

## **Perspectives of Precision Agriculture in Korea**

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Precision agriculture in which seeds, pesticides and fertilizers are site-specifically applied based on scientific judgment using information on soil properties, crop growth, and yield of previous year, is one of environment-friendly and scientific agricultural technologies. Precision agriculture technologies have been spreaded among farmers in advanced countries like USA, west European countries. Number of farm households that adopted precision agriculture in USA reached to over 40% of total number of farm households. In case of Japan, precision agriculture technologies have been developed and tested at farmer's field level.

Korean Ministry of Agriculture established Department of Environment Agriculture in 1994 and made a 5-year plan of environment-friendly agriculture in 2000. The purpose was to reduce environmental impact by saving agricultural chemicals such as pesticides and fertilizers. Goal was to save 30% of agricultural chemicals but policy was focused on organic farming. Korean Society of Agricultural Engineering and National Institute of Agriculture Engineering invited several experts from foreign countries and organized an international symposium in 1999. And we understood concept of precision agriculture, established national research projects for small scale farming in korea. We carried out four main topics such as soil sampler, rice yield monitor, crop growth sensing and VRA for development of precision rice production in Korea.

We may reduce environmental damage by agriculture if we apply these high technologies for Korean farming system.