



SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai

Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &

Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)

COIMBATORE-641 035, TAMIL NADU

UNIT IV: NATIONAL AND INTERNATIONAL FOOD LAWS AND STANDARDS

CAC & EU, GAP

CODEX

The adoption of the SPS and TBT Agreements resulted in new emphasis and importance being placed on the work of Codex in establishing international food quality and safety standards.

Codex

The purpose of Codex is

- to guide and promote the elaboration of definitions and requirements for foods and assist in their harmonization
- to facilitate world trade
- to promote consumer protection

The name Codex Alimentarius is taken from Latin and translates literally as “food code” or “food law”. The Codex Alimentarius is a series of food standards, codes and other regulations adopted by the Codex Alimentarius Commission (CAC) that countries can use as models in their domestic food legislation and regulations, and which can be applied to international trade. Codex provides the assurance that any foods produced according to its codes of hygienic practices and complying with its standards are safe and nutritious and offer adequate health protection. The CAC was created in 1962 by two United Nations organizations, the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). Its main purpose is to promote consumer protection and to facilitate world trade in foods through the development of food standards, codes of practice and other guidelines (FAO/WHO, 1999). Since its inception, the CAC has been responsible for implementing the Joint FAO/WHO Food Standards Program (FAO, 2000).

The CAC is an intergovernmental body with a current membership of 165 Member governments. Membership is open to all Member Nations and Associate Members of FAO and WHO. In addition, observers from international scientific, food industry, food trade and consumer associations may attend sessions of the Commission and of its subsidiary bodies. While observer organizations can fully participate in the proceedings of the meeting, by statute, only Member governments can participate in any decision process. To facilitate international trade, it has been necessary for efforts to be made to harmonize food standards. Those involved

in harmonization efforts recognized that countries have the right to adopt standards they feel are appropriate to protect human, animal and plant health and the environment. They also have the right to take the steps necessary to assure these standards are met. However, preventing these standards from becoming barriers to trade is important to promote trade between countries (FAO, 1998).

The Codex Alimentarius is a series of food standards, codes and other regulations adopted by the Codex Alimentarius Commission (CAC) that countries can use as models in their domestic food legislation and regulations, and which can be applied to international trade. Codex provides the assurance that any foods produced according to its codes of hygienic practices and complying with its standards are safe and nutritious and offer adequate health protection. The Codex Committee on Food Hygiene is currently developing a code of hygienic practice for fresh fruits and vegetables entitled “*Draft Code of Hygienic Practice for Fresh Fruits and Vegetables*”. This draft code addresses GAPS and GMPs that will help control microbial, chemical, and physical hazards associated with all stages of the production of fresh fruits and vegetables from primary production to packaging. To facilitate international trade, harmonization of food standards is necessary to prevent these standards from becoming barriers to trade between countries.

EU:

The **European Food Safety Authority (EFSA)** is the agency of the European Union (EU) that provides independent scientific advice and communicates on existing and emerging risks associated with the food chain. EFSA was established in February 2002, is based in Parma, Italy, and for 2021 it has a budget of €118.6 million, and a total staff of 542.

The work of EFSA covers all matters with a direct or indirect impact on food and feed safety, including animal health and welfare, plant protection and plant health and nutrition. EFSA supports the European Commission, the European Parliament and EU member states in taking effective and timely risk management decisions that ensure the protection of the health of European consumers and the safety of the food and feed chain. EFSA also communicates to the public in an open and transparent way on all matters within its remit.

Structure

Based on a regulation of 2002, the EFSA is composed of four bodies:

- Management Board
- Executive Director
- Advisory Forum
- Scientific Committee and Scientific Panels

The Management Board sets the budget, approves work programmes, and is responsible for ensuring that EFSA co-operates successfully with partner organisations across the EU and beyond. It is composed of fourteen members appointed by the Council of the European Union in

consultation with the European Parliament from a list drawn up by the European Commission, plus one representative of the European Commission.

The Executive Director is EFSA's legal representative and is responsible for day-to-day administration, drafting and implementing work programmes, and implementing other decisions adopted by the Management Board. They are appointed by the Management Board.

The Advisory Forum advises the Executive Director, in particular in drafting a proposal for the EFSA's work programmes. It is composed of representatives of national bodies responsible for risk assessment in the Member States, with observers from Norway, Iceland, Switzerland and the European Commission.

The Scientific Committee and its Scientific Panels provide scientific opinions and advice, each within their own sphere of competence, and are composed of independent scientific experts. The number and names of the Scientific Panels are adapted in the light of technical and scientific development by the European Commission at EFSA's request. The independent scientific experts are appointed by the Management Board upon a proposal from the Executive Director for three-year terms.

Focal Point network

The EFSA cooperates with the national food safety authorities of the 27 EU member states, Iceland and Norway, as well as observers from Switzerland and EU candidate countries, through its Focal Points, who also communicate with research institutes and other stakeholders. They "assist in the exchange of scientific information and experts, advise on cooperation activities and scientific projects, promote training in risk assessment and raise EFSA's scientific visibility and outreach in Member States."

GAP:

Introduction

A multiplicity of Good Agricultural Practices (GAP) codes, standards and regulations have been developed in recent years by the food industry and producers organizations but also governments and NGOs, aiming to codify agricultural practices at farm level for a range of commodities. Their purpose varies from fulfilment of trade and government regulatory requirements (in particular with regard to food safety and quality), to more specific requirements of specialty or niche markets.

Definition

Good Agricultural Practices are "practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products" (FAO COAG 2003 GAP paper)

These four 'pillars' of GAP (economic viability, environmental sustainability, social acceptability and food safety and quality) are included in most private and public sector standards, but the scope which they actually cover varies widely.

Concept

The concept of Good Agricultural Practices (GAP) has evolved in recent years in the context of a rapidly changing and globalizing food economy and as a result of the concerns and commitments of a wide range of stakeholders about food production and security, food safety and quality, and the environmental sustainability of agriculture. GAP applies recommendations and available knowledge to addressing environmental, economic and social sustainability for on-farm production and post-production processes resulting in safe and healthy food and non-food agricultural products. A broadly accepted approach using GAP principles, generic indicators and practices will help guide debate on national policies and actions and on the preparation of strategies to ensure that all stakeholders participate in and benefit from the application of GAP in the food chain. The implementation of GAP should therefore contribute to Sustainable Agriculture and Rural Development (SARD).

Objectives

- Ensuring safety and quality of produce in the food chain
- Capturing new market advantages by modifying supply chain governance
- Improving natural resources use, workers health and working conditions, Creating new market opportunities for farmers and exporters in developing countries.

Key Elements of GAP

- Prevention of problems before they occur
- Risk assessments
- Commitment to food safety at all levels
- Communication throughout the production chain
- Mandatory employee education program at the operational level
- Field and equipment sanitation
- Integrated pest management
- Oversight and enforcement
- Verification through independent, third-party audits

Potential benefits and challenges related to Good Agricultural Practices

Potential benefits of GAP

Appropriate adoption and monitoring of GAP helps improve the safety and quality of food and other agricultural products.

It may help reduce the risk of non-compliance with national and international regulations, standards and guidelines (in particular of the Codex Alimentarius Commission, World Organisation for Animal Health (OIE) and the International Plant Protection Convention IPPC regarding permitted pesticides, maximum levels of contaminants (including pesticides, veterinary drugs, radionuclide and mycotoxins) in food and non-food agricultural products, as well as other chemical, microbiological and physical contamination hazards.

Adoption of GAP helps promotes sustainable agriculture and contributes to meeting national and international environment and social development objectives.

Challenges related to GAP

In some cases GAP implementation and especially record keeping and certification will increase production costs. In this respect, lack of harmonization between existing GAP-related schemes and availability of affordable certification systems has often led to increased confusion and certification costs for farmers and exporters.

Standards of GAP can be used to serve competing interests of specific stakeholders in agri-food supply chains by modifying supplier-buyer relations.

There is a high risk that small scale farmers will not be able to seize export market opportunities unless they are adequately informed, technically prepared and organised to meet this new challenge with governments and public agencies playing a facilitating role.

Compliance with GAP standards does not always foster all the environmental and social benefits, which are claimed.

Awareness rising is needed of 'win-win' practices which lead to improvements in terms of yield and production efficiencies as well as environment and health and safety of workers. One such approach is Integrated Production and Pest Management (IPPM).