

**Learning and Teaching Resource Package Related to  
the Geography of China  
Topic 3 Agriculture and Food Supply  
(Teaching Plan)**

Target students: Senior secondary geography
Theme: Land, Technology and Food security
<p>Prior knowledge:</p> <ul style="list-style-type: none"><li>• Understand the distribution of agricultural regions in our country.</li><li>• Understand the factors affecting the distribution of agricultural regions in our country.</li></ul>
<p>Objectives:</p> <p>a. Knowledge:</p> <ul style="list-style-type: none"><li>• Understand the importance of maintaining food security in our country.</li><li>• Understand the impact of technology on food production in our country.</li></ul> <p>b. Skills</p> <ul style="list-style-type: none"><li>• Map reading skills: by reading and interpreting the map showing the average quality of arable land at the provincial-level administrative regions and to describe the distribution of different quality arable land in our country.</li><li>• Collaboration skills: By discussing agricultural technologies applied and their impact to food production in our country to enhance students' communication and collaboration skills.</li></ul> <p>c. Values and attitude :</p> <ul style="list-style-type: none"><li>• Understand the importance of the food security issue.</li><li>• Appreciate the efforts the Chinese government made in addressing those issues.</li></ul>
<p>Video clips used:</p> <p>(1) Topic 3 Agriculture and Food Supply Video (Senior)</p> <p>(2) Short video of Yuan Longping, <a href="https://www.news.cn/tech/2023-05/30/c_1129655049.htm">https://www.news.cn/tech/2023-05/30/c_1129655049.htm</a></p>

### Topic 3 Agriculture and Food Supply: Land, Technology and Food Security (Senior secondary geography)

Learning and Teaching activity	Lesson flow	Time	Mode of interaction	Questions to be asked	Teaching materials
Pre-lesson task	Teacher asks students to work on the pre-lesson task. Students read Knowledge Box 3.1 about arable land, data, and figures. Then, students complete the given questions.	Before the lesson	Pre-lesson task		Worksheets, Knowledge Box 3.1, Figures 3.1&3.2
<b>Lesson 1: Arable land and food security in our country</b>					
Student's presentation of the pre-lesson task	Students work in groups to discuss the distribution of arable land with different quality and the potential problems faced by our country in agriculture and food supply. Students present their ideas and teacher highlights the risk of food insecurity.	10 min	Sharing/ Student's presentation	<ul style="list-style-type: none"> <li>What are the spatial distribution of high-quality, medium-quality, and low-quality arable land in our country?</li> <li>What are the main challenges faced by our country in agricultural and food supply?</li> </ul>	Worksheets, Figures 3.1&3.2
Development 1: Arable land and food security in our country	Teacher plays the video clip <b>Topic 3 Agriculture and Food Supply Video (Senior)</b> and asks students to read Table 3.1 which shows the amount of arable land and grain production in our country. Teacher leads students to read the data and describe the changes in arable land and grain production in the past 70 years.	15 min	Demonstration, Discussion, Sharing/ Student's presentation	<ul style="list-style-type: none"> <li>How has arable land and grain production in our country changed over the past 70 years?</li> </ul>	Worksheets, Knowledge Box 3.2, videos, Table 3.1
Arable land and food security in our country	Teacher asks students to read Knowledge Box 3.2 and students discuss with their classmates the reasons behind our country's implementation of	10 min	Discussion, Student's sharing	<ul style="list-style-type: none"> <li>What are the reasons behind our country's implementation of the “1.8 billion acres of arable land protection red line” policy?</li> </ul>	Worksheets, Knowledge Box 3.2

	the “1.8 billion acres of arable land protection red line” policy.				
Conclusion	Teacher concludes by describing the characteristics of our country’s food production and the importance of maintaining food security in our country.	5 min	Teacher’s presentation		
<b>Lesson 2: Agriculture technology in our country</b>					
Introduction	Teacher plays a short video introducing Prof. Yuan Longping and tells students that his contributions have greatly changed the lives of Chinese and people around the world.	5 min	Teacher’s presentation		Short video of Yuan Longping <a href="https://www.news.cn/tech/2023-05/30/c_1129655049.htm">https://www.news.cn/tech/2023-05/30/c_1129655049.htm</a> (00:35 – 1:14)
Development 2: Agriculture technology in our country	Teacher asks students to read Knowledge Boxes 3.3 & 3.4 and discuss with them how Yuan Longping’s development of hybrid rice has changed rice production in our country. Then teacher introduces hybrid rice and seawater rice and discuss with them how the invention of seawater rice change rice production.	20 min	Demonstration, Discussion, Student’s sharing	<ul style="list-style-type: none"> <li>What are the changes in rice production before and after applying hybrid rice technology?</li> <li>What are the changes in rice production before and after applying seawater rice technology?</li> </ul>	Worksheets, Knowledge Boxes 3.3 & 3.4, Figures 3.3-3.4
Other agricultural technology	Teacher guides students to use their iPads or tablets to search for extra information about other agricultural technologies in our country that have impacts on food production.	10 min	Discussion, Students’ sharing	<ul style="list-style-type: none"> <li>In addition to hybrid rice technology and soilless cultivation, list and explain at least one agriculture technology which has applied in food production in our country and their impacts on</li> </ul>	Worksheets, Knowledge Box 3.5, Figure 3.5

	Knowledge Box 3.5 shows another technology that our country has used.			food production.	
Conclusion	Recap the importance of food security in our country and appreciate the efforts of our country on the food security issue. Teacher uses the knowledge box of the “1.8 billion acres of arable land protection red line” policy in Development 1 to explain the importance of food security in our country.	5 min	Teacher’s presentation		

**Post-lesson task:**

Objectives:

- To understand the trends of soybean production and net imports in our country.
- To understand the importance of food security issues in our country if we depend heavily on the imports of soybeans