

Technology that enables soilless agriculture

The agriculture fair to be organized in Israel presents the solutions of technology for rare sources. Growing agricultural products without soil and recycling sewage water to drinking water are some of these solutions.

Regarded as one of the most important agriculture and technology fairs in the world, Agritech will be organized in Tel Aviv, Israel on April 28-30, 2015. Technological progresses were presented to the world prior to the fair.

The fact that Israel is one of the world's prominent improving countries in agriculture technology despite its quite small surface area and arid climate has forced the country to realize an agriculture-related technology revolution.

Techniques enabling giant leaps in agricultural sector are also applied in poor African countries. In order to provide other countries, particularly emerging countries, with a sustainable agricultural economics, companies such as LR Group export concepts that have already proven success in Israel.

One of these technologies, 'Drip Irrigation Method', draws attention with the opportunities it offers to farmers. Farmers using 'Drip Irrigation' method, which is presented by Netafim to the world and one of new technologies to partake in the fair, will be able to control their fields via their mobile phones. An application downloaded in smart phones helps the farmers to get the most efficient results by measuring the quantity of water irrigation in each area of the field. This technology allows two times more harvest in the field and a dramatic decrease in water consumption.

Tobacco that heals wounds

Venture firms in the country are provided with huge support, especially through Jerusalem University. Innovative ideas are put forward by these companies, and then marketed to the whole world. Having commenced its initiatives with the motto "Healing tobacco," Collplant is one of these companies. The company managed to produce 'human collagen' commercially for the very first time in the world. Human collagen, which is made from tobacco plant grown under special conditions, is sold in single-use packets. Human collagen kits heal even large wounds in the body without the need for surgical operation. Tobacco plant, which is grown compatibly with human genes with assistance of bioengineering, enables this revolutionary product.

Fields are now on terrace

Another project created with the concept of cities of tomorrow is soilless agriculture. The company named Livingbox launches plant cultivation systems designed not to need soil. The system, which allows harvesting agricultural products from plants even at home without using soil, is quite

promising for the future in a world where urbanization continuously increases and cultivated areas diminish. Terraces of buildings could turn into fields thanks to this system that enables plants to take minerals through their roots.

Sewage water will be drinkable

'Igudan', a non-profit organization, developed a technology that increases the quality of recycled sewage water to that of drinking water. The facility that came into operation in 2000 employs pools and organic methods, and wastewater is recycled through a multi-staged treatment system.

After the wastewater is recycled and quality of the recycled water is very near that of drinking water, water is distributed to growers free of charge for use in cultivated areas. The reason why this recycled water is not consumed as drinking water is psychological. It is actually as qualified as drinking water. In Igudan, even solid waste extracted from sewage water is also used in the recycling process as fertilizers. This is a major example for water policies in a country, 60 percent of which is desert.