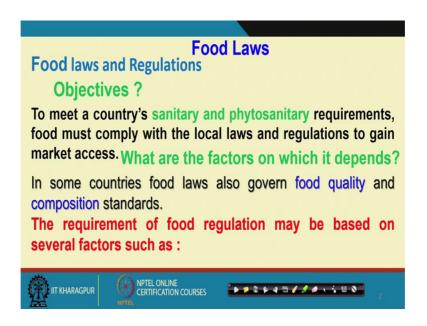
Dairy and Food Process & Products Technology Prof. Tridib Kumar Goswami Department of Agricultural and Food Engineering Indian Institute of Technology, Kharagpur

Lecture - 12 Food Laws - Why

We in this Dairy and Food Process and Products Technology, in this course today it is to be discussed Food Laws, right. So, food laws we will discuss and so, there the first thing comes why the food laws are required, what is that?

(Refer Slide Time: 00:39)



Because law as such we are accustomed that there are many laws in our country, there are many courts in our country. And they decide on many many aspects many many factors. Then why suddenly food laws are coming in being, that question comes in mind? Because this is one where we are consuming, right?

Then what is the point of introducing certain laws regulations boards this that many others; obviously, this implies that till now whatever we have seen that when you are consuming any food any food item, for your nutrition, for your growth, for sustenance, whatever be the reason, whatever be the source; whether it is from plant origin or from animal origin, if the processors, not only processors, if the processors, distributors,

suppliers, retailers at every stage, if there is any change in quality in whatever be the aspect that the term in way we are defined equality.

So, in that quality whatever be the change in quality if there, we then (1) who will be held responsible and how number 1. (2) how can we prevent or protect against such kind of changes? Suppose after consuming a food, somebody fail sick, then who will dictate whether the person was originally sick, and this consumption has no meaning in imparting any such kind of sickness in him or her, or really by consuming that particular thing the person became sick or ill.

Then who is to be blamed? How to be blamed? So, those things if are not defined if are not guided by certain principles by certain laws by certain orders then it is very difficult to control.

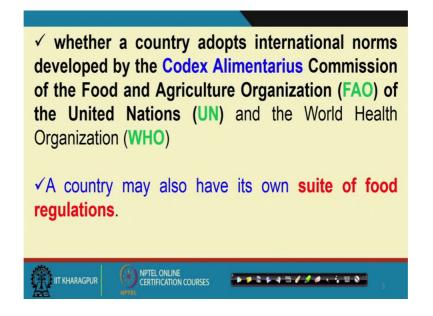
So, to control the entire gamut of food in it is original form or in any form after processing or any form after handling directly or indirectly. So, those things are to be known. So, in this we said food in the earlier classes that when we go to food laws, it will be a little informative then more informative then understanding, but realizing is also required. So, it is not only information, but also realizing why, why things are being imposed, why and why if not, then what would happen, right.

So, then if you look at the objectives of the food laws to meet a country's sanitary and phytosanitary requirements, right. So, phytosanitary another term we are introducing. So, that phytosanitary terms at or aims at the conditions of the surrounding plant origin or plant kingdom, right. So, to meet a country's sanitary and phytosanitary requirements, food must comply with the local laws and regulations to gain market access, right. So, if there is no such laws, no such regulatory is in the country, then it may cause some chaotics in situations, chaotic moments in the country at any part of the country.

So, if they if the there is no binding; binding in terms of laws, then it will be very difficult to control the sanitary and phytosanitary conditions of the country, right. So, what are the factors on which it depends? Of course, in some countries this may be dependent on the international whatever is going on international control mechanism or international rules and regulations, that depends on the country itself. It may be that international boards are or regulatory authorities, they have framed certain rules and regulations.

So, country can totally based on that, and follow the requirements, but depending on the country, they may a deviate and or they may keep and/or impose some variations or some new things in to those. Or could be entirely they have their own methods of controlling, right. So, in some countries food laws also given are governed by food quality, right? Food laws also governed food qualities.

(Refer Slide Time: 08:46)



The requirement of food regulation may be based on several factors, for example, whether a country adopts international norms developed by Codex, alimentarius commission of the food and agriculture organization that is the FAO of the united nations or UN, and the world health organization WHO, right. So, all this governing bodies constitute this Codex alimentarius. Because that is the international bodies which control the entire thing Codex. This is the list of dos and don'ts and many many things which are there, right.

So, that is being controlled by may be international bodies like FAO by UN by WHO. So, if a country yours to totally avoid by these code of, this is I mean Codex or alimentarius means, this is the laws of food or food laws. So, these food laws as governed by these international body can be as such as a whole complied by the country or if the country, once they can also take part of it or whole of it along with maybe some part of their or whole of their depending on the countries requirement or the intention of the country.

So, a country may also have it is own suit of food regulations. So, entirely it is different, that these are the situations when food laws are coming, and a country can totally do the entire thing depending on their requirements depending on their controlling or controlling or the monitoring institutions or at the agencies, right. So, why we need food safety standards?

(Refer Slide Time: 11:33)



There is the first question is coming in mind, that the why we need, right? So, right from the term, safe food; so, safe food that represents different ideas to different audiences, what you fill safe may not be filled by me, what I feel may not be felt by some other, right. So, until and unless, we all are said do not know this is what, safe means this is what we mean what is a safe food until, and unless there is one umbrella, right.

Then everything will not be encompassed and not that umbrella, because your perception my perception somebody else's perception about the thing may or may not be different, right. So, who are at stake number one is the primarily consumers who are consuming, number 2 the special entire the special interest groups, means, some group they might have some typical special interest, or some regulatory bodies or regulators may be by industry and academia year the entire gamut of the m academy who may have some academic interest on that.

So, these we these different agencies or different classes we will have their unique description based on their perception. So, academia will tell quality in one term in one

parameter in one way or it, it may not be single parameter, may be multiples of parameter parameters. But industry also will look into in their way. Some controlling agency we will tell that perception in their way. Some consumers and regulators they also may tell in their own way.

So, depending on who is looking into it that will dictate what the food safe we mean or is meant. It should be that everybody is telling the same. Otherwise suppose you are singing a song in a tune which is totally different from my tune, and with a maybe same song with a different tune by somebody else, and all of us are singing, but all different tunes.

Then will it become a music, no. It will become a chaotics situation, nobody you would like to listen that. And similar conditions also arising here that consumer is pursuing that what is safe food in one way, industry people who are processing their thinking in another aspect another perception, the controlling body is their looking into in other perception.

So, if all this perception should boil down to unique perception so that this is embedded in a definite frame, right. So, food safety is an issue of growing importance due to several worldwide trends in food system. I believe you are now around say 18 to 22 somewhere, right, even a decade back whatever food or even more than decade, whatever food was come on living used or was popular with the change of the decade or with the change of time, that is going on changing maybe day by day or month by month or year by year depending on the particular item or varieties, but what test and liking are also getting changed, right.

So, it becomes here worldwide trend in the food system which is gradually getting changed, right? Who are getting affected? The growing people or moment of the people, live animals, food products across the borders, rapid urbanization, this is also one of because in developing countries there is rapid urbanization so, the changes in the test bars or in the liking or influence of others that is being taking much more rapidly where urbanization is being taking place. Then changes in food handling, again I come back to decades back, when things were not there much common in advertisement.

Nowadays advertisement is also or media is also becoming such a powerful tool that people are coming to know changing their minds getting affected being influenced by looking at those things, right. And the emergence of new pathogen or antibiotic, during our studentship we had heard that this penicillin when it was in invest invented that type, it was one of the one of the breakthrough by which human being or mankind was really benefited, right. And this was the real broad-spectrum antibiotic.

After was many derivatives of those penicillin they came up right, but keep in mind that today the organisms which are getting destroyed by a particular antibiotic, tomorrow that antibiotic may or may not be fruitful or effective on that organism, right. So, that Darwin's theory everywhere it is applicable.

So, that organism may gradually get mutated, and may become resistant to that organ that typical antibiotic, and it will not be that easy or the antibiotic to destroy the organism. So, pathogen antibiotic these things are also come into being. And they are becoming the pathogens are becoming antibiotic resistant, right? And they are all contributing to the risk factor of the consumption of the food, right.

So, that is why the food safety typically is nowadays real concern of both consumer, processor and the regulators, right. And the liberalization trade and growing number of imported food stuffs to increase the food safety risk is also there right. So, things have become more and more liberalized.

So, in that case the imported things or exported whatever bit be the case imported things for a particular country is becoming day by day concerned about the risk. So, we must be capable of fighting those situations where these things may occur right?

(Refer Slide Time: 22:19)

Inadequate food safety is a significant contribute to the burden of disease in different countries and should be addressed as the food system develops and along with related investments in public health. Basic sanitation and water services may be a prerequisite for addressing many food safety hazards.

The industrialization of agricultural production, and increase in the number of food service establishment, also tourism, urbanization with subsequent changes in lifestyles, food consumption pattern and food preparation practices will require high level of food safety standards.



So, inadequate food safety is a significant contribute to the burden of disease in different countries, and should be addressed as the food system develops and along with related investments in public health.

Basic sanitation and water services may be a prerequisite for addressing many food safety hazards, right. So, right from the water as well the basic system of how developing countries or developed countries are handling with the hazards associated with food. So, they are nowadays becoming more and more concerned about the safety of the food items. Now, again and again safety in terms of after consuming the food person should not become in anyway sick or should not be affected.

That is the primary concern about the safety right; obviously, this is the frontal side, but on the backside there are many others again the quality terms. They come in being into being that, along with this that is the pathological safety or along with the microbial safety of the food material, the nutritional safety is as equally associated with the safety world, right?

Now, industrialization of agricultural production and increase in the number of food services is establishment, tourism, organization with subsequent changes in lifestyles. Food consumption pattern and food preparation practices require high level of food safety standards, right. The things which we just told, that all this aspects the tourism, yes, different people are coming from different areas, of different nature, of different

health different culture everything; so, lifestyle of that or in general others lifestyle. So, in organization that is also changing the lifestyle. So, everywhere if we if the country has to have some control over the thin food consumed about the safety part the standards must be there for that country to regulate, to monitor the entire thing right.

So, for this reason we can say that food safety standards at high level must be practiced in any developed countries the developing countries whatever it be.

(Refer Slide Time: 26:00)



Then we come that what are the food laws in India, now the Indian parliament has recently, recently means very recently maybe one decade earlier, pass the food safety and standard act 2006 that overrides all other food related laws.

For example, this laws may are also this FSS, which we are talking about that food safety and standard, this act 2006 that encompasses all of this, but it is overriding. This laws also like prevention of food adulteration act 1954, food products order 1955, meat products meat food products order 1973, vegetable oil products control order 1947, edible oils packaging regulation order 1988, solvent extracted oil or de-oiled meal and edible flour control order 1967, etcetera.

All these earlier orders or laws, they are encompassing the newly formed food safety laws, food safety standards FSS, this FSS and that is at the end it is also called I; that is, food safety standards of India right; FSSI. And the subsequently we will see that did not

controlling agency has been also introduced, that is called food safety and standard authority of India or FSSAI right.

So, that nowadays has taken over the entire food safe food laws all this implication for framing forming, and I am implementing everything has been taken into by that difficult this organization has been approved and built by the parliament, right. So, we are now heading towards the end, because hardly couple of seconds are left for the class.

So, I feel in the next class we will again little recapitulate and then go on the Indian laws, ok.

Thank you.