

# BREAKING DOWN THE HURDLES

After the triple disaster, Japan is looking at rebuilding their economy slowly. Feed efficiency can be one important step in that direction. This issue, Mr. Gerard Keenan, Executive Chairman, Keenan Systems tells us how their company can help Japan's food sector rise back from the ashes.



### 1. What is the current scenario in Japan as far as self-sufficiency in food cycle is concerned?

Japan is 40% self sufficient in food and this situation was a large concern nationally before the earthquake, now the situation is even worse following the earthquake, tsunami and radiation problems. To exacerbate the situation, in recent years Japan has seen a shift away from the traditional, locally sourced diets of fish, rice and vegetables to more imported meat, dairy and processed foods.

A further issue currently in Japan is the average age of farmers, particularly rice farmers who are mainly over 70 years of age. However in some parts of Japan, including the north east where the tsunami hit hardest, there had been good progress in integrating young people back into agriculture.

### 2. What role does Mech-fiber® play in building a cost-efficient dairy system?

Keenan is a feed technology company that improves feed efficiency for dairy cows, the conversion of feed into milk, by improving the cow's digestion of the feeds. Mech-fiber® technology produces a unique ration physical structure that helps the bacteria in the rumen (cow's stomach) better access the feed nutrients. This allows the cow to get more milk from the feed eaten.

The potential for improvement globally is 30% more milk from feed (i.e. land and water resources). In India, a 30% gain feed efficiency is worth more than Rs 10, 000/cow in profit margin to the farmer.

Data from 9,400 dairy herds in 25 different countries showcased the fact that top third of Keenan herds produced 5 litres more milk per cow per day, from 1 kilo more feed than the average.

### 3. What impact can increased dairy feed efficiency have on the economic front?

An improvement in Feed Conversion Efficiency (FCE) will have significant global implications and will reduce the volume of animal feed, agricultural land and farm animals that are required to produce 700 million tonnes of milk each year for the global



population. The latest surge in food and commodity prices has reawakened concerns about the capacity of the global agriculture sector to meet the food demands of the world's growing population

In a research revealed at the first Global Dairy Feed Efficiency and Food Sustainability Summit which took place simultaneously in Dublin, Paris, Washington, London, Berlin and The Hague. Professor Robert Jolly, Department of Economics, Iowa State University said that "The ability to produce more milk from the same resources will significantly help the agricultural community overcome the challenge of meeting the future global demand for commodities. A 25% increase in efficiency could reduce the land area needed for dairy feed production by more than 51 million acres at a cost savings at current feed prices of nearly US\$46bn (€37bn) annually. Increased feed efficiency would also significantly reduce the environmental impact of dairy production through better land use and reduced greenhouse gas emissions."

### 4. How can Keenan and FCE help Japan in their long road to food security?

Mech-fiber® technology, combined with the proper nutrition and protocols, allows farmers to increase food production while preserving the precious resources of feed, land, water and the environment. It is an established practical solution that allows producers to deliver more milk from the same resources.

Given Japan's need for food security, Mech-fiber® technology is very applicable in Japan. We estimate the average Japanese dairy herd can improve feed efficiency by 20%, thus allowing Japan achieve more milk from existing resources and make maximum use of scarce, expensive feeds, whether sourced locally or imported.

### 5. What are Keenan's plans in India?

Keenan is in first phase development with Kolkata-based Keventer to bring its technology to Bengal. The two companies are setting up a plant to produce feed utilising local feeds, forage and Mech-fiber® technology for farmers supplying milk to Keventer. The objectives are more milk, better milk and improved profitability.

Keenan's first year target will be to produce 100,000 litres of milk per day.