

**Dairy and Food Process & Products Technology**  
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**Lecture - 14**  
**Standards in India**

So, we were discussing about the food safety security agency in India or authority in India FSSAI. This is the implementing organization or framing organization in our country to implement the Food Safety and Security Act, 2006 which was passed by the parliament right.

So, we came to up to that now we also said we will look into the different orders which are different controlling bodies, who are also associated with them or with the food and that comes under this Standards in India.

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**Bureau of Indian Standards (BIS)** - National Body of India for all Standards that resolves to be the leader in all matters concerning Standardization, Certification and Quality.

**What it does?** - Harmonious development of standardization, marking and quality certification.

- It provides new thrust to standardization and quality control.
- It evolves a national strategy for according recognition to standards and integrating them with growth and development of production and exports.

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So, if you look into this that there is one organization called Bureau of Indian Standard or BIS if you go and look into any food laws in libraries. You will see that different BIS numbers are there for different things or different numbers are there for different things right. It is not necessarily that BIS will only look into the food part; they also look in many others right.

So, that BIS is one such body one such organizing or controlling authority who does on the national level or that is a national body of India for all standards that that reserves to be the leader in all matters concerning standards, certification and quality. You remember in the class we were saying that this FSSAI or our apex body is like that; like BIS, they do they do give accreditation to certain labs, certain people, certain organizations that the power.

Power is given that they are empowered to go through the quality, safety all these aspects they are entitled they can do, they can perform the test. And they have the authority to either certify or cancel the typical particular product right.

So, those standards are also being framed by this or body are called BIS or Bureau of Indian Standard right. What it does? It harmoniously develop standards marking quality certification right? So, it develops the standards or the process of standardizations that marking and quality control or certification; this is done by this body BIS. It provides new thrust to standardization and quality control. It evolves a national strategy for according recognition to the standards and integrating them with growth and development of production and exports right.

In this regard, let me also tell certain things which are also relevant that though as food from India the quantity of export is not that big as the country is right. It is very bigger in number, bigger in amount as for as the country volume and the population is concerned; it is really a bigger number. But in spite of all these controlling agencies and bodies; all these standards there are many cases since the word export has come up. And I am also saying, I am also sharing; You might also have come across a through media that in many cases, the consignments which we are exported were returned 100 %.

Now, this is a great loss to the company who is doing it and to the nation because this not only we will also develop the company to grow up, but also will have the capability of bringing foreign currencies to the country right. We are not going into those; what is the requirement of foreign currency etcetera into those economics because that is not absolutely part of this, but it is obvious that foreign currencies are also required for who does not have unique currency or international currency as a common currency in that country like hours right.

Rupee is not saleable everywhere all over the world it is true, but either or dollar or euro things like that which I have more impact in the market. So, they are more accessible more not only accessible more saleable more acceptable by different countries right. So, in that respect consignment getting rejected is definitely huge setback for the company, as well for the nation.

I heard in one case that in a one whole consignment; there are some flies or things like that or some vertical small insects who are there for that the entire consignment was rejected. It is the privative of the importing authority, importing country who will decide because you like you when you go and ask for a new product, you are giving money; so you have the say that I will accept this product or I will reject that product because you are buying.

So, it is buyers market right had it been like that the buyer has no other option, other than accepting that that would have been all to be the different. But it is not so, it is absolutely not so; because there are many exporters, many such similar products may be available from all over the world. So, the importer has the choice to accept it or not, but this is a small example, but in reality there are many cases where either due to the poor quality, maintenance or poor microbial quality or its maintenance things are getting rejected or they are the whole consignment is discarded.

So, this is not definitely a good thing. So, if controlling agents like this FSSAI or say BIS; if the loss or the standards or the framework which they are developing, which they are asking the people to avoid by; if they are in to or word to word or in real sense if they are implemented, then definitely the rejection can be as minimum as possible right. So, looking back into that what the purpose of these BIS; it provides new thrust to standardization and quality control. It evolves the national strategy for according recognition to standards and integrating them with growth and development of production and exports.

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**Main Activities of BIS are :-**

- Certification to**
  - Products
  - Hallmarking of Gold Jewellery.
  - Quality Management System
  - Environmental Management Systems
  - Occupational Health and Safety Management System
  - Food Safety Management System
  - Hazard Analysis and Critical Control Points (HACCP)
- Imported Products
- Laboratory Management
- International Activities
- Training Services

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Then main activities of BIS are what? For certification to products, products are certified by BIS, hallmarking of gold jewellery, which is not our that is why I said this is not only the food which is done by the BIS, but many others; so, this is one such.

Quality Management System or QMS; Environmental Management System or EMS, Occupational Health and Safety Management System or OHSMS, Food Safety Management System or FMS, Hazard Analysis and Quality Control Points or HACCP; in short it may be said HACCP, in many cases people do pronounce it as HACCP, but it is a HACCP that is Hazard Analysis and Quality Control Points; H; hazard Analysis A and CC that is Critical Control; Point; CC, Critical Control and P for Point. So, HACCP which is it is a very big word which is associated with food; so keep in mind.

Imported products, laboratory management then international activities training services all these activities are being done by the BIS.

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**AGMARK is a Quality Certification Mark.**

The Directorate of Marketing and Inspection enforces the Agricultural Produce (Grading and Marketing) Act, 1937. Under this Act Grade standards are prescribed for agricultural and allied substances.

**What it does? :-**

- ✓ It ensures quality and purity of a product.
- ✓ It acts as a Third Party Guarantee to Quality Certified.

**Quality standards for agricultural commodities are framed based on commodities intrinsic quality.**

Food safety factors are being incorporated in the standards to compete in World Trade.

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Another implementing authority or agency is called AGMARK; A G M A R K right. In many cases, you will see this AGMARK is symbol; AGMARK is the brand or I; I do not say brand, AGMARK is the controlling agent whose certification is approved or is accepted by the law.

So, that AGMARK is a quality certification mark. So, any product they will see when it is coming in advertisement, they do say that this is under AGMARK right; A G M A R K. So, it is under AGMARK, AGMARK say symbol is there. So, it is I mean what we called that blindly; we can accept right. Here as a scientist, you should also keep in mind that science does not believe blindly right? Science does not believe blindly; what is supposed to be true may or may not be true at the end.

So, science is always curious and that curiosity is served, curiosity is supported by the facts and figures of the analysis. So, what is supposed to be true; again may or may not be that is why that though it may be have hallmark, but still people do have in their mind; this kind of some kind I should say some kind of a negative attitude in the mind that may or may not be correct or true right?

Whether it is under AGMARK or not; that means, in other word that that both the controlling agent, as well as the control mechanisms are to be such that they are good enough to gain the popularity, to gain the confidence of the consumer; to. It is again

ultimately the consumer everywhere this is the ultimate who is the deciding factor that consumer.

If consumer is satisfied this consumer is happy, this consumer is having no grudge, this consumer is not complaining; then things are all right. But if and the; I said in some earlier class that the level of consumer is varied right from; we can save from plus infinity to minus infinity that kind of wide variation. Some are very knowledgeable, some are absolutely not why? When? How? All these are not are not bothered by them.

So, that is why that this word consumer is a really; it is a really huge, I should say huge term huge word encompassing huge sum 1 crore or 130 crore number of people right? I am not saying that all the time all the people these so, 130, 140 crore people are going and buying; may be part of that. And, but consumption is being done by everybody right. So, if somebody may be X has procured, but Y has consumed and Y has all the right to either protest or complain or praise; I am not saying that complaining is all the time.

It is also praising yes; this is very good that also is the certification and satisfaction of the consumer right. So, AGMARK is a quality certification mark; the directorate of marketing and inspection enforces the agricultural produce that is Grading and Marketing Act, 1937; under this act great standards are prescribed for agricultural and allied substances. What it does? Again like earlier FSSAI; we have given to vital notes, here also we can say that it ensures quality and purity of a product, it acts as a third party guarantee to quality certified right?

So, company X is making out product A; selling it to man M right? And this man M; may or may not believe the company X that whatever he is claiming is may or may not be true or correct. So, who will certify? So, this AGMARK is saying that, no whatever he is saying, whatever he is claiming. He is correct because it has undergone this standards, it has undergone this tests such and such organizations have under taken these tests and their reports are also examined by the scientific panel of the of the organization such and such.

So, we can certify on behalf of this company X that the product A is both qualitatively as well as purity; quality as well as purity of the product is absolutely fine and there is no complaint; that is certified by AGMARK. It acts as a third party guarantee and this is the third party that is the AGMARK is those third party acting for the company X, that the

product A which the company X prepared, manufactured, sold to the consumer is both purity and quality are absolutely at par with the laws and regulations of the country.

Quality standards for agricultural commodities are framed based on commodities intrinsic quality. And food safety factors are being incorporated in the standards to compete in the world trade. As I gave the example in other class that company has exported certain things which were discarded by the importer; right?

This is just not like that for without rhymes and reasoning somebody can discard or accept. So, discarding he is also based on certain fraction, figures or regulations or acts; if they are not being adhere to, then that importer may have the right to discard or throw your return, the consignment or the import which was exported by a company X from a country.

So, it is the importing countries framework, rules and regulations that will control. So, if this AGMARK is not sufficiently reach to encompass the food laws governed by the importing countries; then it will not match with that and get rejected. So, that is why that the implementation, that is why regulating, that is why monitoring or framing up these standards, these base by the by the AGMARK is or has to be of high quality, of high standard so, that international trade; it can encounter or it can face the international trade.

Then only this import export or export import this business can developed and this can be supported by the, this standardizing agency like AGMARK.

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Standards are being **harmonized** with international standards keeping in view the requirements of World Trade Organization (**WTO**). **Certification of agricultural commodities is carried out for the benefit of producer / manufacturer as well as consumer.**

Products available under AGMARK are as follows:-

- **Pulses**
- **Whole and ground spices**
- **Vegetable oils**
- **Wheat Products**
- **Milk products**
- **Honey etc. etc.**

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Then we look into that the standards are being harmonized with international standards keeping in view the requirements of World Trade Organization or WTO. Certification of agricultural commodities is carried out by or for the benefit of the product or producer, manufacturer or manufactured item as well as consumer. So, certification of agricultural commodities is carried out for the benefit of the producer or manufacturer as well as the consumer.

So, this certification by the this third party agency; that third party organization that saying that this typical product is good at par with the norms and regulations laid down by this say, this AGMARK agency or AGMARK organization that is that is following the quality of the standard as well as the purity of the standard and it is acceptable.

So, this authentication or this certification is to be made at par with the World Trade Organization or WTO so that the import export this business can sustained or justify. Products available under AGMARK all like this; pulses, whole and ground spices, vegetable oils, wheat products, milk products, honey etcetera.



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**Fruit Product Order (FPO), 1955** : - The FPO mark is a certification mark mandatory on all processed fruit **products** sold in India such as packaged fruit beverages, fruit-jams, crushes and squashes, pickles, dehydrated fruit **products**, and fruit extracts, following the **Food Safety and Standards (FSS)** Act of 2006.

**Objectives of FPO are:-**

- ❖ **The main objective of FPO is to lay down quality standards to manufacture fruit and vegetable products maintaining sanitary and hygienic conditions in the premises.**

**It is mandatory for all manufacturers of fruit and vegetable products including some non fruit products like non fruit vinegar, syrup and aerated sweetened water to obtain a license under this Order.**

Food products as the honey etcetera etcetera. Now, some other organizations like Food Product Order or FPO, 1955. So, this food product order or FPO; this is the 1955 Act or it was established in 1955. So, the FPO mark is the certification mark in many products; you will see that at the end or on some it is written that FPO is there on the as authenticated or certified right that FPO as symbol, as well as that the word FPO is written.

So, this implies that the product is certified by the agency or controlling agency called FPO right. So, the FPO mark is certification mark mediatory on all process food products sold in India; such as packaged food beverages, fruit jams, crushes and squashes, pickles, dehydrated fruit products and fruit extracts; following the Food Safety and Standard or FSS Act, 2006.

And the objectives of the FPO are; the main objective of a FPO is to lay down quality standards to manufacture fruit and vegetable products maintaining sanitary and hygienic conditions in the premises. Let me finish this then I will discuss; it is mandatory for all manufacturers of fruit and vegetables products including some non fruit products like non fruit vinegar, syrup and aerated sweetened water to obtain a license under this order.

So, this is also FPO that is fruit products order it is 1955 Act. So, basically it is controlling the fruits and vegetables this umbrella and their products made of made of fruits and vegetables; idle either has a whole some or maybe some processed from there

right. So, this in many branded items or many companies product which are packed; on the packet you as I said, you may find that FPO; it also has a certain mark and also that FPO word that righting is there that this corroborates that the product is at par right.

So, it is mandatory for all manufacturer of fruits and vegetables producing a producers including some non fruit producing. And now in this case we give the example of fruit vinegar right? Non fruit vinegar and fruit vinegar; now vinegar as we know this is nothing, but 4 percent acetic acid right. So, it can be prepared synthetically and it can be prepared through some fruits and vegetables.

So, in that case or the fruits; so by fermentation it can be prepared; obviously, the test another things altogether are different, but this FPO has a guideline, has a standard which will tell that product A is made of synthetic vinegar and the product B is made of fermentation right? Because vinegar by itself is 4 percent acetic acid; so acetic acid content is 4 percent, but smell wise, test wise, liking all these are different for the 2 as guided by the FPO.

So, this is another certifying agency or organization which certifies food products like products; either as a whole made of fruits and vegetables or products made out of them ok.

Thank you.