

ATTITUDE AND WILLINGNESS OF LOCAL COMMUNITIES TOWARD CONSERVATION OF URBAN FOREST IN SELANGOR

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ATTITUDE AND WILLINGNESS OF LOCAL COMMUNITIES TOWARD CONSERVATION OF URBAN FOREST IN SELANGOR



Project Report Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor Wood Science and Technology in the Faculty of Forestry
Universiti Putra Malaysia

SPECIAL DEDICATION

MY SPECIAL DEDICATION GOES TO MY BELOVED PARENTS

SYED BASIR BIN SYED ADNAN & ZARINA BINTI SHAARI

TO MY BELOVED SIBLINGS

SHARIFAH ARDIYANA SYED BASIR

SHARIFAH AINIL AZWA SYED BASIR

SYED ADAM HARITH SYED BASIR

SYED ZAIM AZHAN SYED BASIR

MAY ALLAH S.W.T BLESS YOU ALL

ABSTRACT

The study was done within Ayer Hitam Forest Reserve (AHFR) and Bangi Forest Reserve (BFR). The study focused on attitude and willingness of local communities toward conservation of urban forest. The main objective of the study was to investigate the attitude and willingness of local communities toward conservation of urban forest and to examine the correlation between local communities' attitude and willingness to conserve the urban forest. The study used questionnaires survey which distributed randomly to local communities that live within 3 Kilometer from the border of AHFR and BFR. A sample size of 200 respondents was chosen with 100 respondents for each forest. From the findings of the study, it can be concluded that the local community in both study areas generally has positive attitudes towards conservation of urban forest. The local community is positively motivated towards conservation as the majority of the respondents were willing to conserve the urban forest. There was a significant monotonic correlation between the attitude of the local community towards conservation and their willingness to conserve urban forest (r_s (198) = .403, p = 0.000). Overall, the attitude and willingness of local communities toward conservation of urban forest in Selangor were positive. Further studies should be done in other urban forests in Selangor by the similar methodology used in this study. It is recommended that conservation education programs should be implemented in order to keep local communities interested in conserving urban forests.

ABSTRAK

Kajian ini dilakukan di dalam Hutan Simpan Ayer Hitam (AHFR) dan Hutan Simpan Bangi (BFR). Kajian ini memberi tumpuan kepada sikap dan kesanggupan masyarakat tempatan terhadap pemuliharaan hutan bandar. Objektif utama kajian ini adalah untuk mengkaji sikap dan kesediaan komuniti tempatan terhadap pemuliharaan hutan bandar, dan mencari hubungan (korelasi) antara sikap dan kesediaan masyarakat tempatan untuk memelihara hutan bandar. Kajian ini menggunakan tinjauan soal selidik yang diedarkan secara rawak kepada masyarakat setempat yang tinggal dalam jarak 3 Kilometer dari sempadan AHFR dan BFR. Saiz sampel sebanyak 200 responden dipilih dengan 100 responden untuk setiap hutan. Dari penemuan kajian ini, dapat disimpulkan bahawa masyarakat setempat dalam kedua-dua bidang kajian umumnya mempunyai sikap positif terhadap pemuliharaan hutan bandar. Masyarakat tempatan bermotivasi positif terhadap pemuliharaan kerana majoriti responden bersedia memelihara hutan bandar. Terdapat korelasi monotonik yang jelas antara sikap masyarakat tempatan ke arah pemuliharaan dan kesediaan mereka untuk memelihara hutan bandar (r_s (198) = .403, p = 0.000). Keseluruhannya, sikap dan kesanggupan masyarakat tempatan terhadap pemuliharaan hutan bandar di Selangor adalah positif. Kajian lanjut perlu dilakukan di hutan bandar lain di Selangor dengan menggunakan metodologi yang sama dalam kajian ini. Adalah disyorkan untuk satu program pendidikan pemuliharaan dilaksanakan bagi memastikan masyarakat setempat tertarik untuk memelihara hutan bandar.

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APPROVAL SHEET

I certified that this research project report entitled "Attitude and Willingness of Local Communities toward Conservation of Urban Forest in Selangor" has been examined and approved as a partial fulfilment of the requirement for the degree of Bachelor Wood Science and Technology in the Faculty of Forestry, Universiti Putra Malaysia.

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LIST OF ABBREVIATION

ABC Affective, Behavior and Cognitive

AHFR Ayer Hitam Forest Reserve

ANOVA Analysis of Variance

BFR Bangi Forest Reserve

CBC Community Based Conservation

CBO Community Based Organization

DOSM Department of Statistics Malaysia

UNFPA United Nations Population Fund

FAO Food and Agriculture Organization

JPSM Jabatan Perhutanan Semenanjung Malaysia

MINT Malaysian Institute for Nuclear Technology

PBC Perceived Behavioural Control

PDR People Democratic Republic

PORIM Palm Oil Research Institute of Malaysia

UN United Nation

SN Subjective Norms

SPSS Statistical Package for Social Sciences

TPB Theory Plan Behaviour

TRA Theory of Reason Action

UNFPA United Nations Population Fund

UKM Universiti Kebangsaan Malaysia

UPM Universiti Putra Malaysia

WTD Willing To Donate

WTP Willing To Pay

CHAPTER 1

INTRODUCTION

1.1 Background Information

According to the UNFPA (2007), majority of the world population nowadays lives in cities and this proportion will further increase in the years to come. Urbanization and population growth in the cities have led to problems such as limitation in availability of resources as well as forest fragmentation (Hauru et al., 2012). In order to establish the infrastructures necessary to support growing population, expanding cities and towns will require land to which is done by deforestation (Mather, 1991; Sands, 2005).

Malaysia has experienced extremely high rates of urbanization especially for the past 20 years when the economy has undergone major changes. According to Department of Statistics Malaysia (2011), current total population in urban area in Malaysia is about 23, 981,117. Selangor ranked third after Kuala Lumpur and Putrajaya as most populated states accounted about 91.4% of total population in Malaysia. Selangor has about 250, 860 hectares of forested land which consist of 250, 129 hectares of permanent reserved forest, 11, 381 hectares of forest plantation and 731 hectares of state land forest (JPSM, 2015).

Forest fragmentation results from the simultaneous reduction of forest area, increase in forest edge, and the sub-division of large forest areas into smaller non-contiguous fragments (Laurance, 2000). In Malaysia, the expansion of agricultural land has been identified as major factor that caused forest fragmentation till the 1970s but since

1980s, land development for other land uses, such as housing, new urban areas, and industrial estates also intruded into forested areas (Abdullah & Nakagoshi, 2007). In Selangor, rubber and oil palm plantation had caused deforestation of inland forests and wetland forests remarkably (Abdullah & Nakagoshi, 2007). During 1980s to 2000, the state of Selangor experienced more drastic damage in the natural landscapes, this time it had converted to the built-up area due to industrialization and urbanization (Abdullah & Nakagoshi, 2006).

Conservation thus is important to make sure the forest is sustainable. Based on Forest Conservation Law (2014), forest conservation defined as a retention of existing forest or the creation of new forest at the levels prescribed by the State or local authority. Despite the long-standing tradition of exclusion of local people in management of protected areas, adding local communities as integral actors in management and conservation of protected areas would be beneficial (Garekae et al., 2016). Public attitudes have a significant influence on many aspects including the public involvement and participation, integration of tree programs into social infrastructure, and community identity (Zhang et al., 2007). Obtaining information regarding public attitudes to support urban tree programs is, therefore, important.

According to Macura et al. (2011), the success of long-term sustainable management of natural resources depends on local people's support. The support from local communities in the forested area can contribute to the more participation in conservation activities in the forest. Besides, researchers have studied local resident's attitudes toward protected areas, especially in developing countries, under the

assumption that sustainable, more responsible, and long-term management of forest resources depends on local people's support (Triguero-Mas et al., 2010).

1.2 Problem Statement

According to Giulo et al. (2009), effects of landscape fragmentation on societal perspective, namely in how landscape fragmentation potentially influences human being have been rarely addressed so far. The landscape context also recently received much attention in land use planning and management based on past studies (Brandt et al., 2002; Romero-Calcerrada & Perry, 2004), especially concerning forest and biodiversity conservation (Fukumachi et al., 2000; Nakamura & Short, 2001).

As a developed country, Malaysia always plans a better life and modern infrastructure in urban area but to create a superior environment in urban, government and city planner always disregards with the important roles of the urban forest (Isa, 2013). For Malaysia which is facing continuous environmental threats due to its rigorous economic development, urban forest would definitely provide various benefits to the community such as those relating to health, employment, education, recreation, aesthetic and landscape benefits (Mustafa, 2009). According to Iverson and Cook (2000), the values and benefits are manifold, including providing recreation possibilities and urban biodiversity.

Past conservation failures have shown that weaknesses in engaging local communities and government have contributed to poor conservation efforts (Kusworo & Lee, 2008). This may due to project planners and implementers frequently use the word 'participation' while continuing a traditional style of management that does not involve local people (Wily, 1997). In Malaysia, the issue of local community engagement and participation in resource management efforts is crucial. In fact, there is still much-unexplored potential for conservation-oriented collaboration involving local communities and local authorities. Therefore, engaging local communities in a collaborative manner with local authorities for the joint management of natural resources has the potential to transform values, practices and overall behavior. This transformation would assist in shifting patterns in natural resource utilization and governance to ensure sustainability (Halim et al., 2011).

However, there is still some people that willingly to participate the conservation activity and aware about the importance of urban forest as stated by some researchers which that over the past few decades, the general public has become increasingly aware of forestry and environmental issues (Dunlap, 1991; Dunlap & Scarce, 1991; Steel & Lovrich, 1997; Steel et al., 1997). This has resulted in greater public involvement in forest management decisions (Fortman & Kusel, 1990), and especially through the proliferation of interest groups representing the diversity of values held regarding appropriate uses of natural resources.

Besides, based on Takon (2013) attitudes are considered critical in predicting conservation behaviors. Understanding conservation attitudes of local communities are paramount to the long-term sustainable management of natural resources including the forests (Triguero-Mas et al., 2010). In addition, the study about correlation on attitude and willingness to conserve the forest also is rarely to be found. Thus, it is necessary to examine attitudes and willingness of local community to conserve urban forest.

1.3 Justification of Study

This study is done to examine public attitudes and willingness from the perspective of conserving urban forest in Selangor. Over the past two decades, the importance of understanding local communities' attitudes, needs and aspirations have received increasing attention among researchers, donors, conservation agencies and protected area authorities. Thus, this study will be beneficial to other researchers because the gathered information related to attitude and willingness of local communities in Malaysia especially in Selangor state will help the forest managers, conservators, policymakers and city planner to make decisions at the same time protecting and conserving the urban forest.

1.4 Objectives

The objectives of this study were;

- 1) To investigate the attitude and willingness of local communities toward conservation of urban forest in Selangor;
- 2) To examine the correlation between local communities' attitude and willingness to conserve the urban forest.

1.6 Hypotheses

H₀: There is no monotonic correlation between attitude and willingness to conserve.

H₁: There is monotonic correlation between attitude and willingness to conserve.

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