ABSTRACT

DIDI IRWANDI. Analysis of the potential areas for directions to preserve paddy fields in Solok Regency- West Sumatera Province. Under direction of ATANG SUTANDI and BOEDI TJAHJONO.

The increasing of rice production by the programme of rice intensification and the controlling of paddy fields conversion becomes very important to maintain food security considering the increasing of paddy fields raw area has been difficult to be realized, mainly due to various barriers of economic and social factors, such as land status, remote location and the lack of manpower. Therefore, ensure the food security, the priority areas that need to be preserved as paddy fields have to be set. The objective of this study was to analyze the potential of the region to be preserved as the paddy fields. The results of this study showed that there is 3.198 ha of area in Solok Regency which is suitable to be developed as paddy fields that is currently the grassland/tall grass, shrubs, bushes and fields. There are six districts namely Gunung Talang, Bukit Sundi, Kubung, Lembang Jaya, X Koto Singkarak and Junjung Sirih which is the most potential to be preserved as paddy fields by considering the availability of the technical irrigation network and the wide of semi technical, simple and village irrigation network, the value of cropping index that is more than 2 times per year and the level of paddy productivity that is more than 4.5 tons per ha. Moreover, the existence of subsidies or incentives for farmers is necessary to implement high yield productivity of farming so it could provides welfare for farmer families.

Key words : paddy fields, conversion, food security, potential area, Solok Regency