

Multiple choice for Absalon, E-learning

LECTURE 1: Impact of farming methods on the environment & food quality

- **Dominika Srednicka-Tober**

- 1. Which planetary boundaries have already been overstepped by humans according to the Rockstrom's study:**
 - a. Biodiversity loss, nitrogen cycle, climate crisis
 - b. Ozone depletion, freshwater use, phosphorus cycle
 - c. Freshwater use, deforestation, ocean acidification
 - d. Phosphorus cycle, nitrogen cycle, chemical pollution

- 2. According to the largest meta-analysis carried out so far, organic plant foods, when compared to the conventionally produced foods, are characterized by:**
 - a. Higher levels of bioactive compounds, but more frequent contamination with mycotoxins
 - b. Higher nutritional value & higher cadmium levels
 - c. Less frequent contamination with pesticide residues & higher concentrations of polyphenolic compounds
 - d. Less frequent microbiological contamination, lower yields & higher vitamin A & D content

- 3. Globally, agriculture of today is dominated by:**
 - a. Organic and biodynamic farming
 - b. GM crops
 - c. Large scale monocultures & intensive agricultural practices highly dependent on animal manure, green manure and compost
 - d. Large scale monocultures & intensive agricultural practices highly dependent on synthetic nitrogen fertilizers, chemical pesticides & GMOs.

LECTURE 2: Turning into practice – The role of dietary guidelines

- **Susanne Bügel**

1. Fill in the missing numbers:

(80 – 100) _____ out of (215) _____ possible countries have food-based dietary guidelines. Out of this only __ (4) mention sustainability.

Eller

2. Which four countries mention sustainability in their food based dietary guidelines?

- a) *Sweden, Brazil, Qatar, Germany*
- b) Norway, Denmark, Germany, Finland
- c) Spain, Italy, Estonia, Poland
- d) France, Romania, Greece, Bulgaria

3. What are the possible adverse effects of cutting down on meat intake?

- A) We have to increase the intake of legumes, when farms and fields are already overexploited
- B) *Reduced intake of high bioavailable iron and essential amino acids*
- C) It will increase the intake of saturated fat
- D) We will get an overpopulation of animals

LECTURE 3: From farm to fork: Food value chain analysis

- **Teresa Briz**

- 1) In the food supply chain, we may find three main flows: _____ flow which goes from suppliers to consumers, _____ flow which goes from consumers to suppliers and _____ flow which goes in both directions.

Answers: *Goods and services, financial, information.*

Wrong answers: Workers, migrants, documents, data

2) The value chain is as strong as its weakest link

True or false

LECTURE 4: Concepts and approaches in agroecology for sustainable food systems

- **Alexander Wezel**

1. What are the three main interpretations of agroecology?

Drag and drop: Scientific movement, *scientific discipline*, permaculture, *movement*, *practice*, religion, trend.

2. The food system approach in agroecology do researches on a lot of different topics. Among them are:

Food quality, *land grabbing*, *agroecological practices*, geographical indications, organization of food supply chain, rural development, *free trade*, stakeholder networks

3. Do the natural and social sciences have the same approach to the food system approach?

- a) Yes, they both deal with it the same way
- b) *No, the natural sciences mainly looks at it from the field level to food system level (bottom up), and social sciences looks at it is more from global level to local level*
- c) No, the social sciences look at it from the field level to global level (bottom up), and natural sciences looks at it from global level to field level

4. What are the movement's definition of agroecology?

- a) *They define their own type of agroecology often as food sovereignty and autonomy for local population; they also apply agroecology as a practice and an alternative to high input chemical intensive agriculture*
- b) They define agroecology as the integrative study of the ecology of the entire food system, encompassing ecological, economic and social dimensions.
- c) They define agroecology as applying ecological concepts and principles of the design and management of sustainable food systems.

5. Which country is the only country in the world that has a certain policy for agroecology?

Answer: France

6. Transformations of the food system, there are five levels – elaborate and example for each level (drag and drop)

- a) Level 1: Increase input use efficiency – For example reducing fertilizer applications, because there might be groundwater pollution.
- b) Level 2: Substitution of conventional inputs and practices with alternatives – For example substitution replacing pesticides applications with biological control approaches.
- c) Level 3: Redesigning of the agroecosystem – farmers changing towards no till and direct seeding systems, often they have to change the whole farming and cropping system.
- d) Level 4: Reconnecting the consumers and the producers – For example community supported agroecosystems and food box schemes.

- e) Level 5: Build a new global food system – For example reconnect consumers and farmers to build a real sustainable food system.

LECTURE 5: Ecosystem services in food systems

- *Eve Veromann*

1. According to Millennium Ecosystem Assessment concept, biological pest control and pollination belong to:

- a) Supporting ecosystem services
- b) Provisioning ecosystem services
- c) *Regulating ecosystem services*
- d) Cultural services

2. It is possible to enhance ecosystem services such as pest control and pollination

- a) By eliminating non-crop areas as a source of weeds and pests in agricultural landscape
- b) *by creating non-crop elements and conserving resource-rich habitats in agricultural landscape*
- c) By using of larger cultural fields to provide more hosts for natural enemies.

LECTURE 6: Driving sustainable diets: The role of food service

- *Carola Strassner*

1. Drag and drop: Which of the following foodservice operations are institutional catering and which are hospitality?

(Institutional catering) company canteen, hospital, clinic, kindergarten, school, university, prison, armed forces

(Hospitality) hotel, restaurant, airplane, ferry, train, fast food outlet, cruise ship,

2. Organic goals in foodservice can be found integrated into

a) nutrition societies' quality standards, procurement guidelines, hygiene (HACCP) plans, educational materials

b) nutrient analysis of menus, procurement guidelines, recipes and cookbooks for professionals, educational materials

c) nutrition societies' quality standards, procurement guidelines, recipes and cookbooks for professionals, educational materials

d) nutrition societies' quality standards, procurement guidelines, food waste monitoring, educational materials

LECTURE 7: Sustainability assessment of agricultural and food systems

- **Paola Migliorini**

1. How would you define sustainable agriculture?

- a) it includes food availability, access, stability and utilization
- b) The one "that meets the needs of the present without compromising the ability of future generations to meet their own needs"
- c) "the capacity of agroecosystem to maintain production over time, over long term ecologic limitation and socioeconomic pressing"

2. Sustainability is a complex issue and it depends on the perspective taken when looking at the system. How to judge a system?

- a) using indicators in two different time that compare the system evolution over time
- b) using indicators that have an optimal level or a threshold limit
- c) using indicators that have an objective value

LECTURE 8: Aspects of food quality analysis

- **Ewa Rembiałkowska**

1. Please select the proper set of the holistic criteria of food evaluation:

- a) Biological value, ethical value, authenticity, holistic measuring methods
- b) Authenticity, ethical value, technological value, sensory quality
- c) Technological value, sensory quality, nutritional value, biological value
- d) Biological value, ethical value, holistic measuring methods, sensory quality.

2. Biological value is a good indicator of food quality, because:

- a) Many compounds can be determined at the same time in food
- b) Using this method helps to keep animal welfare
- c) Using this method helps to increase the homoeostasis of the ecosystem
- d) The reaction of living animal is the best indicator of food value.

3. Select a proper description of the organic crops compared to conventional ones:

- a) *Organic crops contain less nitrates, less pesticides, more vitamin C, have better sensory value*
- b) Organic crops contain less nitrates, more dry matter, less vitamin C, have longer shelf-life
- c) Organic crops contain less nitrates, less dry matter, more vitamin C, have longer shelf-life
- d) Organic crops contain more nitrates, more dry matter, less vitamin C, have shorter shelf-life.

LECTURE 9: Geographical indications – examples from France

Celine Michaud

What is the difference between PGI and PDO labels?

- a) PGI labels apply exclusively to foodstuff while PDO labels apply exclusively to wines
- b) *The qualities and properties of PDO products are exclusively determined by the geographical environment*
- c) The PGI status is granted when all phases of the productive process are carried out in that region

What is the main advantage of geographical indications?

- a) *They prevent from fraud and imitation.*
- b) They inform consumers about the whole production process.
- c) They always generate greater incomes to producers.

LECTURE 10: The organic food system model

- **Johannes Kahl**

1. Does the organic food system supports sustainable diets?

- a) yes indicated for food production (agriculture)
- b) yes, as well defined alternative food system
- c) no, as organic describes only primary production system

2. Does the organic food system offers indicators for measuring the sustainability of food systems?

- a) No, as no data are available
- b) Principally yes but not yet suggested
- c) Yes, fx. land use and consumption data