



Introduction and organization of the course  
(subject to few minor changes)

**FÖ0466 (20070)**

***Sustainable Agri-Food Value Chains  
& Bioeconomy***

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**2/November/2021 – 16/January/2022**



## 1. Why study sustainable agri-food value chains and bioeconomy (SAFVC&B)?

### 1.a Why Sustainability?

As citizens of this planet, as consumers, as farmers, as politicians, as businesspersons, we have come to realise that the ways we produce and consume food and other goods, are un-sustainable: that is they exhausts the resources of the planet leaving very little for future generations to continue living in standards at least as high as the standards of living of the past and current generations. Scientists provided evidence and have warned the world about anthropogenic disasters: the depletion of natural resources, the loss of biodiversity, the damage to the natural environment, and the abnormal and rapid climate change. This lead the world leaders and international organizations to the realisation, that these are global problems which require immediate global solutions. As a response to this devastating realisation, all member-states of the United Nations adopted 17 Sustainable Development Goals (SDG) in 2015. Specifically for the “ticking clock” issue of climate change there is a global policy framework comprising the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and the Paris Agreement. The European Union (EU) has signed all three global policy frameworks, and went even beyond by setting out a “growth strategy” - the Green Deal - to use the problem of achieving the SDGs into an opportunity for growth and economic development, mobilising at least €1 trillion of sustainable investments over the next decade. The main components of this Green Deal strategy are more specific strategies: Farm to Fork, the Biodiversity, the Climate Law, Circular economy, and others. Sustainability is therefore becoming, not only a constraint for firm conduct, but also an incentive and potentially a profitable strategy. This provided by policy incentives and funding, and also driven by the demands of the consumers. As we will see, this requires a chain approach.

### 1.b Why Value Chains?

Agrifood firms, small or large, as well as farmers realise that in order to add value to their product they need to adopt the concept of the value chain, i.e. to incorporate into their decision making what happens before and after their own production, i.e. to include those firms (and industries) that provide the inputs, as well as to those that buy the firm’s product, process and distribute it to the final consumer. In other words an approach that looks at the entire spectrum “from farm to fork” – or rather “from lab to fork”.

### 1.c Why bioeconomy?

Achieving the SDGs from a global, national, or even a firm perspective, is a challenging task that requires an understanding that goes even beyond the chain concept, it requires a system view that encompasses all sectors that rely on biological resources. This leads us to the concept of the **bioeconomy**, nicely described in this EU document:

*“The bioeconomy covers all sectors and systems that rely on biological resources (animals, plants, micro-organisms and derived biomass, including organic waste), their functions and principles. It includes and interlinks: land and marine ecosystems and the services they provide; all primary production sectors that use and produce biological resources (agriculture, forestry, fisheries and aquaculture); and all economic and industrial sectors that use biological resources and processes to produce food, feed, bio-based products, energy and services.” [EU18]*

### 1.d The objective of the course

**The objective** of the course Sustainable **Agri-Food Value Chains and Bio-Economy (SAFVC&B)** is to provide with an understanding of the concept of value chains, the various approaches, theories, methods and their applications; to raise questions and link to current and long-term issues.

## 2. The organization of the course:

The course will consist of four parts: A. Overview; B. Theory & methods; C. Applications; D. Synthesis

### Part A: Overview

Here we are introduced to the concept of the economics of the firm and the organisation and strategy of the value chains in the agri-food industry. We will learn what is agri-food chain and why it is useful to view the production and distribution of food as a “chain”. What do we miss by this view? We will also learn how to map value chains. We will discuss sustainability and bioeconomy concepts.

### Part B. Theory and methods

In approaching the value chains in the agri-food industry we will follow a step-wise approach, adding complications and elements, from various theories, literature and disciplines. The following four steps follow in a way the general approach to studying social analysis [WIE00]:

- I. The Firm. We start with very simple concept of the firm as “black box” and we use neoclassical theory of the firm
- II. The market. We will follow the industrial organization game theory and vertical markets.
- III. Governance. We proceed with opening the “black box of the firm and adding organizations, and governance elements, derived from new institutional economics, organization theory, transaction costs and agency.
- IV. We take a side step from a chain to network perspective, using social network analysis
- V. Finally we close the theoretical and methodological analysis of chains with the managerial or strategy view.

We will follow each approach for one week, and we will close the week with an assignment, for which you will be graded and this will contribute towards your final grade. These 5 assignments will count for 50% of your final grade

### Part C: Applications & Policies

Agri-food value chains is an applied discipline. We will study various chains and case studies as we proceed and then we dedicate one and half week to discussing applications. However we will draw examples during the entire course. Here we will examine specific agri-food chains from around the world, starting from Sweden. We will also look at policies, particularly EU policies concerning the agri-food. We will discuss, food waste, CSR, Nutrition, and of course, we can not ignore the severe impact COVID19 had on local the global agri-food chains.

### Part D: Synthesis

Putting everything together - the synthesis part of the course – is something that will be done by each one of us – mainly you: individually and in team work. This will be accomplish with a project which will deal with a particular problem in one – or several – agri-food value chains and will require – and exhibit your ability – to identify a problem, select theory and method, collect information, and finally write and present your work. This part will also contribute towards your final grade:

Project proposal 5%; written paper 40%; presentation 10%.

### 3. Course Plan

The course will be contacted remotely on **ZOOM** and through **CANVAS**. However, I intent to have at least **one lesson per week** live in classroom for those who can attend – while it will be linked to ZOOM live for all others – this is voluntary and is subject to availability of room and other technicalities.

Lessons will be three (3) times per week:

**Monday, Tuesday, Thursday 09:00-12:00.**

There may be some minor adjustments.

#### Teacher:

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#### Course Administrator

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### The weekly plan:

#### Monday, Tuesday, Thursday 09:00-12:00

week	days	topic	readings
1	2-5/nov	Introduction	YTFP21, EVNUTR, FAOPFX, ECNFP21, KM01, WIE00
2	8-12/nov	The firm the farm & the market	CPIO94 (CH2)
3	15-19/nov	Vertical Markets	TK614, JRC20
4	22-26/nov	Governance	WIE05, BOM15, FAO13, GHS05
5	29/nov-3/dec	Networks	SLO13
6	6-10/dec	Strategy	PRTR98
7	13-17/dec	Applications	BRSZ20, FAO19
8	20-22/dec	Applications	PCSR06
9	3-7/jan	Project Work	
10	10-14/jan	Presentations	

### 4. Preparatory Readings:

As preparation for the course I suggest that you read (and watch) the following:

1. Read **KM01** (Chapters 1,2,3,4)

2. Watch **YTFP21**

3. Read **ECNFP21, EVNUTR, FAOPFX**

4. Read **PRTR98**

5. **The links:** [SDG](#), [UNFCCC](#)), [Kyoto Protocol](#), [Paris Agreement](#), [Green Deal](#), [Farm to Fork](#), [Biodiversity](#), [Climate Law](#), [Circular economy](#)

All readings are available in **SLUNIK** and will also be available on the **CANVAS** page which will open soon  
If you can not access any of the readings or links please contact the **teacher** or **assistant**.

## 5. Readings (more to come)

All readings are available in **SLUNIK** and will also be available on the **CANVAS** page which will open soon. If you can not access any of the readings or links please contact the **teacher** or **assistant**.

FÖ0466 SAFVC&B 2021 Course Literature - Subject to some changes	
BOM15	Bush, S.R.; Oosterveer, P.; Bailey, M; Mol, A.P. 2015. "Sustainability governance of chains and networks: A review and future outlook". Journal of cleaner production.
BRSZ20	Barrett, C.; T. Reardon; J. Swinnen; and D. Zilberman. 2019. "Structural transformation and economic development: insights from the agri-food value chain revolution". Cornell University
CPIO94	Carlton, D.W. and Perloff, J. M. 1994. "Modern Industrial Organization". 2nd ed. New York, USA, Harper Collins College Publishers. CHAPTERS 2, 3, 4
ECNFP21	The Economist. 2021. "High food prices are here to stay"
EU18	EU. 2018. "A sustainable Bioeconomy for Europe: strengthening the connection between economy, society and the environment". Updated Bioeconomy Strategy
EVNUTR	EUROACTIV. 2021. "Agrifood Brief: A spoonful of sugar" <a href="https://www.euractiv.com/section/agriculture-food/news/agrifood-brief-a-spoonful-of-sugar/?fbclid=IwAR1TTFwflxOPA-ucmb1YLCEnWs0ObIMC06VOrsaAOzEyiDXH2DN2CG5UL00">https://www.euractiv.com/section/agriculture-food/news/agrifood-brief-a-spoonful-of-sugar/?fbclid=IwAR1TTFwflxOPA-ucmb1YLCEnWs0ObIMC06VOrsaAOzEyiDXH2DN2CG5UL00</a>
FAOFPX	FAO Food Price Index <a href="https://www.fao.org/worldfoodsituation/foodpricesindex/en/">https://www.fao.org/worldfoodsituation/foodpricesindex/en/</a>
FAO13	FAO. Da Silva, C. A. and M. Ranking. 2013. "Contract farming for inclusive market access". FAO
FAO19	FAO. 2019. "The State of Food & Agriculture: Moving forward on food loss and waste reduction"
GHS05	Gereffi, G.; J. Humphrey; and T. Sturgeon. 2005. "The governance of global value chains. Review of International Political Economy 12.1: 78-104.
JRC20	JRC. Barathova, K. et al. 2020. "Pass-through of unfair trading practices in EU food supply chains: methodology and empirical application"
KM01	Kaplinsky, R. and Morris, M. 2001. "A handbook for value chain research". IDRC
PCSR06	Porter, M.E.; M. R. Kramer. 2006. "The link between competitive advantage and corporate social responsibility". Harvard business review 2006 Vol. 84 Issue 12
PRTR98	Porter, M.E. 1998. "Competitive Advantage -Creating and Sustaining Superior Performance". New York, USA, The Free Press CHAPTER 1, 2
SLO13	Sloane A.; S. O'reilly. 2013. "The emergence of supply network ecosystems: a social network analysis perspective". Production Planning & Control
TK614	Tomek, W.G; Kaiser, H.M. 2014. "Ch6 Marketing Margins". in "Agricultural Product Prices". 5th ed. Cornell University Press
WIE00	Williamson, O. E. 2000. "The new institutional economics: Taking stock, looking ahead". Journal of Economic Literature 38(3), 595-613.
WIE05	Williamson, O.E. 2005. "Transaction Cost Economics". In C. Ménard and M. M. Shirley. "Handbook of new institutional economics". Springer 2005 Vol. 9
YTFP21	YOUTUBE. 2021. "The Shortages Are Going To Get Worse Later This Year As Global Supply Chains Increasingly Falter" <a href="https://www.youtube.com/watch?v=ClrjwWxWRUU">https://www.youtube.com/watch?v=ClrjwWxWRUU</a>