

Assessment of Vulnerability to Flood A Case Study In Sambas Regency, Indonesia

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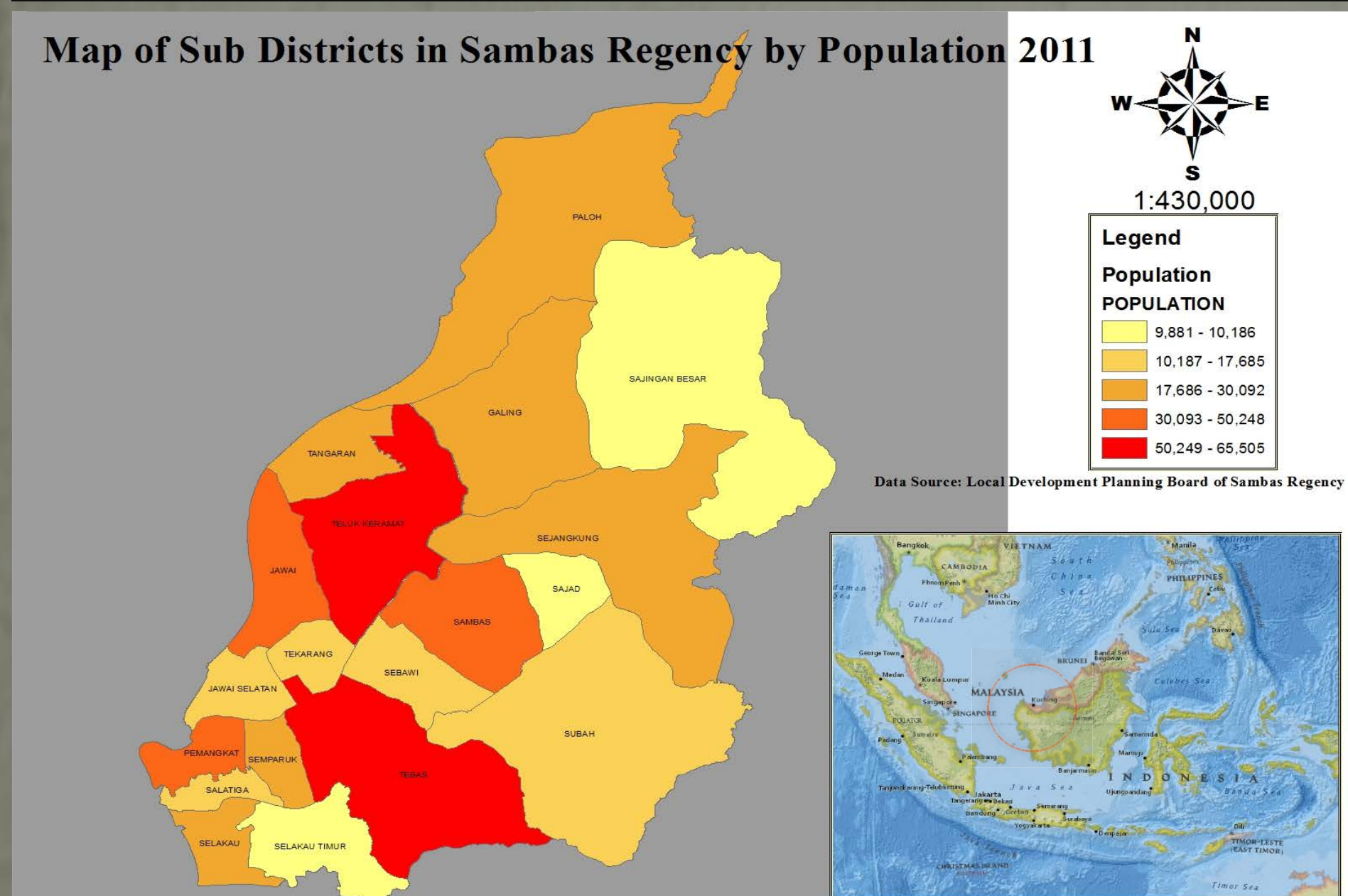
INTRODUCTION

Deadly and damaging flood events are increasing since recent decades. Some factors behind the scene are including the climate variability, massive urbanization, and the most crucial one is the encroachment of natural resources in the pursuing of economic growth. As consequence, population in the floodplain areas who for a long time beneficiary to flood now is getting vulnerable to the occasions. To cope with such condition, assessing people vulnerability to flood is crucial.

However, assessing vulnerability often requires complex analysis as vulnerability itself is a broad term and linked to broad area of interest. Ideally comprehensive vulnerability analysis is that one which considers the totality of the system (Turner et al 2003). Unfortunately, such thing almost impossible to be achieved.

The most reasonable way is that at least a vulnerability analysis considers the population and structures at risk within the flood-prone area (United Nations n.d). It is also important to acknowledge that every country, every government, and every society is unique regarding its vulnerabilities and the root causes of such (Coppola 2011)

RESEARCH SITE

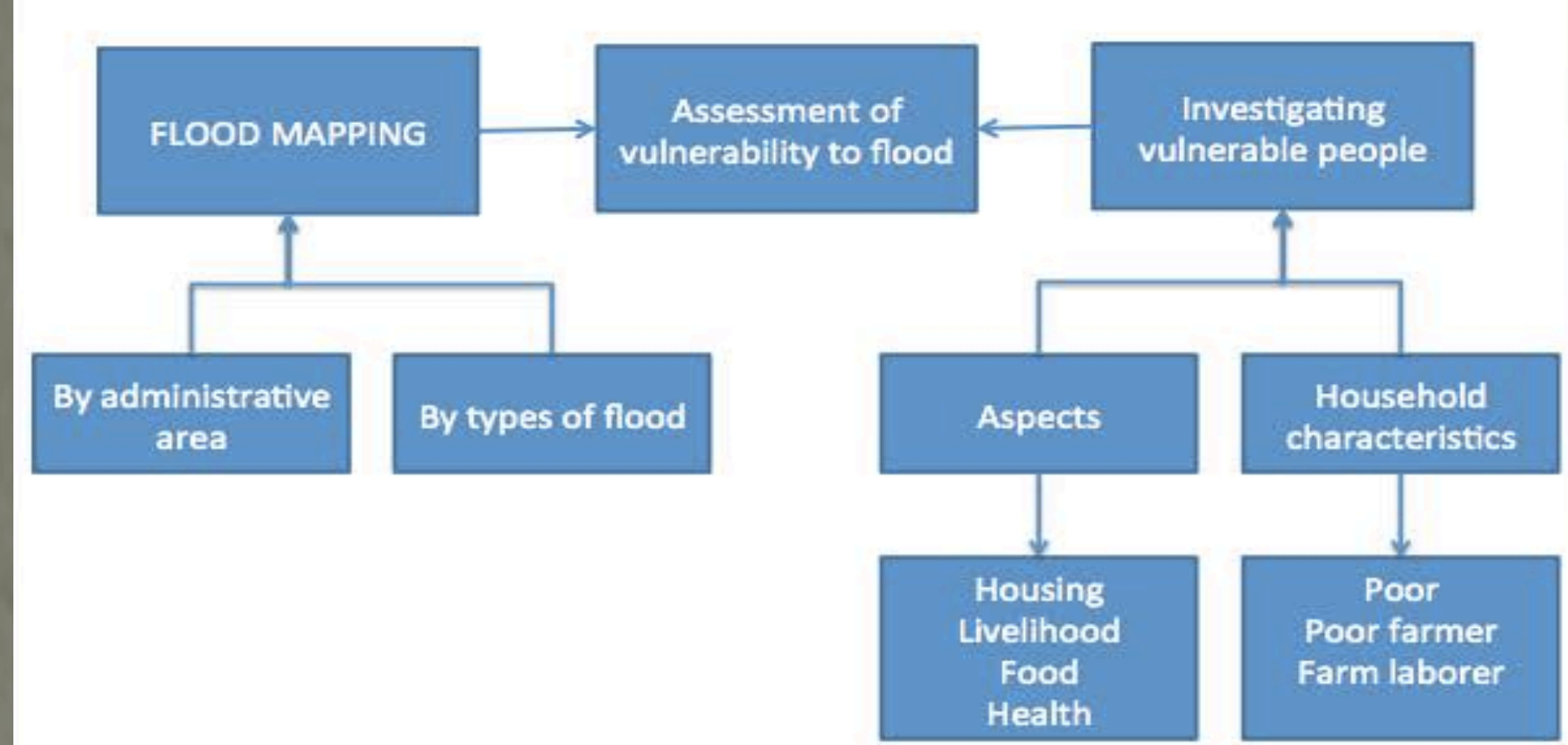


OBJECTIVES

Propose a simplified model and method for the assessment of vulnerability to flood, particularly in rural floodplain area such as in Sambas Regency of West Kalimantan Province, Indonesia. The assessment itself is aimed to fulfill several interests:

- Support decision-makers (Douben 2006).
- Recognized correct actions (Balica 2007).
- Prepare for the potential adverse impacts (IPCC 2012)
- Identify the emergency responses (UN undated)

RESEARCH FRAMEWORKS



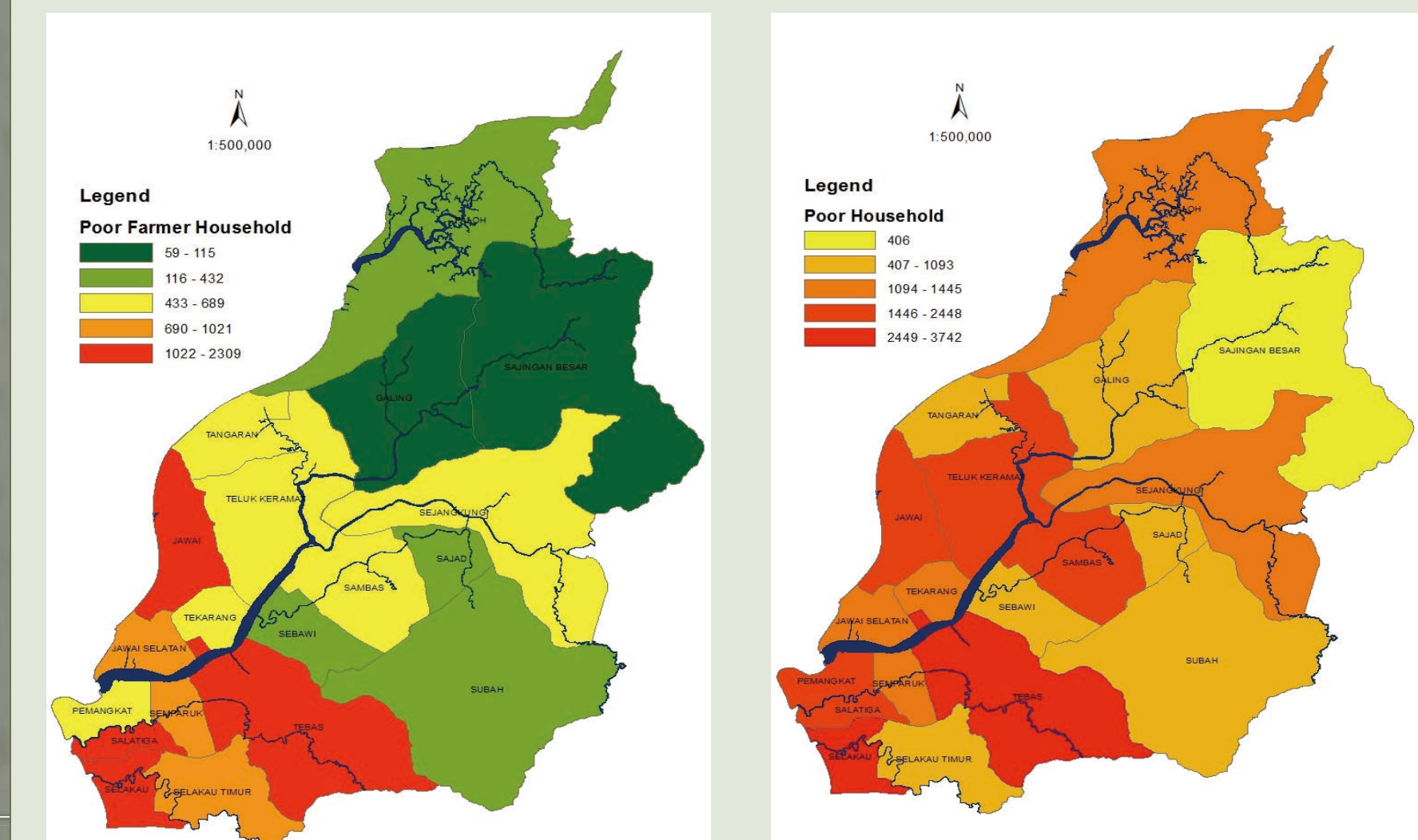
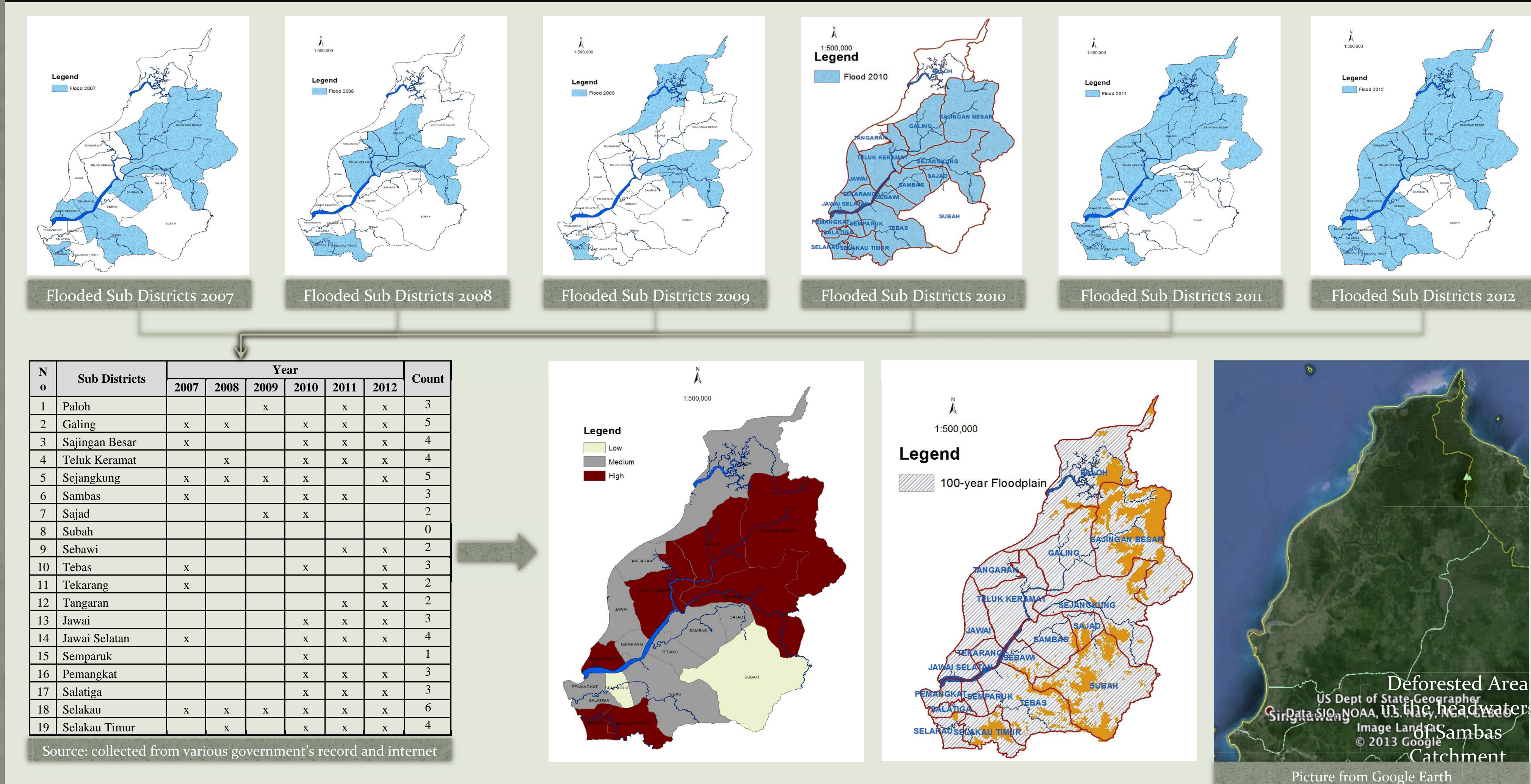
METHODS

- Mapping potentially flooded area (qualitative mapping/GIS), Data: flooded villages/sub districts (2007-2012), Government records, media, internet
- Investigating vulnerable people (18 KEY INFORMANTS): In-depth interview with key informants to investigate:

1. Who is vulnerable
2. In what aspects do they more vulnerable
3. How do they cope with floods

Fieldwork two times

RESULTS



CONCLUSIONS

- Even though almost all parts of Sambas Regency are risky to flooding, some sub districts are more vulnerable. Sejangkung Sub District is one of the most vulnerable. Here flood potentially happened every year and the area is populated by many poor farmers.
- There are two types of people vulnerability to flood, during flood vulnerability and after flood vulnerability.
- Generally, poor farmer households are more vulnerable to floods, but farm labourer households are more vulnerable during flood.
- Livelihood is the most vulnerable aspects of poor household to flooding, they are more resilience in housing.

RECOMMENDATIONS

- Policy makers should pay more attention to the vulnerable sub districts and their vulnerable population.
- The focus of attention : during flood vulnerability and after flood vulnerability. Farm labourers are more vulnerable during flood than farmers, but farmers are much suffering after flood
- Managing forests utilization in the headwater of river catchments FOR PREVENTION AND COPING STRATEGIES

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