



[AGST #1 RURAL DEVELOPMENT STUDIES: LECTURE SERIES NO.5]

AGRICULTURAL SCIENCE AND SOCIETY

Philosophy of Science, Agriculture and Modernisation

by **Ir. JAN SCHAKEL**

Lecturer, Wageningen University

This course is highly recommended for students in the social sciences, with an interest in the agricultural sciences and the philosophy of agriculture. Or, for students with an agronomic background, and with interest in the social sciences and the philosophy of sciences. No background in philosophy is required to participate in the course.



Jan Schakel is a lecturer at the Rural Sociology Group, Wageningen University, the Netherlands. His research interests include transdisciplinarity and plurality of agricultural science, multi-functionality in agriculture, and its consequences on agricultural science, society and education. His teaching courses are highly appreciated at Wageningen University for stimulating reflective thinking about agricultural modernisation.

**This course is designed to be worth 1 credit.
(Registration required)**



AGST (Asian Platform for Global Sustainability
& Transcultural Studies)
by Japan Gateway: Kyoto University Top Global Program

[CLASS SCHEDULE]

October	
14th Wed.	1 & 2
16th Fri.	3 & 4
21th Wed.	5 & 6
23th Fri.	7 & 8

[TIME & VENUE]

9:00-12:00 @ ROOM 102

Faculty of Law and Economics
East Building

1. Agriculture and Modernisation; the 'Horizon of Relevance'
2. The Rise and Fall of Agricultural Modernisation
3. Philosophy of the (Agricultural) Sciences (1)
4. Philosophy of the (Agricultural) Sciences (2)
5. Technology: Instrumentalism, Pragmatism and Moralism
6. Assignments for Group Work and Individual Papers
7. Presentation of Group Work, Discussion and Feedback
8. Agricultural Sciences and Society: Reflections

We welcome your participation!!

CONTACT:

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Course Title	Agricultural Science and Society			Instructor(s) Position ▪ Name	Dr. Shuji Hisano, Professor at Graduate School of Economics, Kyoto University Dr. Jan Schakle, Lecturer, Rural Sociology group, Wageningen University		
Credits	1	Term	Autumn	Day/Period	Oct 14, 16, 21, 23	Class Methods	Lectures/ Seminars

Course Outline & Objectives

This course focuses on the relationship and mutual influences between agricultural science, technology and society. The aim of this course is the analysis of complex societal questions (e.g. modernization) in the field of agricultural science and technology from a philosophical and sociological perspective. Although some contents of this course are originally designed for students from agricultural science and technology, how to deal with normative questions in a scientific and technological context as well as the responsibilities and ethics of scientists might be common themes for students in economics and political economy as well. The course will take an interactive teaching and learning form, giving the student a platform for training their presentation and discussion skills. Finally, assignments will be given for group work and individual papers, through which the students can learn how to position oneself vis-à-vis different ideas of science and technology, and have experience in debates on agricultural science, technology and society.

Course Schedule & Content

(October 13th)

A. Agriculture and modernisation; the 'Horizon of Relevance'

1. Dutch Mountains (song by The Nits): dykes, land and water
2. Dutch Landscapes: blue skies, open view, low horizon
3. Dutch Horizon: globalisation, trade and Protestantism
4. Dutch Polders: cooperation, negotiation, democracy
5. Dutch Cows: Paulus Potter's bull, Frisians and Holsteins
6. Dutch Farms: stalls, stables and science fiction

B. The rise and fall of agricultural modernisation

1. The modernization of agriculture since World War II; facts and figures
2. The motor behind modernisation: education, extension, research (OVO)
3. Success stories and counter effects: modernisation beyond its limits
4. The end of the modernisation paradigm: agriculture in crisis
5. Crisis: diagnoses and remedies on 5 different levels
6. Science and technology: from success to failure?

(October 16th)

C. Philosophy of the (agricultural) sciences

1. The concept of science: 3 different meanings
2. The structures of sciences: a matrix of 6 different sciences
3. The features of sciences: 6 different characteristics
4. Three ideas of science: empirism, rationalism and paradigms
5. Agricultural Sciences as Applied Science
6. Agricultural Sciences as Technology

(October 20th)

D. Technology: instrumentalism, pragmatism and moralism

1. Technology as applied science
2. Technology and context: Man-Machine-Systems

3. Technology in between Practice, Public and Politics: rationalisation
4. Technology: internal and external code
5. Technology: horizon of relevance
6. Technology: Agriculture and Modernization: a local perspective

E. Assignments for group work and individual papers

1. Cracking the code: group work
2. Discovering and reconstructing the horizon of relevance: group work
3. Reflection paper: individual essay

(October 23th)

F. Presentation of group work, discussion and feedback

G. Agricultural Sciences and Society: reflections

1. Agricultural Sciences revisited: mono-, multi-, inter-, trans disciplinarity
2. Agricultural Sciences revisited: matrix of six different levels of integration
3. Agricultural Sciences revisited: institutional reforms
4. Agricultural Sciences revisited: from instrumentalism to pragmatism.

Course Requirements

1. three lectures of each three hours (A and B, C, D and E)
2. self-study during the whole period
3. group work on two assignments (E)
4. individual paper (essay)
5. presentation of group work (F)
6. finale reflection meeting by Jan Schakel (F)

Grading & Evaluation

Grading will be done on the basis of attendance, class participation, a presentation of group work, and individual essay.

Required Textbooks

In case preregistration for the course is required, course participants will receive the texts for the seminar in advance.

Recommended Materials & Resources

1. Six powerpoint presentations, Jan Schakel, Rural Sociology Group, WUR
2. Recent course materials "Introduction into the Philosophy of Science", Applied Philosophy Group WUR
3. Recent course materials "Animal Science in Society", Rural Sociology Group, WUR
4. Course document "Agricultural Science as local knowledge", Jan Schakel
5. Chapters from Schama's book "Landscape and memory" (1995)
6. Chapters from Bieleman's book "Five centuries of farming; a short history of Dutch agriculture" (2010)
7. Chapters from Staudenmaier's book "Technology's storytellers" (1985)
8. Chapters from Gibbons book "The new production of knowledge" (1994)
9. Articles from the journal " Sociologica Ruralis"
10. Articles, drawn from different research reports, Rural Sociology Group, WUR

Additional Information (e.g. Homework policy, Office hours)

This course is highly recommended for students with an agronomic background, and with interest in the social sciences and the philosophy of the sciences. Or for students in the social sciences, with an interest in the agricultural sciences and the philosophy of agriculture. However, no background in philosophy is required to participate in the course.