

APEDA's initiatives in Traceability in India

India's market share in global trade of agriculture and processed food products is quite insignificant, except for a few selected products and selected markets.

APEDA has been undertaking a number of initiatives for market promotion and quality development for Indian agricultural and processed products exports in general. Some of the key issues that are constantly faced by Indian agricultural and processed food products in the penetration of major markets like European Union, USA, Japan, etc., have been the following:

- Increasing global focus on food safety, especially on residue monitoring, product standardization, Traceability, etc.,
- Regular Crisis due to pesticide residue, aflatoxin, etc., in products exported from India
- Use of the above as non-tariff barriers by developed markets

To assure the importing countries that the quality requirements are being maintained at every level of supply chain, APEDA took initiatives to set up traceability mechanisms in agricultural products, as this area is gaining more and more importance due to the growing awareness in the international market, especially in the major markets of developed countries. It helps to establish clear linkages between the stakeholders through 'farm-to-fork' monitoring to ensure implementation of appropriate pre-harvest & post-harvest practices, processing and ensuring quality & food safety.

APEDA has come out with a number of initiatives in this area and setting up of information technology enabled monitoring systems co-opting all stakeholders in the supply chain into a single system of reporting has been a major initiative in the recent past.

Key features of Traceability system

- Low cost of operations for Stake holders. These systems can be easily accessed - anywhere, anytime, 24 by 7, by all authorized stakeholders. All they need to use is a commonly available web browser through their Internet connection.
- Ensuring Compliance to International Standards as No document can be issued without going through the software and the inbuilt checks in the system to ensure that the succeeding step can be carried out only if the preceding steps were successfully complied with.

- Faster clearance as the system virtually reduces duplication in data capturing and enables instant reference of previous steps in the supply chain.
- Puts in a credible data/ documentation trail through which APEDA can trace details of the consignment right up to the plot / farm /pack house / processing unit level, as applicable, in case of any rapid alert from the importing country .
- Transparency in system: The result of every activity in the system is recorded and made available for next user in the supply chain, resulting in complete transparency.
- Impact on service response time: Has removed many repetitive steps, thereby reducing the overall response time required for any consignment.

Introduction of Traceability Systems in India by APEDA

Grapenet

Grapenet is the solution APEDA developed to a major crisis that hit Indian grapes sector. India, a major exporter of Grapes to Europe for a number of years, was suddenly faced with serious threat of nearing a ban, due to pesticide residues. Consignments were held up at the ports, exporters faced huge financial losses and India's position as a quality fresh product supplier was under threat.

The first task was to put in place, a Government of India regulation, clearly spelling out the procedures to be followed by all stake holders in the Grapes Sector, training them to fulfill the requirements of the regulation, co-opting the monitoring agencies in the Government and Private Sector and generating the necessary documentation trail for the importers.

Then it was taken up to IT enable the regulation, compliance and monitoring. Thus was born, **Grapenet**, a first of its kind in India, covering all stakeholders in the grapes export supply chain including Farmers, exporters, State Government Horticulture/Agriculture departments, Accredited Laboratories, Agmark, Pack houses, Phyto-sanitary Certification Departments, National Referral Laboratory (NRL), APEDA, etc., through a centralized web-based monitoring software.

APEDA is a pioneer in implementing traceability systems in India. For the first time in India, a traceability system was set up for establishing consignment to farm traceability, Grapenet for fresh grapes exported from

India to European Union.

Even when Europe raised concerns in 2010-11 with Indian Grapes consignments due to the use of chlormequat (Agro Chemical), APEDA was able to demonstrate the availability of the existing data for instant verification of tests / inspections carried out on consignments.

Grapenet has been widely recognized and won National E-governance Award (GOLD) in 2007-08 and eASIA award 2009.

Anarnet

For monitoring the quality assurance being maintained in the supply chain of Pomegranate export , a similar traceability system has been developed in line with the Grapenet which has been successfully implemented.

Tracenet (For Organic Products)

For enhancing the credibility of certification system for organic products, a user-friendly web- based traceability system (Tracenet) has been implemented by APEDA since June 2010. This is world's first ever web-based traceability system developed and implemented at national level for organic products in line with the National Programme for Organic Production (NPOP) for which APEDA is the secretariat and the accrediting body for accreditation of certification bodies. The NPOP defines the standards and procedures to be followed for organic farming and certification.

This Tracenet system helps in maintaining authentic information and related data of all the organic stakeholders under certification ie operators (producers, processors traders, exporters) and Certification Bodies operating under the National Programme for Organic Production (NPOP). Presently, the Tracenet software is being provided for use by the operators and Certification bodies. APEDA has further initiated the steps to extend the present traceability system from certification to the accreditation process.

The Tracenet system covers certification of all horticulture and agriculture crops including cotton / cotton products, processed foods and wild harvest. Eventually, it will be used in all livestock products like meat, poultry, dairy, honey and aquaculture products after the standards are notified in the near future. APEDA has already initiated steps to extend the present traceability software from certification to the accreditation process.

For efficient monitoring, GPS system is used at the farm level by the inspecting body. Every harvested lot at the farms up to the level of the consignment exported can be traced back. Implementation of Tracenet has reduced the documentation work, and has been saving time in the entire process with efficient control.

The importing countries have appreciated the present certification module “**Tracenet**” and it has provided substantial publicity in the credibility of not only the certification bodies but also of the entire certification system in the country.

Tracenet helps generate confidence among global buyers and consumers about the genuineness of Indian Organic Produce and indirectly help the every stake holder in the supply chain, from exporter to the farmer, get the desired value for their produce.

It also provides a level playing field for all stake holders in the supply chain, among farmers, processors, grower groups and certification bodies.

Tracenet is among the first such national initiatives and has been recognized with the e-ASIA award instituted by UN/AFACT in the year 2011.

Peanut.net

Higher levels of aflatoxins in groundnuts have been major concern of the importing countries. Therefore, it was essential to establish adequate controls to minimize possibilities of presence of the aflatoxins in groundnuts in excess of prescribed levels.

In order to control and minimize possibilities of presence of the aflatoxins in groundnuts in excess of prescribed levels a regulation for export of Peanuts and Peanut products through control of aflatoxins was developed. Export of groundnuts (peanuts) permitted subject to compulsory registration of contracts with APEDA, alongwith controlled aflatoxins level certificate given by the agencies/laboratories nominated by APEDA. APEDA has nominated Indian Oilseeds and Produce Export Promotion Council (IOPEPC) to implement the procedures.

Based on the prescribed regulation, APEDA has developed a Peanut.net a web-based traceability system with the objective of tracing and tracking of the consignment.

The Stakeholders co-opted for the Peanut.net traceability system are Processing Units involved in Shelling, grading, value added products manufacturing, etc., Exporters, IOPEPC and Accredited Laboratories. No

certificate can be issued by any Laboratory or IOPEPC without going through this system.

Each consignment of an Exporter is accompanied by a Stuffing Certificate and Certificate of Export. The stuffing certificate leads to the particular batch of the Processing Unit or Shelling unit from which the consignment was created.

This has helped India address Europe's major concerns of prevalence of aflatoxin in Indian peanuts, thereby helping to avert major restrictions on exports of groundnut to EU.

Source: Department of Commerce, Government of India.

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