

The Urban Expansion to Durian Orchard in Nonthaburi

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Abstract: The urban and commercial growth and density of population make Bangkok metropolitan region as the primate city. Nonthaburi is one of vicinity of Bangkok metropolis get an influence of urban growth to agricultural area especially durian and mix orchard in Bangkruai, Pakkred and Meaung districts which is located nearby Bangkok. Nonthaburi Durian as called “Durian Non” is long term famous for the delicious taste which is registered geographical indications in Thailand since 2010. The unique characteristics of Nonthaburi are different from another region of Thailand. The fertile soil in flood plain of Chao Praya river, ridge and groove cultivation and the indigenous wisdom of local people in Nonthaburi are suitable for durian that make them unique with the good taste, flesh thick, rich and smooth creamy texture. Nowadays, the cultivation area of durian orchard in Nonthaburi was decrease rapidly with many reasons for example urbanization such as housing and transportation network. In addition, the impact of flood in year 1995 and 2011 almost destroyed all durian orchards in Nonthaburi. The conservation of the specific fragile varieties durian cultivation area is important to preserve durian orchard. The Plant Genetic Conservation Project under the Royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn help to preserve an indigenous endangers plant varieties to prevent the extinction of Durian Non. The renovation and encourage durian gardener to restore their garden were started after inundate finish. This study aims to analyze the pressure of the urban growth and flooding on agriculture area, particularly, durian cultivation area in Bangkruai, Pakkred and Meaung districts of Nonthaburi province using remote sensing and GIS techniques for two period (before and after Thailand’s flood in 2008 and 2012) in order to monitor the change. The QuickBird Satellite images of 2008 and the images of 2012 from Theos were used for updating the land use database obtained from Land Development Department. The results showed that The flooding destroyed whole area of durian orchard in Bangkruai and Pakkred districts and some part of Meaung districts. The urban and commercial area has been highly grown in Meaung districts. However, some durian orchards survived from flood more than 15 households in Meaung districts. The major reasons that gardeners changed their land were the effect from flood and old age. Many of them sold out their land to the real estate to build up hometown village. The encouragement the gardeners and their communities to conservation and awareness for preventing the extinction of “Durian Non” plantation are important before them leave only the name.

KEY WORDS: Urban Expansion, Durian Orchard, Nonthaburi, Theos satellite