

Video Transcripts “Understanding and Managing Food Insecurity”

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0. Video: Overview

Welcome to “Understanding and managing food insecurity”

Conflict has many causes and consequences.

One of them is food insecurity. It can be the manifestation of long-term structural inequalities. The deprivation of food, which is a basic human need, can lead to riots, anti-government demonstrations and uprising. We have observed this phenomenon very recently in the case of the Arab Uprising or Venezuela.

Then again, food insecurity can also be a consequence of conflict. Yemen, for example, has been devastated by a civil war, toppling its population into severe food insecurity. According to the World Food Programme, approximately 16 million people wake up hungry every day. This is half of Yemen’s population.

With that being said, we can see that managing food security is an integral part of conflict management.

International humanitarian assistance organizations, for example, address food insecurity in vulnerable, conflict-prone, and conflict-ridden regions.

Then again, from a development perspective, agrarian and land reforms often help to dismantle the structural fundamentals of many conflicts.

Thus, understanding the economics of policy interventions to ameliorate food insecurity is essential for effective social policy programming.

Which brings us back to the objective of this course: Understanding and managing food insecurity.

Before we look into content-related details, let’s have a look at **what you should bring to this course** in order to excel.

“Understanding and managing food insecurity” is technically an advanced applied micro- and macroeconomics course. This is because the economics related to food as a good typically constitutes exceptional cases that often go beyond mainstream workhorse economic modelling. Thus, you will need a basic understanding of micro- and macroeconomics. Some basic calculus skills will also be helpful in this course.

Now, how is this course structured?

We will cover 6 different modules, each of which will begin with an introductory video. You will then dive into each module by working through the lecture notes on your own.

At this point, I should mention that for the more advanced modules you will find references to more detailed handouts.

Each module also provides you with a list of complementary materials. So, no need to struggle. Once you feel confident about the module's content, do the self-assessment. Module 1 through 5 are accompanied by problem sets that will prepare you for both midterms, which are similarly designed as the problem sets.

Additionally, there will be several exercises. Their purpose is to provide you with hands-on experience and deepen your understanding of the matter.

Now that you know what you will put into the course, let's have a look at what you will get out of it.

Once you completed this course you will be able to

- Use the food security relevant terminology correctly.
- Apply food security indicators for real-world analytical purposes.
- discuss the main causes and consequences of famines.

And

- problematize food insecurity from the angles of religion, political history, economic history, and most importantly from an economic analytical perspective.

This course will also provide you with the necessary tools to

- derive sound policy relevant mechanisms to manage food insecurity from the economic analytical perspective

and

- illustrate the importance of food security to conflict prevention.

These learning outcomes bring us to, last but not least, the outline of this course. Throughout "Understanding and managing food insecurity" we will define food insecurity, analyze indicators of food insecurity and find out what lessons we can learn from famines. We will then spend some time on food security from a humanistic, religious, political, and economic historical perspective before we finally learn about mechanisms to manage food insecurity. To tie the knot, we will conclude this course with a model that illustrates the importance of food security to conflict prevention.

1. Video: What is Food Security?

Welcome to the first module of the course "understanding and managing food insecurity." This module is all about the question "What is food security?"

At the World Food Summit in 1996, the representatives of 185 countries and the European Community established that "Food security exists when all people, at all times, have physical and economic access to

sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”

Now, this is a very nice definition and I could not agree more. In order to deal with and manage food insecurity, however, this definition needs to be made more tangible. The four pillars of food security help us to do so. These four pillars are availability, access, utilization, and stability. Remember them well, because we will draw on them in subsequent modules.

Availability, access, utilization, and stability help to access the subject matter. Including a time horizon determines whether food insecurity is chronic, thus persistent in nature, or transitory, thus temporary in nature. These days climate change is a rough challenge, amplifying a rather new type, namely seasonal food insecurity. It falls between chronic and transitory food insecurity, since it is temporary, yet persistent.

Knowing how to access and categorize food insecurity is important. But when talking about food insecurity some vocabulary is important, too. Hunger, for example, which is often used interchangeably with food insecurity, is actually a subjective sensation. Malnutrition and poverty, on the other hand, are physiological and physical deficiencies that help us to pinpoint food security and give us a starting point when managing it.

But what entity do we refer to when talking about food insecurity? Well, if availability, access, utilization, and stability are not given, an individual/ a household/ and even a nation is considered to be food insecure.

In the following module we will learn about different indicators that help us approach food insecurity. We will see that most data is measured in a proportion of the entire population, thus referring to both the individual and a nation.

Now that you watched this short introduction, go ahead and work through the lecture notes, use the complementary materials and do the self-assessment. And, of course, don't forget the exercise. Thank you and enjoy.

2. Video: Indicators of Food Insecurity

Welcome to the second module of the course “understanding and managing food insecurity.” This module is all about “Indicators of Food Insecurity.”

Food insecurity indicators are very important when managing food insecurity. But why?

First, they are important to research and thus an inherent part of public policy programming and simulation.

But secondly, they are essential to humanitarian assistance decision-making and advocacy. For example, in order to decide on what to do it is important to know what is needed.

Are we dealing with lack of physical access due to a lack of paved roads or is it high food prices that prevent individuals from purchasing needed food? Need we consider parasites for inadequate utilization due to hygiene problems or simply undernutrition?

The examples are plentiful, and you will get the chance to gather some expertise through this module's exercise.

Now that you watched this short introduction, go ahead and work through the lecture notes, use the complementary materials and do the self-assessment. Thank you and enjoy.

3. Video: Lessons from Major Famines

Welcome to the third module of the course "understanding and managing food insecurity." This module is all about "Lessons from Major Famines."

Famines can be traced back for centuries. Analyzing each one of them shows that the causes can be narrowed down to natural disasters, political ideology and conflict.

The Irish potato famine from 1846 to 1852, for example, acquired very sad prominence due to its monstrous magnitude. Thanks to the discovery that potatoes grow very well in the damp climate of Ireland, food security increased - and so did dependency on that specific staple. Once the blight destroyed three quarters of Ireland's potato crop, a major famine was the consequence.

Almost 100 years later and in a different part of the world, Mao envisioned a fast transition towards a modern agricultural and industrial communist state. Mao's plan became famous as the Great Leap forward that transformed millions of formerly productive farmers into an economic system that not only failed to create economic value added but destroyed human capital and historically grown farming practices. As a consequence, 15 to 25 million people starved to death.

Switching time and places will take us to Ukraine 1932/33. Since 1924 Stalin, who was determined to return to communism, had made every effort to keep the Ukraine as a Soviet republic. Ukraine, however, resisted until the Soviet leaders brutally crushed their resistance with deportations, killings and the withdrawal of food. This withdrawal of food as a means of warfare reduced Ukraine's population by nearly 25%.

Individuals, when confronted with a situation of food insecurity, develop different strategies from changing dietary habits to extreme rationing. For the society as a whole, food insecurity goes often hand in hand with adverse effects such as migration and political instability, taking us back to the causes of famines that we identified at the beginning of this module.

Now that you watched this short introduction, go ahead and work through the lecture notes, use the complementary materials and do the self-assessment. And, of course, don't forget the exercise. Thank you and enjoy.

4. Video: Food Insecurity in the History of Religion, Political, and Economic Thought

Welcome to the fourth module of the course "understanding and managing food insecurity." This module is all about "Food Insecurity in the History of Religious, Political, and Economic Thought."

Food has been important ever since. So important, that in the absence of it is interpreted as punishment in Christianity and Islam. In history, the Greeks were the first to recognize the uniqueness of food as a commodity and regulate market power. Which brings us to your microeconomic skills.

In 1798 Thomas Malthus published “An Essay on the Principle of Population” where he observed that an increase in a nation’s food production improved the population’s well-being. This improvement, however, was temporary because it led to population growth. These observations motivated his Congestion Hypothesis that population will eventually outgrow the available productive capacity.

David Ricardo, a close friend to Thomas Malthus, but intellectual rival, on the other hand, showed, that this is not necessarily true. On the contrary, with his Theory of Comparative Advantage he showed that if countries participate in international trade, all benefit from gains from trade; thus, consuming more than they produce.

Both approaches are important basics when dealing with the causes of food insecurity. And so is the Lewis-Fei-Ranis Model when applied to the idea and importance of a Green Revolution for economic development.

Yet, we also have to understand consumer behavior. Sometimes, people may consume more of a good as its price rises and vice versa; and generally, people spend relatively less on food as their income increases. We will use a modified Leontief and Stone-Geary utility function to explain these phenomena and why they are important to know.

Now that you watched this short introduction, go ahead and work through the lecture notes, use the complementary materials and do the self-assessment.

This module and the following module share the exercise. So, excavate your calculus skills, maximize some utilities and derive our most favorite demand functions. Thank you and enjoy.

5. Video: Managing Food Insecurity

Welcome to the fifth module of the course “understanding and managing food insecurity.” This module is all about “Managing Food Insecurity.”

First of all: The right to adequate food is a long-standing international human right. And human sense gives us enough reason to manage food insecurity. Additionally, Amartya Sen’s Capabilities Approach accentuates the benefits from food security, which gives us even more reason to manage food insecurity.

But how do we actually do that?

Using a Cobb-Douglas utility function we will show how the economic system affects production and, hence, the first pillar of food security. Right, Availability. Thus, a market system is important for agricultural efficiency.

Sometimes, however, availability of food is given, but – remember the second pillar of food security?- access is denied to, often vulnerable, groups of the population. Now a government needs to interfere. From a state’s perspective, subsidies and cash transfers are equally good. And for the individual they are unequally efficient, which can be demonstrated with comparative statics. Well, subsidies and cash transfers help the consumer. But what about the producer? His living and access to food depends on a good harvest. And on a side note: so does future availability of food. Using economic models of uncertainty, we will calculate the price of a fair crop insurance.

Now assume that availability and access are given. Does that mean our individual is food secure? Prioritizing healthy meals and advertising a lifestyle beneficial to health enhances utilization. Easier said than done? School feeding programs, for example, internalize positive externalities from a healthy population; and a sugar tax eliminates negative externalities from overconsumption of sugar.

Yet, availability, access, and utilization can only be guaranteed if they are also stable over time. We don't need to look back very far to find an array of examples, where stabilization could not be guaranteed. Just think of the food riots after the food price crisis in 2007/08. Fiscal and monetary policy mechanisms can help to stabilize food supply shocks.

Now that you watched this short introduction, go ahead and work through the lecture notes, use the complementary materials and do the self-assessment.

Also, continue working on last module's exercise. Thank you and enjoy.

6. Video: The Importance of Food Security to Conflict Prevention

Welcome to the last module of the course "understanding and managing food insecurity." This module is all about "The Importance of Food Security to Conflict Prevention."

As we have already learned, examples of hunger triggering demonstrations, uprisings, and conflict are plentiful. And remembering Engel's Law, we can see that it is usually the real income of the poor that is affected worst.

Stylizing democracies and autocracies from a theoretical perspective strongly suggests that an authoritarian regime is inferior to a democratic regime in meeting the redistributive demand of the poor. Assuming rising food prices, our model assumes that authoritarian regimes must match the redistribution that the poor would obtain in a democracy to prevent an uprising.

What can our model tell us about the importance of food security to conflict prevention?

Rising food prices are a threat to both democracies and autocracies, but they are more of a threat to autocracies than democracies.

Yet, they are a threat to political stability. At this point we may be keen enough and conclude that food insecurity may be a threat to stability and peace. Hence, the importance of understanding and managing food insecurity.

Now that you watched this short introduction, go ahead and work through the lecture notes and use the complementary materials. This module comes with an exercise only. You will finally get the chance to do some research on your own and apply what you have learned throughout this course.

Thank you very much for your interest in this course and staying until the end. I hope you enjoyed the course, understand food security a little bit better now and feel confident about managing food insecurity from an economic perspective.

Good-Bye!