

Abstract

Research Title	The Study of Physical Potential of a Single House in Phitsanulok's Housing Development Project for Supporting a Self-reliant Lifestyle
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The Study of Physical Potential of a Single House in Phitsanulok's Housing Development Project for Supporting a Self-reliant Lifestyle aims to survey and study the physical ability of single houses in Phitsanulok's housing development projects. Samples were taken mainly in the Amphor Muang district of Phitsanulok province to evaluate self-reliant level of the housing majority. Self-reliance concept developed here is taken from the framework of the Philosophy of Sufficiency Economy and Sustainable Development. Investigations are focused on food (herbs, fruit, and vegetables), water, and energy. The results show that the majority of single houses in Phitsanulok have a high level of self-reliance. Most houses can produce about 100% of food requirement (herbs, fruit, and vegetables). Rainwater collection can be harvested for use up to 81% of water required for the out-of-house use. In energy category, the Low-user households (6 kWh/day) can produce more than 100% of their electricity needed from the PVs on the rooftop. At least, about half of energy requirement can be produced for the intermediate-higher user (18.5 kWh/day). A family practicing self-reliance can save up to 8,500/year.