however is solved, it is difficult to solve other problems related to mankind. This is because conservation of biological diversity requires the understanding of the philosophy of environmental management which focuses on the despoil, exhaust and extinguish.



Plate 1. The magnificent Lojing Highlands, South Kelantan

Environmental conservation normally does not seem important due to the beliefs that it hinders commercialization, industrialization and globalization. However, it must be understood that, for the economic generation from the natural resources to be sustainable for a long period of time, one must understand that the destruction and the degradation of the resources must not happened. Environmental conservation is not something new but has its roots for as long as mankind exists. All major religions of the world advocated the concept of environmental conservation and love for mother nature. When the global industrial revolution expanded with the increasing used of chemicals, environmental pollution begun which have initiated the global concerned on environmental protection and conservation. Today, every citizen of the world understands that humankind must have the moral respect to the environment and it is unethical to cause any detrimental effect to it. The population

of the world increases rapidly and therefore, rapid conversion of the land and environment to support the growing population is inevitable. As a result, the development plans which do not consider the conservation of the natural resources will lead to the destruction of our natural resources. Each year, 22 millions acres of forest lands worldwide were destroyed to make way for human settlement and economic activities. Toxic chemicals, waste materials and various forms of pollutants from domestic and industrial sources are released to the environment which gradually threatening the health, prosperity and security of mankind. These are issues raised during The Copenhagen Summit on Environment 2009. Developed countries need to compromise for the well being of the world at large in their pursuit of wealth creation. Under many circumstances poor countries suffer most as a result of global environmental changes. Technologies for pollution remediation and management of environmental destruction are only available in rich countries making poor countries continue to accumulate environmental problems, which further worsen the socio-economic status of these poor countries. Therefore, poor countries must design steps and strategies to ensure that their environment will continue to remain safe for many more years to come.