MODULE 2
Integrated Production, GAP and Sustainable Farming standards in the F&V sector

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MORNING

- GAP – stage Production: farming, pest management, water use, fertilization, risk assessment, etc.
- GAP – stage QMS (Organisation): implementation, audits and certification

AFTERNOON

- Record keeping and traceability: paper-based or ICT-based systems
- How is GlobalGAP related to EU and MNE legislation
Good Agricultural Practice: specific methods which, when applied to agriculture, create food for consumers or further processing that is safe and wholesome.

The standards target potential sources of contamination in the production chain, including water, soil, animals, people, and equipment. GAPs cover the farm operation and production activities up through field packing.

- Soil
- Water
- Use of chemicals
- Animal production, health and welfare
1. **GAP – STAGE PRODUCTION**

- **Farming** - Crops, cultivars and varieties are chosen for their suitability to the site and their role within the crop rotation for the management of soil fertility, pests and diseases, available inputs, and local consumer and market needs.

- **Pest management** - Maintenance of crop health is essential for successful farming for both yield and quality of produce.

- **Water use** - Careful management of water resources and efficient use of water within agriculture are criteria for GAP.

- **Fertilization and soil use** – Soil management shall maintain and improve soil fertility by minimizing losses through erosion, runoff and leaching into surface or ground water.

- **Risk assessment** - Producers conduct a written Site Risk Assessment and identify the most common risks with regards to food safety and environment, by measures in a management plan.

- **Other** - Energy saving, Prevention against potential pollutants, Landscape protection.
2. GAP – STAGE QMS (ORGANISATION)

GlobalGAP standard (key requirements and benefits)

- Much of the current interest about GAPs is generated by private voluntary standards by processors, exporters or retailers like major supermarkets chains. Attempts by the food industry to codify, implement and sometimes impose ‘GAP’ codes of practices on their suppliers (farmers) has raised the question of the extent to which the markets can support sustainable agriculture.

- The GLOBALG.A.P. IFA Standard V5 is built on a system of modules that enables producers to get certified for several sub-scopes in one audit.
  - All Farm Base Module
  - Scope Module
  - Sub-scope Module

- Certification Options:
  - Option 1 (Single producer with or without an optional QMS).
  - Option 2 (Multiple producers with a mandatory Quality Management System).
Legislative requirements related to GAPs

Substantial legislation and support measures have been in place in the EU for more than 20 years, designed to deliver safe, reduced and more precise use of pesticides in agriculture. However, until it is more rigorously implemented by Member States, these improvements are limited, and certainly insufficient to achieve the environmental and health improvements the Directive was designed to achieve.

Directive 2009/128/EC aims to achieve a sustainable use of pesticides in the EU by reducing the risks and impacts of pesticide use on human health and the environment and promoting the use of Integrated Pest Management (IPM) and of alternative approaches or techniques, such as non-chemical alternatives to pesticides. The Directive offers the potential to greatly reduce the risks derived from pesticide use.

National Action Plans with clear measurable targets can enable Member States to demonstrate to citizens that they are duly implementing the Directive, and even going beyond it to propose innovative ways to reduce risks from pesticides.
FROM IPM TO IP, UNTIL GAP: DIFFERENCES

Benefits and requirements related to IP and GlobalGAP certification: The promotion of GAP by industry could be a win-win situation for farmers, ecologists, labourers, processors and consumers.

GAP schemes can be also used to complement “public-sector GAPs” such as extension or public incentive programmes.

- **Integrated pest management (IPM),** also known as integrated pest control (IPC) is a broad-based approach that integrates practices for economic control of pests. An IPM system is designed around **six basic components:** Acceptable pest levels, Preventive cultural practices, Monitoring, Mechanical and Biological control, Responsible use of chemicals.

- **Integrated Production (IP)** emphasises the growth of a healthy crop with the least possible disruption to agro-ecosystems supported among other options and encourages natural pest control mechanisms.
Traceability is a way of responding to potential risks that can arise in food and feed, to ensure that all food products are safe for citizens to eat.

Under EU law, “traceability” means the ability to track any food, feed, food-producing animal or substance that will be used for consumption, through all stages of production, processing and distribution.

The traceability system is the system to prepare for accidents and nonconformity regarding food safety. This system also allows verifying correctness, in case the reliability of information carried in labels and the like, is at risk. It is not a direct measure to ensure food safety but is useful in obtaining the trust of consumers and related food business operators

- Paper-based systems
- ICT-based systems: electronic information system printed on a food labeling (bar code, Two-dimensional code, Electronic information compiled in electronic tag (IC tag)
Agenda

JUNE 12th

MORNING
- Compliance to Residue requirements (Monitoring, Farm record keeping, Advanced IPM in F&V)
- ISO 22005 and Food Chain standards

AFTERNOON
- Retail marketing standards: the ‘Private Labels’
- Social Responsibility, Environment, Landscape, Biodiversity: new scenarios for Farming
1. COMPLIANCE TO RESIDUE REQUIREMENTS

All farmers who use plant protection products or post-harvest treatments are obliged to comply with the legal requirements regarding maximum levels and approved active substances/pesticides of each respective production country and country of intended use (Regulation EC N.396/2005 and/or equivalent provisions).

- **Monitoring** - The residue monitoring in the Quality schemes monitors whether maximum residue levels for plant protection products and limit values for contaminants and nitrate in fruit, vegetables and potatoes are complied with.

- **Farm record keeping** - A farm record is a document (in most cases a book) that is used to keep account of different activities, events, materials etc. regarding the farm operations.

**Advanced IPM in F&V**: Biological control has been a valuable tactic in pest management programs around the world for many years but has undergone a resurgence in recent decades that parallels the development of IPM as an accepted practice for pest management. In IPM specific tactics often do not act independently of one another.
2. ISO 22005 AND FOOD CHAIN STANDARDS

- Legal Bases:
  - Public Health Security - Bioterrorism Preparedness and Response Act, FDA 2002

- ISO 22005:2007 This standard gives the principles and specifies the basic requirements for the design and implementation of a feed and food traceability system. It can be applied by an organization operating at any step in the feed and food chain. It is flexible enough to allow feed and food organizations to achieve identified objectives.

- Other Food Chain standards - Farm assurance schemes: product certification for agricultural products that emphasize the principles of quality assurance, in addition to product inspection, may include standards and certification for traceability, production methods, transport, and supplies.
RETAIL MARKETING STANDARDS: THE ‘PRIVATE LABELS’

Private label products are those manufactured by one company for sale under another company's brand, or with a name associated with the brand, available in a wide range of industries from food to cosmetics.

The distribution, by labeling the products takes a dominant position in the relationship with the brand suppliers for access to the market and assumes the image of the producer towards consumers.

Retailers are investing in their private-label brands, and they seek ways to differentiate themselves to meet consumer needs and gain attractive margins.

Larger stores, such as hypermarkets, provide wider product ranges, and private-label can be given more visibility and space alongside brands.

Smaller stores, often with a focus on fresh and chilled, can offer new, innovative private-label products in “food for now” and convenience foods.
Private Labels are targeting foods

As consumers demand more transparency about the foods they eat, retailers are expanding their private-label brands to include better-for-you options, including those for consumers with special dietary needs, providing more nutritional information for private-label foods to make more healthful and better-informed choices.

What’s next?

There are further growth opportunities for private-label products:
1. The global economy will always have peaks and troughs. During an economic downturn, they will seek to purchase cheaper goods and services.
2. Consumers now have a global outlook on life, and using technology are more knowledgeable to make trade-offs in terms of range, price and availability when choosing a product or service. Retailers, being able to follow consumers into fast-growing or niche categories (health, wellbeing, food origin) have the opportunity by their own brands to reinforce the values of differentiation based on long-term brand equity.
Sustainable agriculture is a long-term farming system that incorporates profit, environmental stewardship, fairness, health, business and familial aspects on a farm setting, defined by 3 aspects: economic profit, environmental stewardship and social responsibility. In the longer term, it could aim to increase even new sales opportunities.

Social Responsibility

- **SA-8000** labour standard pushes the companies to invest in worker benefits, ensuring health and safety, decent working hours and remuneration meeting basics needs, reduced turnover and discrimination in the work place.

- **GRASP** is an Add-on product standard for SR designed to complement GLOBALG.A.P. Certification towards social aspects. GRASP measures can be assessed together with the GLOBALG.A.P. audit.

- **Fairtrade Labelling Organizations (FLO)** guarantees a better trade arrangement for producers in developing countries.
Agricultural biodiversity includes all the components of biological diversity of relevance to food and agriculture together with the components of biological diversity that constitute the agro-ecosystem, including wild relatives of genetic resources. This diversity has been shaped by farmers and communities for millennia and remains a key element of the livelihood strategies of poor, small-scale farmers throughout the world.

The Rainforest Alliance offers farms a business-to-business service in order to help transform land-use and business practices into more sustainable practices implemented through a network of nine national NGOs. It works with several basic principles including environmental, social and economic aspects. Its mission is to protect ecosystems, including the people and wildlife that live within them, through programmes in forestry, agriculture, tourism and natural forests. The resulting products are labelled.
THANK YOU FOR YOUR ATTENTION!
ANY QUESTIONS?

That's all Folks!