

Naing Kyi Win 2009: Farmers' Adoption of Improved Technological Knowledge on Soybean Production in Northern Shan State Area, Myanmar. Master of Science (Tropical Agriculture), Major Field: Tropical Agriculture, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Praderm Chumjai, Ph.D. 105 pages.

A study was conducted on the farmers' adoption of improved technological knowledge on soybean production in Northern Shan State Area, Myanmar. The objectives of this research were to study the socio-economic factors, knowledge of soybean production farmers and extension activities affecting to adoption of improved soybean production technology, farmers' problems and recommend alternative solutions. The sample was 377 farmers and survey questionnaires were used as tools for collecting the data. The data were analyzed by using the percentage, mean and chi-square test for hypotheses.

Finding: this study revealed that the average age of farmers was 52 years and size of the land owned was 0.64 ha. Most of the soybean farmers 78.25% had formal education and almost all of the farmers cultivated the land their selves. A majority of 72.41% of the farmers had 2-4 supporters and average income per ha 353060-kyats. Also 32.63% of soybean farmers obtained credit, 28.91% worked in off farm employment and 37.40% were members of a farmers' organization. Further, 31.50% of soybean growing farmers had fully known about the improved soybean production technological knowledge. Farmers participated in extension activities such as home or farm visits 39.53%, and group contact 32.36%, while extension agents contributed to 35.30% farmers with mass media and the demonstration to 27.33% of farmers. Adoption level of improved soybean production technology was less than 50% except for adoption of improved varieties.

Hypotheses testing: relationships were found between level of education, family labor, farm income, credit and off arm employment and adoption of improved soybean production technology at the significant level 0.05. There was significantly relation between farmers' knowledge and adoption of improved soybean production technology. Also extension activities such as farm visits and group activities were significantly related with the adoption of improved soybean production technology. Most of the farmer's suggestions mainly dealt with the credit, improved and adaptive varieties, technological knowledge, and extension activities.

Student's signature

Thesis Advisor's signature

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