CIHEAM

Mediterranean Agronomic Institute of Zaragoza

Online Advanced Course

FOOD SUSTAINABILITY ASSESSMENT: A METHODOLOGICAL APPROACH

15-24 February 2021

1. Objective of the course

Food systems have the challenge to achieve nutrition security, food safety and healthy diets for an increasing global population while minimizing the impact on the limited natural resources available and protecting human well-being and social equity. Business-as-usual pathways and upscaling current practices have been proved not to be optimal to sustainably and equitably meet the needs of the global population in the future. However, despite several efforts and initiatives towards more sustainable food systems, sometimes also including discussions on possible metrics, there is not yet clarity on what would be an adequate set of indicators for countries and stakeholders to measure progress in the transformation of their food systems.

The course aims at providing a comprehensive look at the different methodologies that, so far, have been developed arising from alternative perspectives and conceptual approaches. The course will also provide an opportunity to engage with experts on different aspects of food systems in exploring the possibility of including and monitoring sets of feasible and measurable indicators for assessing the sustainability of food systems. Specific attention will be provided to the complexity of food systems as well as to the resolution of conflicts arising from trade-offs among indicators.

At the end of the course participants will:

- Have an overview of the interaction between food systems and sustainability in the international policy context.
- Be aware of the importance of good governance in food system transformation.
- Understand key aspects and steps to design a food system sustainability assessment.
- Know updated and upgraded social, economic, nutritional and environmental assessment methodologies and acquire criteria to apply them in different contexts.
- Be conscious of the potential conflicts among indicators and know how to face them.
- Have practical skills in implementing specific assessment methodologies.

2. Organization

The course is organized by the **Mediterranean Agronomic Institute of Zaragoza (IAMZ)** of the **International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM)**. The course will be held online, with lectures and practical work delivered in live sessions by highly qualified lecturers from international organizations, and from universities and research centres in different countries.

The course will be held from 15 to 24 February 2021. The 8 sessions will be held from 15 to 19 and 22 to 24 February, from 13:00 to 17:30 (Central European Time). The time slot could be reconsidered according to the countries of origin of participants finally selected.

3. Admission

The course is designed for 30 professionals with a university degree and is addressed to decision makers, administration officers, food producers, managers and marketers, technical advisors, researchers and NGO professionals working on or concerned with assessing the sustainability of food systems.

The number of admissions can be increased to attend lectures only and excludes the practical work on the assessment of the environmental footprint and resolution of conflicts.

Given the diverse nationalities of the lecturers, knowledge of English, French or Spanish will be valued in the selection of candidates, since they will be the working languages of the course. IAMZ will provide simultaneous interpretation of the lectures in these three languages.

4. Registration

Candidates must apply online at the following address: http://www.admission.iamz.ciheam.org/en/

Applications must include the *curriculum vitae* and copy of the supporting documents most related to the subject of the course.

The deadline for the submission of applications is **8 January 2021**. The deadline may be extended for candidates not applying for a scholarship if there are free places available.

Applications from those candidates requiring authorization to attend the course may be accepted provisionally.

Registration fees for the course amount to 400 euro.

Please display on a notice board if possible

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CIHEAM

See updated information at

www.iamz.ciheam.org

INFORMATION CONTINUES OVERLEAF

Selected candidates will receive technical and methodological assistance to ensure efficient online participation and favour interactivity

5. Scholarships

Candidates from CIHEAM member countries (Albania, Algeria, Egypt, France, Greece, Italy, Lebanon, Malta, Morocoo, Portugal, Spain, Tunisia and Turkey) may apply for scholarships covering registration fees.

Candidates from other countries who require financial support should apply directly to other national or international institutions.

6. Teaching organization

The course requires personal work and interaction among participants and with lecturers. The international characteristics of the course favour the exchange of experiences and points of view.

The course has an applied approach. Formal lectures are complemented with international examples and case studies on successful actions and innovative approaches to assess food systems sustainability, as well as with practical exercises in groups and discussions.

The focus of the practical exercises will be the calculation of environmental footprints in the dairy and seafood sectors and the use of participatory tools for trade-off management.

Participants will be invited to provide before the beginning of the course a brief document about initiatives for food sustainability assessment in their respective countries/regions. These documents will be distributed to all participants and lecturers and will be the basis for discussion.

7. Programme

0. Class 0 – Videos: welcome from IAMZ and programme presentation

1. Introduction (3 hours)
- 1.1. What is a food system? What are sustainability assessments?
- 1.2. How we produce and consume food and why sustainability is important? Need of food system transformation
- 1.3. Impacts of food production and consumption and food system resilience to shocks and threats. The importance of assessing sustainability
- 1.4. How we assess sustainability? For what? For whom? Where are they applied – examples from practice
- 1.5. International and national policy context
  - 1.5.1. The SDGS and The UN Food System Summit
  - 1.5.2. European framework: European Green Deal, Farm to Fork Strategy, New Circular Economy Strategy, Single Market for Green Products: Product Environmental Footprint
- 1.6. Links between food systems in the wider context of a sustainable and circular bioeconomy. National and regional food and bioeconomy strategies

2. Good governance (2 hours)
- 2.1. Stakeholders' mapping
- 2.2. Coordination mechanisms and power relation
- 2.3. Prioritization of outcomes and dimensions, and defining criteria

3. Measuring sustainability (2 hours)
- 3.1. State of the art about measuring sustainability
- 3.2. Defining system boundaries
- 3.3. Designing measurable sustainable objectives
- 3.4. Quantitative and qualitative approaches
- 3.5. Issues in data availability: simple vs complex indicators
- 3.6. Creating and maintaining monitoring systems

4. Assessment methodologies (16 hours)
- 4.1. Global food systems sustainability indicators: type of indicators
- 4.2. Environmental assessment
  - 4.2.1. Life Cycle Analysis
  - 4.2.2. Environmental footprint
  - 4.2.3. Water footprint
  - 4.2.4. Practical exercise: assessment of the environmental footprint of dairy and seafood products
- 4.3. Social assessment: Social Life Cycle
- 4.4. Economic assessment
  - 4.4.1. Life Cycle Cost
  - 4.4.2. Extended Cost-Benefit Analysis
- 4.5. Food and nutrition composite indicators

5. Synergies and trade-offs among environmental, social, economic and nutritional assessments. Resolution of conflicts (4 hours)
- 5.1. Synthetic indicators
- 5.2. Participatory tools
- 5.3. Mathematical tools
- 5.4. Practical exercise on resolution of conflicts

6. The example of the nexus water-energy-food (2 hours)
- 6.1. Why considering the nexus water-energy-food
- 6.2. State of the art about indicators to measure the nexus water-energy-food in rural and urban areas

7. Round table discussion: how to engage public and private actors in assessing sustainability of food systems? (2 hours)

GUEST LECTURERS

M.M. ALDAYA, ISFOOD-UPNA, Pamplona (Spain)
L. BATLLÉ-BAYER, Univ. Pompeu Fabra, Barcelona (Spain)
M. BIANCHI, RISE, Göteborg (Sweden)
A. BOGDANSKI, FAO, Roma (Italy)
G. BRUNORI, Univ. Pisa (Italy)
M. CIDAD, AZTI, Derio (Spain)
J.M. GIL, CREDA-UPC-IRTA, Barcelona (Spain)
Z. KALLAS, CREDA-UPC-IRTA, Barcelona (Spain)
S. RAMOS, AZTI, Derio (Spain)
M. REZAEI, FAO, Roma (Italy)
S. VALDIVIA, Leuphana Univ. Lüneburg and WRF, St. Gallen (Switzerland)
J. VALLS, FAO, Roma (Italy)
M. VITTUARI, Univ. Bologna (Italy)

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