

Global Learning Unit

AUTHOR:	Institute for sustainable development
COUNTRY:	Slovenia
TITLE:	Global food market (local versus global)
STUDENTS' AGE:	15 – 18 years
SUBJECTS:	Natural Sciences, Geography, Biology, History, Ethics
DURATION:	4 x 45 min
TOPICS	Education to choice/critical consumption Food miles Food traditions Food environmental impact
SDGS	Responsible consumption and production

Knowledge and understanding on Global Learning:

Social justice and equity	Fairness between groups	Inequalities within and between societies	Causes of poverty	Understanding of global debate
	Causes and effects of inequality	Basic rights and responsibilities	Different views on eradication of inequalities	
Globalisation and interdependence	Trade between countries	Awareness of interdependency	Power relationship North/South world economic and political systems	Complexity of the global issues
	Fair trade	Awareness of our political system and others	Ethical consumerism/ consumption	
Sustainable development	Relationship between people and environment	Different views of economic and social developments - locally and globally	Global imperative of sustainable development	Understanding of key issues of sustainable development
	Awareness of finite resources	Understanding the concepts of possible and preferable futures	Lifestyles for a sustainable world	
Diversity	Contribution of different cultures, values and beliefs to our lives	Nature of prejudice and ways to combat it	Understanding of issues of diversity	Deeper understanding of different cultures and societies



Skills and competences on Global Learning

Critical thinking	Detecting bias, stereotypes and opinions	Media literacy	Critical analysis information	Handling contentious and complex issues
	Assessing different viewpoints	Making informed decision	Making ethical decisions	Dealing with complexity and dilemmas
Ability to argue effectively	Finding and selecting evidence	Learning to develop/change position through reasoned argument	Arguing rationally and persuasively from informed position	Political literacy
	Beginning to present a reasoned case	Participation in relevant societal and political processes	Connect local and global context & experiences	
Cooperation and conflict resolution	Accepting and acting on group decision	negotiation	compromising	mediation

Values and attitudes on Global Learning

Empathy and sense of common humanity	Sense of importance of individual worth	Open-mindedness		
Commitment to social justice and equity	Growing interest in world events	Concern for injustice and inequality	Commitment to social justice and equity	Commitment to the eradication of poverty
	Sense of justice	Willingness to take action against inequality	Integrity	Solidarity
Concern for the environment and to sustainable development	Sense of responsibility for the environment and the use of resources	Concern about the effect of our lifestyles on people and the environment	Concern for the future of the planet and future generations	Commitment to sustainable development
Belief that people can make a difference	Belief that things can be better and that individuals can make a difference	Willingness to take a stand on global issues	Willingness to work toward a more equitable future	Role as Global Citizen
Respect for people and things	Making choices and recognizing the consequences of choices	Growing ability to take care of things	Following a personal lifestyle for a sustainable world	
Ability to challenge injustice and inequalities	Recognizing and learning about alternatives to mainstream	Starting to challenge viewpoints which perpetuate inequalities	Selecting appropriate action to take against inequality	Campaigning for a more just and equitable world

European lifelong learning key competencies

1. communication in the mother tongue
2. communication in foreign languages
3. digital competence
4. learning to learn
5. social and civic competences



Learning objectives:

- To learn that self-sufficiency in food production varies over time and space (comparing different nationalities).
- To learn about today's food transport, think about which factors facilitated the transportation of food in the 20th century and whether the latter affects the environment and nutritional value of food in any way.
- To discover the origin of basic ingredients used in our daily food, and to become familiar with the concept of "food miles".
- To think about why locally produced food has generally a higher nutritional value than the food transported from distant places.

Methodologies:

Use of educational films and online applications, work in groups, presenting findings to the classmates.

Activities:

Lesson	Time	Activity description	Tips for teachers
1	10 min	Teacher begins a lesson with the question: What did you eat for breakfast today? (if students didn't have breakfast, they can share with others what they ate for dinner). Students are asked to list some of the dishes that they usually eat for breakfast or dinner. The teacher writes the listed dishes on the blackboard and then he/she asks them: What do you think, which of the dishes were produced in our country and which were imported from other countries? The teacher must emphasize, that despite the fact that the article says it is produced in our country, it is not necessary that the main ingredients (eg. cereals, sugar) were also produced in our country. Teacher tells students, that they will learn more about the six crops, that our country imports in large quantities. At the same time teacher encourages them to list some of those crops (rice, tea, cocoa, coffee, bananas, oranges). They can also find examples on the blackboard.	
	35 min	Work in groups. Students are divided into 6 groups and each group gets a sheet describing a certain product: rice, tea, cocoa, coffee, bananas, oranges (Annex 6a). Each group has 5-7 minutes to read the text and choose someone who will present the product and the main points of interest in connection with it. After presentation the teacher asks the following questions:	



		<p>Who are the biggest producers of certain products? Each group should write on a sticky note the country of production and paste the appropriate country on the map:</p> <ul style="list-style-type: none"> • Tea (China, India, Kenya) • Cocoa (Ivory Coast, Ghana, Indonesia) • Sugar (Brazil India, China) • Coffee (Brazil, Vietnam, Colombia). <p>Who is the biggest consumer of these foods?</p> <ul style="list-style-type: none"> • Swedes drink the biggest amounts of coffe, • Brits drink a lot of tea, • Almost half of all global chocolate is eaten by Europeans; the average Brit, German or Swiss eats around eleven pounds of chocolate a year. <p>Groups should again apply sticky notes to mark on the map which country consumes most of these foods. If this information is not in Annex 6, they should find information online.</p> <p>Teacher motivates the students to think about which food has more nutrients, locally produced or imported foods.</p> <p>Teachers ask the question:</p> <ul style="list-style-type: none"> • What can we do to vegetables and fruits that we grow in the local environment, lasts longer and can be used even in the winter? (froze, pasteurize, dry) <p>The students get acquainted with some traditional methods of preserving food (some are very interesting), which are described in the article "Traditional and Indigenous Ways of Preserving Food". In Teaching tools you'll also find a link where the modern methods of preservation are described, depending on the time remaining to briefly introduce some methods - especially those for whom you think that the students do not know.</p> <ul style="list-style-type: none"> • Why are the methods of preserving food useful? (by preserving we reduce carbon footprint, because we do not buy food imported from elsewhere, we also reduce the amount of food waste). 	
2	25 min	<p>Teacher asks students following questions: Do you think that you would be able to eat bananas in the 15th century in Europe? What about chocolate or corn flakes? Students are encouraged to contemplate on the questions.</p> <p>Students together with teacher via an interactive map of the world:</p> <ul style="list-style-type: none"> • realize that a lot of the food we eat every day comes from tropical and sub-tropical zone (corn, potatoes, cocoa, sunflower, tomato, etc.). <p>Link to map: http://map.seedmap.org/category/food-</p>	



		<p>diversity/agricultural-biodiversity/crop-diversity/.</p> <ul style="list-style-type: none"> investigate in which parts of the world the major part of certain crops are produced (eg. rice). <p>Students list different means of transportation (planes, ships, trains, trucks...) and contemplate about what mean of transport is most prevalent for transit of food (trucks).</p> <p>Teacher can also mention the ship transport and in relation to that play a short movie »Global trafic routes«. It's worth mentioning that seven of ten most largest ports are in China.</p> <p>Students also familiarize themselves with the concept of "food miles".</p> <p>Link to the application to calculate travelled distance: http://www.foodmiles.com/</p> <p>With the help of this application they calculate the distance different food needs to travel to reach our tables (mango, bananas etc.).</p>	
	20 min	<p>Students continue work in groups. Each group gets two sticky notes. They contemplate on pluses and minuses of imported food and locally produced food. On one sticky note they should write pluses and minuses of imported food and on the other one, pluses and minuses of locally produced food.</p> <p>When they finish writing, they should post the sticky notes on the board and go through the conclusions.</p> <p>Groups of students reflect on the negative impact of transport on environment, climate change and reduction of nutritional value of food. Teacher leads the discussion.</p>	
3	20 min	<p>Teacher starts with a short "Fairtrade" quiz (in Teaching tools), where students observe what some foreign foods look like before they reach our stores (cashew nuts, tea, cocoa, sugar, coffee and vanilla).</p> <p>Students are asked which three countries are the biggest producers (for each of these foods) and we repeat what we found out at the beginning of the lesson, but also add new sicky notes for:</p> <ul style="list-style-type: none"> cashew nut (Vietnam, Nigeria, India) vanilla (Madagascar, Indonesia, Papua New Guinea). <p>We look at the situation on our map and discover that a lot of food that is produced in the global South, is exported to the global North. Teacher continues conversation with the following questions:</p> <ul style="list-style-type: none"> What do you think, where are the profits from these plantations accumulated. Who owns the plantations? (Usually corporations from global North) 	



		<ul style="list-style-type: none"> • Do not know the conditions under which people work on these plantations? (Emphasize child labor, unpaid labor, work in slavery conditions) • What kind of damage this represents for the environment? (Eg .: intentionally burning of rain forests for production of palm oil) How did this happen? The teacher draws parallels between colonization in the past, and globalization in the present and encourages students to explain these two concepts. 	
	25 min	<p>We present the problem of food that comes to us from the global south, on the example of cocoa.</p> <p>The students look at what are the stakes in the value chain of chocolate production (Annex 6b) and calculated on the number of students in the class corresponding to each share. Students are distributed into groups according to their shares. Proceed with questions about what they think, which of the participants represented their group (retailers, processors, producers of cocoa, carriers and merchants, taxes and marketing as well as manufacturers of chocolate). A smaller proportion (2.1%) is not likely to be represented by the students, and can be used chair like.</p> <p>Followed by a discussion led by the teacher, in which students discuss why they think the share is so low cocoa producer and traders so great. Professor helps you with the material "Bitter-sweet chocolate." Alert on deforestation for plantations, pesticide use and child labor. At the same time play a short movie "Chocolate Child Slaves".</p> <p>Below is a brief discussion, where students suggest how to prevent such practices. Introduce them to the Fair Trade concept and play the short film "What is Fairtrade?".</p>	
4	45 min	Method of evaluation is described below in section "Evaluation tools suggested".	

Materials and equipment:

- (Lesson 1, 2, 3) Computer with internet access.
- (Lesson 1) World map.
- (Lesson 2) Sticky notes.
- (Lesson 2, 4) Notebook and pen.

Teaching tools / Sources:

- Gliha, Anja, 2013. Slovenska tradicionalna prehrana med mladostniki. Graduation thesis, English abstract on page 4:
http://www.mss.si/datoteke/dokumenti/diplomske/2013/Gliha_Alja-Slovenska.pdf
- Video »National Geographic investigates the future of food«:
<https://www.youtube.com/watch?v=HPBReI5Ymhl>



- Video »Our global kitchen now open«:
<https://www.youtube.com/watch?v=bPlmnEJ9CHc>
- »Local®ional food systems«: <http://www.sustainabletable.org/254/local-regional-food-systems>
- Interactive application about popularity of different foods around the globe:
<https://photoworld.com/instagram-food-capitals/>
- Food security. The Sphere project: <http://www.spherehandbook.org/en/4-food-security/>
- Online map of Silk Road: <http://en.unesco.org/silkroad/network-silk-road-cities-map-app/en>
- Article »Environmental cost of Shipping Groceries Around the World«:
http://www.nytimes.com/2008/04/26/business/worldbusiness/26food.html?_r=0&oref=slogin&pagewanted=all
- Online record »The impact of trade opening on climate change«:
https://www.wto.org/english/tratop_e/envir_e/climate_impact_e.htm
- Origin map of our everyday foods: <http://map.seedmap.org/category/food-diversity/agricultural-biodiversity/crop-diversity/>
- Interactive map for calculation of distance food travels: <http://www.foodmiles.com/>
- More about »food miles« concept:
<http://www.sbs.com.au/shows/foodinvestigators/listings/detail/i/1/article/2941/Food-Miles>
- Publication »How far your food travels has serious consequences for your health and the climate«: <https://food-hub.org/files/resources/Food%20Miles.pdf>
- »Buy locally«: http://www.ecofriendlyfood.org.au/buy_locally
- Fairtrade quiz:
<http://schools.fairtrade.org.uk/resource/fairtrade-picture-quiz/>
- Short movie »Chocolate Child Slaves«:
<https://www.youtube.com/watch?v=eHDxy04QPqM>
- Study »Grenko-sladka čokolada«:
<http://focus.si/wp-content/uploads/2016/03/Povzetek-poro%C4%8Dila-Grenko-sladka-cokolada-oblikovano-final-web-1.pdf>
- Web page of Fairtrade organisation:
<https://www.fairtrade.net/about-fairtrade/what-is-fairtrade.html>
- Short movie »What is fairtrade?«:
<https://www.youtube.com/watch?v=PLKTGWH398Q>
- Article »40 reasons why you should choose Fairtrade products«:
<http://www.mirror.co.uk/news/uk-news/40-reasons-why-you-should-choose-454881>



Questions to discuss:

- (Lesson 2) Why were pepper beans in the past used as commodity money?
- (Lesson 2) How does the method of preservation, storing and transportation affect the quality of our food?
- (Lesson 2) Does long distance transportation of food affect its nutritional value? Explain.
- (Lesson 3) How much of my food is produced locally and how much of it travelled a great distance?
- (Lesson 3) Explain “food miles” on the case of rice.
- (Lesson 3) List and explain advantages of locally produced food.
- (Lesson 3) Have you ever seen a Fair trade sign on any of the products?
- (Lesson 3) Do you know that there is a Fair trade store in our country, which only offers products produced according to the principles of Fair trade?
- (Lesson 3) How much more would you be willing to pay for a product that you know, that was produced according to the principles of Fair trade?

Annexes: none.

Evaluation tools suggested:

We can test the obtained knowledge in several ways. We recommend that no matter what method of evaluation you choose you ask the students how do they like this type of class work.

- Students work in groups; **they prepare summary of their findings** about appropriateness of consumption of their favourite food from aspect of transport, good preservation methods, effect on environment and health.
- Students fill in the questionnaire bellow.

Questionnaire for students:

1. Which basic ingredients prevail in your everyday menu? Do you know what part of the world they originate from?
2. What does the concept “food miles” mean?
3. Estimate what distance did the food travel to get on the plate of your grandparents and what distance does your everyday food travel?

Food of my grandparents travelled: _____

My food travelled: _____

4. How does transport influence the nutritional value of food?
5. Do you produce food at home and if you do, how?
6. What food (produce) do you find more tasteful – home grown or bought in supermarket?
7. What will you take into account when purchasing food and what menus will you prepare in your household?



8. How did you like this way of implementing lessons?

