

A STUDY ON THE SUSTAINABLE DEVELOPMENT OF CAMERON HIGHLANDS

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Dedicated to

My beloved Father and Mother, my family members and all my friends.

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Abstract

Cameron Highlands, located in the mountain area of tropical forest of Peninsular Malaysia, is a popular tourist destination and is also suitable for tea and vegetable farming. It has also been developed for hydroelectric power generation. Development activities have recently been intensified creating enormous stress to the environment.

This thesis investigates the sustainability of the development in Cameron Highlands. It adopts a holistic approach based on the Pressure-State-Response framework. The methodology adopted is mainly library research, with supplementary environmental data processing and calculation.

The pressure of the development of agriculture, tourism and hydropower generation on the environment is analyzed. Then, the state and the changes in environmental quality for the last 4 decades are quantified and examined. Finally, the sustainability and the societal response towards the increasing pressure and deteriorating environmental state are also discussed.

This dissertation concludes that the development pressure due to agriculture and tourism is intense and causes tremendous environmental degradation at a pace that is unsustainable. The deteriorated environment had resulted in the severe sedimentation of Ringlet Reservoir, reduction in hydroelectric generation, increasing incidents of landslides, increasing agriculture input and cost, deteriorating visual aesthetic affecting tourism development.

Long-term and short-term strategies and responses to the management of the catchment with interdisciplinary considerations and collective participation of the relevant agencies as well as the local communities are recommended.

Abstrak

Cameron Highlands yang terletak di kawasan pergunungan hutan tropika Banjaran Titiwangsa di Semenanjung Malaysia adalah sebuah kawasan pelancongan yang menarik dan juga tempat yang sesuai bagi penanaman teh, bunga and sayur-sayuran. Ia juga dibangunkan sebagai sebuah kawasan tadahan air untuk penjanaan kuasa hidroelektrik. Tetapi, kegiatan pembangunan yang semakin ketara telah mengakibatkan tekanan kepada alam sekitar.

Tesis ini bertujuan menyelidik kemampanan pembangunan di Cameron Highlands. Ia mengambil pendekatan secara menyeluruh mengikut menggunakan corak Tekanan-Keadaan-Tindakbalas. Kaedah utama yang digunakan ialah kajian perpustakaan berserta dengan menganalisis data.

Tekanan akibat daripada pembangunan kegiatan pertanian, pelancongan dan hidroelektrik telah dianalisis. Kemudian, keadaan dan perubahan kualiti alam sekitar untuk 4 dekad ditentukan dan diperiksa dengan teliti. Seterusnya, tesis ini juga membincangkan kemampanan pembangunan dan tindakbalas masyarakat di Cameron Highlands.

Tesis ini menyimpulkan bahawa tekanan pembangunan daripada sektor pertanian dan pelancongan adalah terlalu tinggi dan telah menyebabkan kemerosotan kualiti alam sekitar yang berterusan dengan kadar yang tidak mampat. Kemerosotan kualiti alam sekitar telah memyebabkan hakisan tanih yang teruk, pengurangan penjanaan kuasa elektrik, kekerapan kejadian tanah runtuh, peningkatan kos pertanian dan kemerosotan activiti pelancongan.

Cadangan-cadangan jangka masa pendek dan panjang juga diberi untuk pengurusan pembangunan mampat dengan cara interdisiplin dan penglibatan pelbagai agensi serta penduduk tempatan.

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