

LAND USE PLANNING IN THE CONTEXT OF CLIMATE CHANGE IN BA RIA – VUNG TAU PROVINCE, VIET NAM

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Key Words: Land use planning, climate change, land use change, coastal erosion, drought, sea level rise

1. BACKGROUND AND OBJECTIVES

Agricultural land conversion into built-up land has been happening rapidly in Ba Ria – Vung Tau province in Viet Nam. This change is going to continue according to the land use master plan and land use plan for the period 2010-2020. Due to climate change coastal erosion is getting more serious with high speed of land loss. The climate change scenario shows that about 5.9% of land in Ba Ria – Vung Tau will be inundated if the sea level rise at 1m elevation. The study aims to understand the context of climate change in the province, to assess the provincial trend of land use change, to find the linkage between land use planning and climate change policies and to analyze local planners' participation and community perspectives about integrating climate change into land use planning in order to suggest ways to mainstream climate change issues into land use planning.

2. METHODOLOGY

To achieve the study goals, the thesis applied various methodologies including literature review. A questionnaire survey was conducted to evaluate local planners' participation in integrating climate change into land use planning. Focus group discussions participated by 42 participants were also conducted to analyze community perspectives about the integration. Policy analysis aims to realize linkage elements between climate change and land use planning policies. Map analysis was conducted by overlaying flood map on land use planning map to determine inundation areas.

3. RESULTS

Based on the land use change analysis, policy analysis, map analysis, questionnaire survey and focus group discussion, Vung Tau city is considered as the most vulnerable to coastal erosion, sea level rise and storm. This city also has the largest land use change in the future according to land use planning. Then Tan Thanh district is the second most vulnerable to sea level rise. It is also has the second largest land use change in the future. Finally, Xuyen Moc district is considered as the most susceptible area to drought and highly vulnerable to storm and coastal erosion. Climate change issues have not been integrated in land use planning due to lack of climate impact assessment, coordination between sectors and local stakeholder participation. According to the 2013 land law, integrating climate change into land use planning is at the beginning stage.

4. CONCLUSION

The climate change coordination office is founded to help the local committee make the right decision in integrating climate change issues into land use planning (Figure 1). In detail, the office will connect all resources of sectors and local communities with the support of institute or research organizations to assess climate vulnerabilities and land use constraints by sharing and discussing knowledge. Then the authorities will come up with solutions to disaster risk reduction and climate change adaptation.

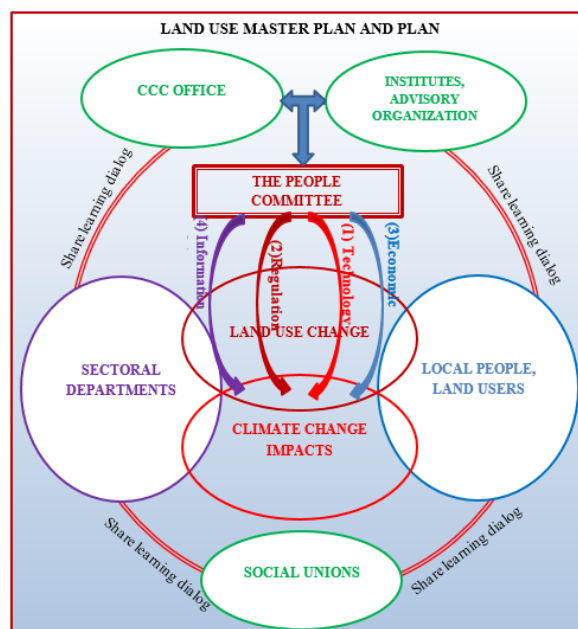


Figure 1 Diagram of integration climate change issues into land use planning