# Classification map of buildings in Amakubo 3 Chome

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#### Introduction

University of Tsukuba was established in 1973. There is an area of land which is located on the east side of the campus known as Amakubo 3 chome. Historically this was an agricultural area but by now land use has been changed mostly built up area and the university does not own this. This area is about five hectares

#### **Purpose**

This research investigates buildings classification according to the services whether they are residential, shops, restaurant and agency.

#### Study Area

In order to achieve the purpose of study Amakubo 3 chrome area was selected as the study area.





Fig.1. Amakubo 3 Chome

#### Methodology

The data, used in this research is Zenrin of 2008. This study will update footprints of new buildings and investigate the classification of each building. With the manual GPS and Arc survey 123 assisted capturing processes, the location, floors of the building, field boundary, were captured. Four factors were considered for evaluation: They are residence, shops, restaurant and agency.

### **Results and Discussion**

The result of the classification map shown in the figure 02.

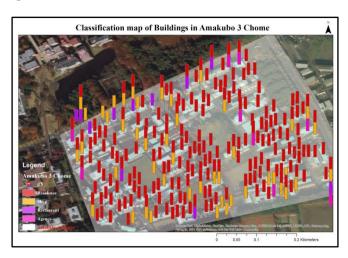


Fig.02.Classification map of building in Amakubo 3 chome

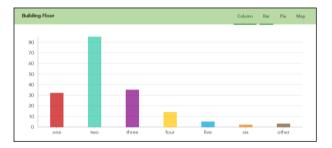
The analyzed map shows the percentage of each category of buildings. According to the results, it is apparent that the concurrent situation has already been changed from agricultural to the built up area. Most of these buildings are residential. It is about 72 %. The second largest category is shops it is about 7 %.





Source: Arc Survey 123

The main reason influenced for this result is income generation a block of land. Householders generate more income from residential than agricultural. The available agricultural fields are occupied by the intensive farming. Most of residential areas are for rent.



Source: Arc Survey 123

Most of the buildings are two-storied buildings are used for different purposes such as shop and renting out. More than two storied buildings are residential buildings.