COMPLETION REPORT

This research highlights aging farmer population and food security in agriculture an issue for both for Thailand and Japan. The increase in the elderly population in both countries is particularly marked in the agricultural labor force as the number of farm labor force has continually decreased due to the exodus of young farmers from agriculture. And this has impacted on food security. The 152 Thai and 10 Japanese respondents made up of farmers aged over 55 years were sampled using a purposive sampling technique that was based on the interviewing survey carried out August-December 2011. The techniques of data analysis have used the descriptive statistics and cohort method.

The results found that for Tottori prefecture, Japan, in the next 25 years the agricultural population of people aged over 65 is expected to reduce from 34,656 persons in 2005 to 33,743 persons in 2030 and from 74,468 persons in 2005 to 12,725 persons in 2030 for the population aged under 65. In contrast, for Thailand, the total number of farming population aged under 65 is expected to decline from 18.07 million in 2003 to 16.64 million in 2028. This is a decrease of around 19% in 2003-2028 for the population aged less than 65. But it has an increasing trend of aged farming population and aging farmers mainly engaged in farming aged 65 and over in both countries. From this viewpoint, the aging trend is partly due to a slower rate of quitting from farming. With regards, for Japan the number of farmers aged 65 and over shows an increase figures. In case of the increase in Japan, it can explain the number of post-retirement farmers. It is interesting to note that the aging trend increases in number partly due to a slower rate of exiting from farming. The disadvantage is that older farmer would be much less efficient in agriculture especially rice cultivation.

As a result of population prediction, population aging will be an increasing trend in rural development that agriculture and rural development will be more increasingly encouragement from older persons (Gustavo, 2008). Older farmers have expansive knowledge and experience of agricultural production that they can be conservative traditional agricultural practices and transfer their experience to young farmers in spite of that older farmers are less incentive for investment and innovation in agriculture (Stloukal, 2000) and are slower to adapt to the change in agriculture (Siamwalla, 2004). In other words, the aging of producers in the low capital-intensive agricultural sectors could imply a lowering of the productivity of labor (Philippe, 2011). Yet, however, the role of maintaining farm land can be entrusted to the aging famers with support from outside and use of mechanization that older farmers in both countries have played a key role of farm land maintenance involving in rice cultivation.

As mentioned above, governments should improve the technological and crop seed development as well as machinery availability to increase production efficiency to offset production decreasing. Additionally, to cope with food security both Thai and Japanese farmers should increase crop diversification other main crop.

Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)

21-22 January 2012, The 3rd International Conference on Environmental and Rural Development at KhonKaen University, Thailand

Title : Aspect of the Aging Farming Population and Food Security in Agriculture for Thailand and Japan (oral presentation)

Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.) SUPAPORN P., KOBAYASHI T., PONGSAGORN P. (2011). Aspect of the Aging Farming Population and Food Security in Agriculture for Thailand and Japan. *International Journal of Environmental and Rural Development*. (Accepted)
Book (Publisher and Date of the Book, Title and Author of the Book, etc.)