

## Plugging India Into The Global Cold Chain With Effective Monitoring, Compliance And Registration

India is a hot topic in the food industry currently, as a result of the EU imposing a ban on the import of mangoes from the country due to quality issues. India is one of the largest producers of mangoes, as well as items like milk, bananas, fruit and vegetables. It is also one of the largest global exporters of meat and poultry, and third largest producer of fish. Food isn't the only sector with such impressive statistics – India is also the third largest pharmaceutical producer, at about eight percent of global production.

On the issue of the mangoes, one minister in the UK has said it was up to exporters in India to improve their processes and meet the criteria for export to the EU. He said that the key action resides with the exporters, in their ability to demonstrate that what they are exporting meets the criteria that the EU needs to have confidence in.

Given this need for the food and pharmaceutical industry to have confidence in it supplies, a good cold chain infrastructure becomes an important part of the process, especially if manufacturers and retailers want to assure their customers of product integrity as well as minimize waste of food and temperature-sensitive medicines. However, India's cold chain market is highly fragmented, with a severe shortage of temperature controlled vehicles and cold storage facilities.

Analyst firm TechSci Research suggest the the cold chain logistics market in India is expected grow to around US\$11.6 billion by 2017. According to a report published last November, the value of fruits, vegetables and grains wastage in India is around Indian Rupees 440 billion (around US\$ 7.2 billion) annually, with fruits and vegetables accounting for the largest portion of that wastage at around India Rupees 133 billion (around US\$2.2 billion).

This is where tools like Dyzle's smartphone app can combined with temperature sensor probe can help in the 'last mile' of the cold chain, where a significant amount of wastage can occur. The probe measures the temperature of incoming goods or prepared meals. The app displays the temperature of the food or pharma product, indicates whether it is within the correct specified temperature range, displays critical values, and also indicates any corrective action that may need to be taken.

A further important aspect is that this is not just a standalone tool. By automatically integrated the collected data into the cloud and storing it in a portal, quality assurance departments or managers can easily access reports and details at any time. And since the data is stored in the same central database as the rest of the cold chain data, this enables full visibility of product integrity throughout the logistics network.

Dyzle will be demonstrating this app and sensor solution at this year's Cold Chain India conference taking place in Hyderabad, India on 22-23 May. Chief Technology Officer Rene Tjong Tjin Tai, will also give a session at the conference outlining current temperature monitoring practice according to GDP, discussing what is available now, and how this will look in the future in the overall cold chain.

Last year, the discussion was around how to obtain better guarantees of product compliance, how to instil good distribution practice (GDP) more widely in India, and of cultural attitudes of labour workforce, especially with the last mile. There was a good balance of discussion around the issues in both the food and pharmaceutical industries.

The theme of this year's Cold Chain India conference is around international trade regulations and effective compliance strategies to secure India's position in the global pharma market. This will include sessions on the roles and responsibilities of logistics providers in effective handling, data monitoring, recoding and analysis. In terms of compliance with international trade regulations, this aspect, of the technology for monitoring in real-time and automatic registration, will also be an important debate at the conference