

The Changing Farming In Japan

In traditional times Japanese farmers would plant as many seeds as possible in their, usually, small allotment. These would be supplemented by many long hours of caring for and countless hours of labour intensive harvesting. The agriculture is changing in Japan and it is changing at an alarming rate.

Nowadays, in Japan there are two different main types of farming, far surpassing the old methods in ways of produce and labour. The first way, most similar to conventional methods, is utilizing their small allotment with machines such as seed spreader and harvesters, specialized for use on small farms and harsher landscapes. The second method, much more controversial than the last, involves the use of hydroponics. Hydroponics means 'water labour' in Ancient Greek. Plants absorb essential mineral nutrients as inorganic ions in water. This is, in a nutshell, plants growing without the use of soil, growing in water.

The reason for the change is the fact that the productivity of the Japanese agriculture was not enough to supply the vast population of the proud nation, and that many conventional farmers were being undercut in the price war against foreign imports of rice, lettuce, radish and cabbage. The Japanese replied with enhanced techniques able to produce hundred-fold the produce once available to them. The use of hydroponics, growth without soil does not affect the quality. In natural conditions, soil acts as a mineral nutrient reservoir but the soil itself is not essential to plant growth. When the mineral nutrients in the soil dissolve in water, plant roots are able to absorb them. Also, without the obstruction of soil particles the mineral uptake of the roots is quickened by over 250%, so not only do the plants grow faster but they are essentially healthier to ingest. For hydroponics farmers are required to purchase large

warehouses and high-tech equipment which can range in price from \$30,000 to \$100,000. Needless to say, the money does come back and within 3 years most hydroponic farmers have received a profit, even accounting with the cost of the nutrient water, maintenance and labour. Many farmers who only incorporate machinery into their lives have a higher chance of failing to meet profits because of foreign imports and not being able to keep up with the ever-changing market, such as a small farm just north of Fukuchiyama, they are not able to cope with the lower costs provided by cheaper imports lowering the price of Japanese crops. They need the change otherwise their way of life could be wiped out altogether by imports leaving Japan solely to import its food.

The change resulted in a surplus amount of certain food crops in Okinawa and Tokyo where over 3 tons in each city were left to rot when the food could have been put to better use. Although the change has temporarily halted the foreign invasion it may mean the end for traditional farming. This in itself is in most ways a good thing however it ends the pride of a hard day's work which used to put in by many farmers and in some ways glamorised farming. Now, in Fukuchiyama the farmers' children are less persuaded to join their forefathers and be farmers and instead long for jobs in law and business. Next generation the number of farmers is predicted to decrease by 83.2%, maybe the end for Japanese produce. The change has helped the farmers in the plains of Japan, but in the long term it could hinder them.