Thesis Title Evaluation of Drying System Performance in Rice Mills

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Abstract

The objective of this research was to study the suitability of paddy drying system from five rice mills which had different product capacity and drying system installation in the central part of Thailand. Two steps of paddy drying system at each rice mill were studied which included paddy drying method, paddy quality, energy consumption and economical assessment, to compare the efficiency of paddy drying system.

The result showed that paddy which passed the first step of drying system at each rice mill had the same good range quality but the difference in quality showed in the second step of drying system. Factors that effected the energy used in drying system at each rice mill were initial and final moisture content of paddy while factors effected the cost in drying at each rice mill were product capacity, moisture content of paddy and fuel used (Paddy husk, Diesel and Fuel oil) and most of the problem was the lack of knowledge in drying machines application.

Keywords: Drying system / Rice mill / Paddy drying / Product capacity / Paddy quality / Energy consumption / Economical assessment