CHAPTER I
INTRODUCTION

1.1 Background and Justification

Abandoned areas problems in developing communities, areas in chaotic communities in the city planning, areas not having the entrance and exit, or land where is small and does not shape a size people want. These problems derive from developing communities freely, not regulating strictly, and increase continuously. The problems causing from abandoned areas are much concerned by public because these areas, not used, are abandoned.

The survey of Land Development Department indicates that there were many abandoned areas both belonging to the governments and private sectors. These areas, outside forest districts in every type, could be classified that were abandoned paddy fields, abandoned field crop, natural grasslands, scrubs land, marsh and swamp, and abandoned mine. The survey in Phuttamonthon district demonstrates that there were abandoned areas which were the ones as follows: abandoned paddy field, 23 rais, rangeland, 1,953 rais, and marsh and swamp, 481 rais (Land Development Department, 2007). These areas caused losing opportunities both in economic affairs and social problem solutions. Phuttamonthon district is in Nakhon Pathom Province, and adjacent to Bangkok.   Phuttamonthon district is appropriate to develop infrastructures for supporting expansion in residence, and tourism and commerce. Yet the past developments made agricultural possessory interests decline because these areas were transformed to domiciles, governmental organizations, and places where people do other activities. These developing areas were not suitable to soil properties. Abandoned areas for agriculture increased because they possibly derived from people buying land to get benefit (Tachapon, 2012). Because of the fact that areas are in a good location, they are potential and have high opportunities to develop. On the other hand, they have troubles and restriction in utilizing soil resource, and lack of regulation to exploit land effectively. To capitalize on these abandoned areas

effectively is to make economic value, renovate and improve soil qualities, and also conserve and develop these areas for using a long time. Therefore, people are worried that if these problems are not solved quickly, people might be in situations getting troubles of land people get benefits, insufficient agricultural regions, and thus, environment in future. Thus, to utilize abandoned areas helps economic value increase, and also helps land be conserved and developed sustainably.

The objective of this study is to present spatial informatics data for managing abandoned areas by using Geo – Informatics technology of abandoned areas in Phuttamonthon district, Nakhon Pathom province, and estimate potentiality of these areas being information for making decision, including give suggestions or appropriate ways for managing these areas.

1.2 Objectives

1.2.1 To classify patterns of the abandoned areas by using satellite data in Phuttamonthon district, Nakhon Pathom province.

1.2.2 To estimate the potentiality of the abandoned areas development in according with environmental management.

1.3 Scope and Limitations of the Study

1.3.1 The limit of the studying areas.

This study selects the studying areas by using the administrative district that is Phuttamonthon district, Nakhon Pathom province, 76,329 square kilometers or 47,706.25 rais (Phuttamonthon district, 2012).
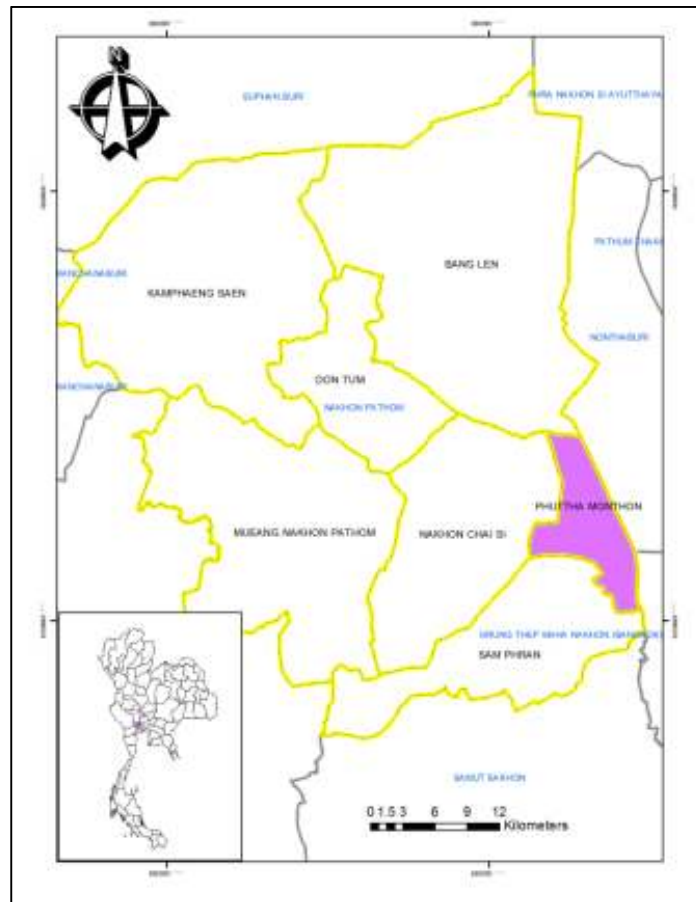
Figure 1-1 Study area boundaries

   1.3.2 The content limit of the study.

        1.3.2.1   To analyze satellite data and spatial models are to classify types of abandoned areas and status that are founded exactly in the studying areas. Classification of abandoned areas by the object-based classification. Using Thaichote satellite data in the classification data is divided into 5 types of abandoned paddy field, rangeland, marsh and swamp, open space or bare soil and abandoned buildings. (Abandoned village, abandoned industrial, spaces in front of the building).

        1.3.2.2   To analyze the potentiality of abandoned areas development corresponds with environmental management by studying generality of the transformation and potential estimation of areas in the present time, suggestion in the ways of ecological area development in Phuttamonthon district, Nakhon Pathom province, and modification concerning with other ways, such as social, economic, and law ways, helps field works completely and possibly.

1.4 Definitions, used in this study.

Abandoned areas mean that abandoned areas, useless, or using abandoned areas, agricultural areas or not agricultural areas, and these areas, physical conditions are different from environment surrounding, are left from people using in other ways discontinuously.

The potentiality of using land means that land is utilized in activities under specific conditions. The potentiality of using land depends on the methods using or managing this land.

Environmental management means that processes using resources effectively and systematically by planning, operating, following, estimating, improving, and also concerning about utilizing resources at least but getting advantages the most, using these resources a long time, and being useful to humans and nature the most.
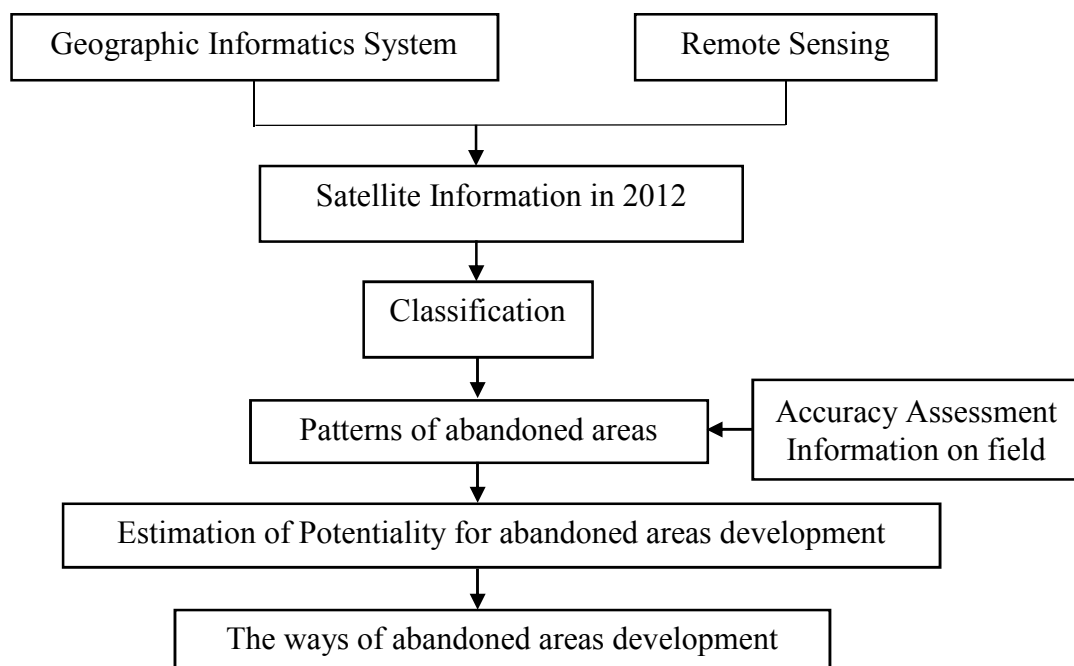
1.5 The concept ideas in the study

Figure 1–2 The concept ideas in the study

1.6 Expected Results

1.6.1   Information and patterns of abandoned areas in Phuttamonthon district, Nakhon Pathom province.

1.6.2   Information about the potentiality of abandoned areas and the appropriate ways for abandoned areas development. This information supports the examination in planning abandoned areas management, and gives the ways for solving resource utility that land resources are used in the right way and effectively, and these ways are the ways for the next study in other areas.