Information asymmetry has widen wealth between those who have and those who have not. Smallholder farmers in developing countries are not exceptions and more sensitive to levels of income whether to use information in agriculture for development, crop production, and sales activities. In Lao PDR, agriculture sector accounts for 25 percent of its economy and two third of its population involve in agriculture or related-industries. It implies that dependency and importance of agriculture are high.

Our study focus on impact of information accessibility of 295 smallholder farmers on income and productivity by season from two villages; Paklung village, Northern Lao PDR in Luang Prabang province, Pakkayong village, Central Lao PDR in Vientiane province. We use econometrics approach to measure impact of information by season (annual level, wet season, dry season) on their income (total income, farm income, non-farm income) and productivity (production quantity, yield). First, our study uses Ordinary Least Squares (OLS) approach to estimate impact of farming and market information. Then, we use Propensity Score Matching (PSM) technique to measure under- or overestimation of the former OLS results. Moreover, based on PSM results, we further look into detailed types of farming and market information with OLS. Farming information is divided into 1) Weather information, 2) Input information, 3) Farming technique information, while market information is classified into 1) Input price information, 2) Intermediate trader information, 3) Budget management information.

Our study finds that farming and market information enhance Lao farmers’ total and farm income, and production quantity while non-farm income is not affected by any information. In detailed farming information, input and farming technique information are important for increasing total and farm incomes in annual level and wet season, however, weather information affects high only in dry season. In detailed market information, using input price and intermediate trader information help farmers obtain higher total and farm income, and crop quantity in all seasons, however, impact degree in dry season is the highest. Therefore, policymakers should provide smallholder farmers with detailed and different types of information for ameliorating income level and productivity depending on wet and dry season.