

CHAPTER 1

INTRODUCTION

1.1 Background

Urbanization could be defined as process whereby a society changes from rural to an urban ways of life which indicates gradual increase in the population of people live in urban areas (National Library of Medicine, 2014). Urban areas commute large population which eventually are the main users of water. This statement indicates changes of level of water consumption in a river basin. Urban expansion affects the increase in water demand due to large number of users of natural sources and the function of urban areas as economic center.

The urban expansion of Pahang give impacts to the water demand. In order to develop a sustainable expansion without facing problem with water supply, the pattern of water inflow and consumption should be generated. The dimensions of urban expansion such as change of landuse,land requirement and urban growth should be take account in this study.

1.2 Problem Statement

The demand of water increases as the population growing in the urban area. The projected water planning demand has been structured but different factor could contribute to water shortage problem. Sinar Harian in April 2013 reported that Air Putih, Kem Galing, Jalan Haji Ahmad and Bukit Ubi are the critical area in water shortage issue. This area facing serious water shortage that suddenly interrupted without notice. Therefore, a study should be conduct aim to identify factor that may leads to water shortage in 5 districts which are Kuantan, Maran, Bentong, Cameron Highlands and Pekan.

1.3 Objective of Study

The main objective will be to identify factor contributing to water shortage issues in urban area in Pahang. The specific objectives will be as follow:

- I. To forecasting population growth and domestic water demand pattern, and
- II. To compare domestic water demand and water supply in 5 districts in Pahang

1.4 Scope of Study

The scope of study will include forecasting domestic water demand for 5 districts in Pahang. The districts would be Kuantan, Maran, Bentong, Cameron Highlands and Pekan. The study period would be for 7 years starting from 2010 until 2017. The data obtained from local authorities and literature review. Statistical approach will be use in this study. The data will soon to be process and projection of population and water demand will be constructed. This analysis use to compare water demand and water supply in this 5 districts and identify the factor that may lead to water shortage issue and achieved the objectives of this study.

1.5 Research Significance

This study significance is aim to identify the factor that lead to water shortage issue. Therefore, at the end of this study we will come out with a recommendation to contribute for future research in this water shortage issue.

1.6 Thesis Structure

The thesis is divided into five (5) chapters. Chapter One describes the background and objective of the study. While Chapter Two, looking back at the previous research studies related to the review of progress. In Chapter Three, the study described the projection of population of five districts in Pahang, which will be a key component of the water domestic demand analysis. The urbanisation, the population growth and its

impacts on water domestic water demand explained in Chapter Four. Chapter Five is the conclusion of the study and recommendations for future research.