Yr 9 Geography Worksheet 1

FAST FACTS ABOUT GLOBAL FOOD **PRODUCTION AND FOOD SECURITY**

Read the statements in Figure 1: food facts. All statements are factually correct, but not all are relevant to answering the guestion:

CAN THE WORLD PRODUCE ENOUGH FOOD TO FEED EVERYONE?

Select those that are relevant and put them in a logical order to write a paragraph to answer the question. Alternatively, print and cut the statements and paste them in order onto a new blank sheet of paper.

Figure 1: Food Facts

The demand for food is expected to increase by 14 per cent per decade.

of the hungry people are farmers and their families involved in small-scale farming, for whom agriculture is a livelihood, providing food for their own needs and generating income.

World cereal production in 2014 was at nearly 2480 million tonnes.

A failed harvest due to weather conditions (drought, flood etc.), or the loss of land caused by largescale land investments, can

have devastating effects on the livelihoods of farmers.

Every year, consumers in rich countries waste almost as much food (222 million tonnes) as the entire net food production of sub-Saharan Africa (230 million tonnes).

More than 1.4 billion adults were overweight in 2008, and more than half a billion were obese.

500 million smallscale farms around the world are helping to put food on the plates of two billion people (or one in three people on Earth).

Nearly 870 million people of the 7.1 billion people in the world, or one in eight, were suffering from chronic undernourishment in 2010-2012.

Rice is the major source of calories for half the world's population. It is the single largest source of employment and income for rural people.

all the hungry people, 842 million, live in developing countries, representing 15 per cent of the population of developing countries. There are 16 million people undernourished in developed countries.

Globally, 842 million people are currently undernourished.

> When you spend up to 80 per cent of your income on food (as many poor families are forced to do) even small increases or food price spikes can have a particularly devastating effect on what the family can afford.

> > If women farmers had the same access to resources as men, the number of hungry in the world could be reduced by up to 150 million.



- approximately 1.3 billion tonnes — gets lost or wasted.

Roughly

one third of

the food produced

in the world for human

consumption every year

WWW.FOOD4THOUGHT.ORG.AU



WHICH BIOMES ARE ABLE TO PRODUCE FOOD?

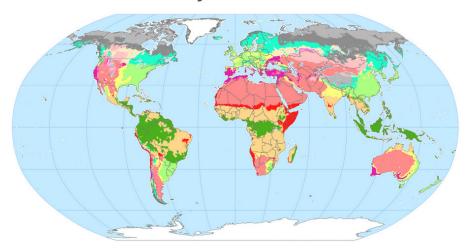
Biomes exist on land and in oceans and differ according to their location and geographic characteristics. Topography (the shape of the land), climate and soils mean similar land biomes can have different species of plants and animals. Food can be produced from different biomes when people change the environment for example by ploughing the land, building greenhouses to grow plants, draining swamps and wetlands, building terraces on slopes etc.

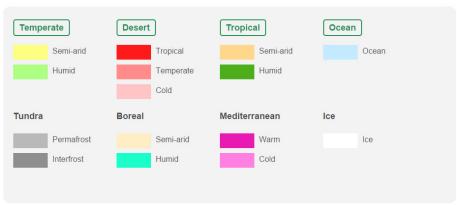


THIS MAP SHOWS THE WORLD'S MAJOR LAND BIOMES.
LOOK AT THE DISTRIBUTION OF BIOMES ACROSS THE WORLD.

Figure 1: Major Biomes

Major Biomes





Source: www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/maps/?cid=nrcs142p2_054002

- a. Describe where the tundra areas are located?
- b. What proportion of Africa is taken up by deserts? Estimate a percentage.
- c. Large areas of tropical rainforest are found on which continents?
- d. Name the regions of the world where temperate and Mediterranean biomes can be found.

A larger, interactive version of this map can be found online at: https://www.oxfam.org. au/biomes-world-map/



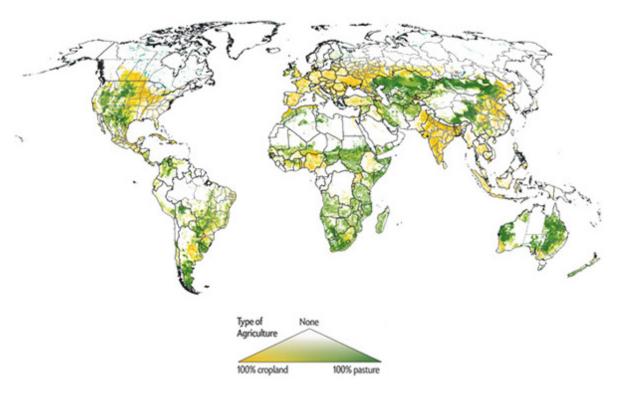


LOOK AT THE IMAGE BELOW AND STUDY THE KEY CAREFULLY.

Notice that the darker the colour the closer to one hundred per cent coverage of the area is for a form of agriculture, either cropland (yellow) or pasture (green).

Figure 2: Balance of Land Used for Agriculture

Balance of Land Used for Agriculture



Source: www.scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican.com/article/foley-global-food-production-reduce-environmental-damage-maps/scientificamerican-global-glo

Compare the map of land used for agriculture with the map of biomes - figure 1.

- a. Which biomes are mostly used for cropland?
- b. Which biomes are mostly used for pasture, i.e. animal grazing?
- c. Which biomes produce the least food?
- d. Is there an interconnection between biomes and land used for agriculture? Give examples to illustrate your answer.



GOOD ENOUGH TO EAT

When people can grow food in a biome, they have access to nutritious, safe and sufficient food for a fit and healthy life, then the region can be said to be food secure. Visit this site: http://www.oxfam.org.uk/what-we-do/good-enough-to-eat It looks at global food levels in 125 countries across the world, to determine whether a country has food security.

- a. Choose six countries from the 'Highlight a Country' drop-down menu and locate within the Food Index.
- b. Create your own table to show the level of food security according to whether the country has enough to eat, can afford to eat, has quality food and whether the eating is healthy.
- c. Do all people experience food security? Explain your answer using your table and examples from this map: https://www.oxfam.org/sites/www.oxfam.org/files/oxfam-best-worst-food-map.png#sthash.KLlUt8CV.dpuf



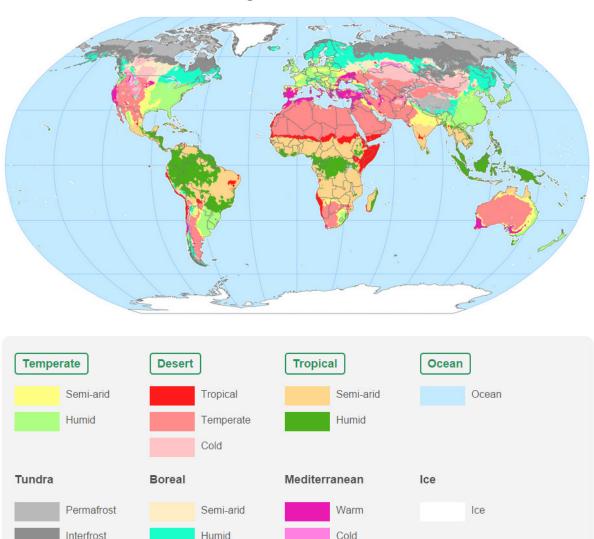


PHOTO ESSAY TIME!

A photo essay is a collection of images that are placed in an order that tells the progression of events, emotions, and concepts. Photojournalists use photo essays as a story-telling technique using visual images. Check out the below map online at https://www.oxfam.org.au/biomes-world-map/. For four biomes you will find a photo essay showing the biome and the changes people have made to that biome to grow food. Look at each of the photo essays and write an answer to the following questions:

- a. How does climate affect food production?
- b. How does topography affect food production?
- c. How does soil affect food production?
- d. Make a list of the ways in which biomes can be changed as shown by these examples.
- e. How are biomes changed for food production?

Major Biomes



Source: www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/maps/?cid=nrcs142p2_054002





EXTENSION ACTIVITIES

Work in groups of three. Each student should choose one of the global biomes not illustrated in figure 1 – tundra, boreal, Mediterranean – to create their own photo essay. Research information about the biome (its climate, soils and topography) and the food production that has altered the environment. Find three photographs on the Internet to create your own photo essay to show how the environment has been changed to grow food. Write one or two sentences for each image to describe the biome, the food grown and the change that has occurred. Use pictures from Creative Commons sources in all cases. Present your photo essay to a small group or the class. You may like to present your photo essay using Wowslider.

OR

Using figure 1, choose one Australian biome used for food production. Research the biome and the food production in that biome and create your own photo essay of not more than eight images to show how the environment has been changed to grow food. Write one or two sentences for each image to describe the biome, the food grown and the change that has occurred. Use pictures from Creative Commons sources in all cases. Present your photo essay to a small group or the class. You may like to present your photo essay using Wowslider.



MAJOR CHALLENGES TO FOOD PRODUCTION – CLIMATE CHANGE

There are numerous factors that challenge food production. The climate, topography and soil variations within biomes may be challenging for growing food, but the way people change the environment can also have an impact on food production – this worksheet will focus on the impact of climate change on food production and food security.

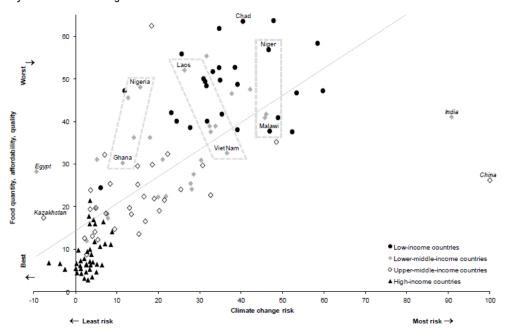
Changing and unpredictable weather conditions are altering the seasons and bringing change to biomes. For example, in Sudan droughts and extreme floods are becoming more common and farmers have to cope with crop losses, and adapt to these changes where they can. In some countries, because the weather has become so volatile and extreme, people have to gain new understandings of the weather, adapt their farming techniques, and learn disaster management strategies to reduce the risk of people and communities going hungry.



WHO DOES CLIMATE CHANGE HIT FIRST?

A scatter graph is a diagram that compares two sets of data. Study the below scatter graph, which shows countries at risk of climate change and the impact that climate change has on food security.

Figure 1: Food insecurity and climate change risks



Source: http://issuu.com/0xfam/docs/mb-hot-hungry-food-climate-change-2/1?e=1574349/7301209

- a. How is climate change expected to impact on food availability for the people in most developed countries?
- b. Which countries are most vulnerable to climate change affecting food security?
- c. Three cases of countries located in close global proximity to each other are highlighted on this graph. Read the text in the document at http://issuu.com/0xfam/docs/mb-hot-hungry-food-climate-change-2/1?e=1574349/7301209, page 5 Bucking the trend. In a paragraph summarise the differences between each pair of countries.
- d. Where do you think developed countries like Australia would be located on this graph? Justify your decision.





STUDY THE BELOW MIND THE GAP GRAPHIC WHICH SUMMARISES THE IMPLICATIONS OF CLIMATE CHANGE ON FOOD PRODUCTION.

Figure 2: Mind the Gap



a. Ten key factors that impact on what people eat are outlined in the graphic.

Complete a diamond ranking activity to show the most significant nine factors, using this template. The diamond ranking helps you to prioritise your ideas.

You will need to discard one of the ten factors — you can do this at the start or as you develop your ranking.

In the highest point of the diamond, place the idea that you think is the factor that most impacts on what people eat.

Next choose the factor that should be at the bottom of the ranking — the factor that has the least impact on food availability. On the second line, place the next two most important factors.

Continue in this manner until the diamond is complete.

- b. Compare your diamond ranking with another person in your class. Revise your diamond ranking so that it reflects both your ideas — you may have to discuss and compromise to do this.
- c. Now compare your revised diamond ranking with that of another pair of students. Are there any significant differences? Can you suggest why your diamond rankings might be different?
- d. The title of this graphic "Mind the gap" suggests that food inequality exists. For each factor suggest at least one way of overcoming this food inequality.

Present your ideas as an infographic, like the one above, using symbols and a minimum of words.

Source: http://oxfamblogs.org/fp2p/wp-content/uploads/2014/03/oxfam-10-gaps-climate-preparedness-16001.jpg





FACES OF CLIMATE CHANGE

Go to YouTube http://bit.ly/1IPhNxt and in the groups designated by your teacher watch the short film clip, or read the text provided, about one of these "faces" from a range of places – Ethiopia, Australia, Tuvalu in the Pacific, Bangladesh, Vietnam and Carteret Islands, Papua New Guinea.

Each group will need to report to the class in response to the following questions. Your teacher will discuss with you the final format of your report.

- a. Find where your country is located on a world map.
- b. What are the climate change issues for the people in this location?
- c. How are these people adapting to and managing these changes?
- d. Each film clip/report finishes with a challenging question. Take the challenge as a group and come up with some actions that can improve food security.
- e. When all the groups have presented their report write a summary response to the statement: "Climate change is impacting on farming practices across the world."



EXTENSION ACTIVITIES

Read the following about the impact of climate change on agriculture in Australia.

IThe IPCC's final report on Impacts, Adaptation and Vulnerability, released 31 March 2014 identifies food security in both poor countries and wealthier ones as being at risk, with the findings showing Australian agriculture as vulnerable to climate change.

The report states that declining freshwater resources in many parts of Australia will particularly impact upon irrigation-dependent crops like rice and sugarcane. The effect of a three degree centigrade increase in temperatures would be a four per cent reduction in the value of the beef, sheep and wool sector. A temperature rise of as little as one degree centigrade by 2030 would see a projected decline in dairy output in all regions of Australia except Tasmania.

Oxfam Australia Climate Change specialist Dr Simon Bradshaw said climate change was already making it harder for millions around the world to feed their families and today's report shows this is likely to get harder, both in Australia and overseas.

Source: https://www.oxfam.org.au/media/2014/03/ipcc-report-heightens-warning-of-climate-change-impact-on-food-security/source-interpretation-food-security-interpretation-food-security-int

Using the Bureau of Meteorology's State of the Climate Report 2014, complete the following exercise:

- a. Choose a region near where you live and using the summary page, research any evidence of climate change occurring in your region.
- b. Use the maps of temperature change, rainfall ranges, heatwaves and fire weather, and scroll down to the Australian map of climate scenarios.
- c. Use this information to suggest how these changes might impact on the sustainability of local farms.
- d. Find an image of a local farmer/group of farmers and using speech bubbles write their comments on climate change and its effect on food production.



MAJOR CHALLENGES TO FOOD PRODUCTION — COMPETING FOR LAND USE

Since the food price increases that occurred in 2008 during the Global Financial Crisis (GFC), large food-producing companies have expanded their farming practises across the world in an attempt to make greater profit from growing food.

In some cases, the way this has been done has resulted in small-scale farmers being forcibly removed from their land. This can result in communities finding it difficult to feed their people and can also impact on the ability to educate children and have access to health care.

WATCH THESE VIDEOS TO FIND OUT MORE:

- http://youtu.be/JsTi8LrTLFg
- http://youtu.be/5GL5400QthE



READ THIS ARTICLE AND ANSWER THE FOLLOWING QUESTIONS.

It's not necessarily a problem when wealthy companies invest in agricultural land in poor countries for commercial use. But when families are kicked off the land or less food is grown as a result, that's a very big problem indeed.

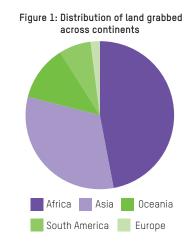
And since the food price spikes of 2008, that's been happening more and more.

Demand for land has soared as investors look for places to grow food for export, or to grow biofuels, or simply to gain in value.

But in many cases, land sold as 'unused' or 'undeveloped' is actually being used by poor families to grow food. These families are often forcibly kicked off the land. Promises of compensation are broken. And then, to add insult to injury, the land is left idle, despite promises to the contrary.

Source: https://www.oxfam.org.au/grow/about-grow/grow-in-depth/

- a. In your own words, write an explanation of what you think the term "land grab" refers to.
- b. Research three types of plants grown for the production of biofuels.
- c. Study this pie graph of land areas that have been "grabbed".
- On which continents do 75 per cent of the land grabs occur?
- · Suggest why fewer land grabs occur in Europe.
- North America is not shown on this graph indicating that no land is grabbed on that continent. What does this say about land ownership in America?
 Do you think American companies are involved in land grabs in other countries?





Source: http://www.pnas.org/content/110/3/892.full.pdf+html?sid=ab6e42ea-7468-487f-a965-12c5d662e94a





STUDY THE FOLLOWING MAP OF SOUTH-EAST ASIA TO GET A SENSE OF THE SCALE OF THE ISSUE OF LAND GRABS.



- a. What is the total number of land grabs that had occurred in south-east Asia by the 10 April, 2014?
- b. Rank the countries from highest to lowest number of land grabs.
- c. Read the red circles, and make a list of the uses being made of the land. What do you think will be the impact of changing this land on the local communities?
- d. Which country has the greatest issue with land grabs? Give reasons for your answer.
- e. "Land grab" is an emotive term why do you think it is used? What other terms could be used to describe what is happening?





LAND GRABS AROUND THE GLOBE

By January 2013, fifteen African countries had a total of 34,686,027 hectares grabbed by overseas countries and others within Africa. Agricultural products dominate the use made of the land. These countries are shown in the following table.

Table 1: Distribution of land grabbed for agricultural production in Africa

African country where land deals occurred	Area grabbed (hectares)	Countries grabbing land	Uses being made of the grabbed land
Democratic Republic of the Congo	8,250,310	China 3.1 million hectares or 37.7 per cent.	Cattle, biofuel farming.
Sudan	3,281,429	United Arab Emirates (UAE) 1.5 million hectares.	Wheat and other grains.
Tanzania	1,917,749	41 separate deals so deals were smaller.	Sugar cane, palm oil.
Mozambique	1,496,935	South Africa 1 million hectares.	Rice, almonds, sugar cane.
South Sudan	1,408,500	Unites States of America (USA) 1 million hectares in two deals.	600,000 for rice; 400,000 for cereals, flowers, fruit, vegetables, oil seeds.
Ethiopia	1,001,382	India dominates; 325,000 hectares in one deal.	Maize, palm oil, rice, sugar cane, tomatoes.
Uganda	858,870	Egypt 800,000 hectares or 93.1 per cent of deals.	Maize, wheat
Morocco	700,000	UAE took it all.	Citrus, olives.
Republic of Congo	664,000	Malaysia 470,000 hectares.	Oil palm.
Liberia	649,800	Six countries, including two African countries (Côte d'Ivoire and Libya).	95.1 per cent for oil palm and sugar cane.
Sierra Leone	423,500	United Kingdom 125,000 hectares; Portugal 126,000 hectares.	Oil palm, rice.
Gabon	407,200	Singapore 300,000 hectares; Belgium 107,200 hectares.	Oil palm.
Madagascar	369,100	United Kingdom 200,000 hectares; India 159,100 hectares; China 10,000 hectares.	UK beef; India maize and oil palm; China sugar cane.
Nigeria	362,292	United Kingdom 300,000 hectares; USA/Vietnam 44,000 hectares.	Rice.
Cameroon	294,960	USA, China.	Palm oil, rice.
Total	34,686,027		

Source: http://allafrica.com/view/photoessay/post/post/id/201306240002.html

- a. Use the data in the table to create a choropleth map of the land grabs taking place in African countries.
 Do this on a blank outline map of the world, found here: https://www.oxfam.org.au/wp-content/uploads/2015/01/Oxfam-Schools-Program_Cloropleth-Map.pdf
- b. Rule lines from each African country to make a connection to the country that is "grabbing" land.
- c. For each of the countries that are "grabbing" the land, draw symbols to show the agricultural products that are moving from one country to another.
- d. Describe the distribution of the countries in Africa where land has been grabbed. The use of latitude may help.
- e. List the main products being grown using these large-scale commercial agricultural practices.
- f. The countries undertaking the land grabs are scattered across the world. Refer to the atlas or research on the Internet to describe the economic level of development of these countries. How do they compare with the economic development of the countries whose land is being "grabbed"?





Behind the Brands looks at some of the major food brands that you may recognise and buy and have in your pantry. It ranks each company according to a scale out of ten on a number of criteria. Begin by focussing on the "Land" button and then explore these international companies further.

- a. Name the major countries that are aware of the implications of land grabs.
- b. Name the companies that have a policy in place to address this issue.
- c. How effective is this type of action in influencing the foods that you eat or buy now and in the future. Explain your answer.



LAND GRABS AND AUSTRALIA

Is Australia involved in land grabs? Oxfam research shows that the answer is "yes".

READ THIS ARTICLE:

www.oxfam.org.au/media/2014/04/australian-banks-backing-companies-accused-of-land-grabs/

Using the information in this article, and your knowledge about land grabs, draw a flow diagram to show how Australia is assisting global food security while also adding to food insecurity.







Undertake some further research into a country where land grabs are occurring. Here are some sites to get you started.

Brazil — sugar and coffee plantations

- Drought and coffee crop decline in Brazil: www.theguardian.com/world/2014/feb/25/brazil-drought-threatens-coffee-crops
- Land grabs: www.oxfam.org/en/grow/landgrabs includes description and case studies for Brazil (with a photo essay), and the Philippines (with link to a video)
- www.oxfam.org/en/grow/pressroom/pressrelease/2013-10-02/big-food-drink-companies-stop-conflicts-land-sugar-production

Cambodia — sugar plantations

- http://policy-practice.oxfam.org.uk/publications/sugar-rush-land-rights-and-the-supply-chains-of-the-biggest-foodand-beverage-c-302505 see Box on page 5
- www.irinnews.org/report/98861/global-sugar-demand-leaves-cambodian-farmers-landless

Indonesia — palm oil plantations

• www.oxfam.ca/blogs/grow/palm-oil-real-problems

Africa

http://policy-practice.oxfam.org.uk/publications/promises-power-and-poverty-corporate-land-deals-and-rural-women-in-africa-279252

YOUR RESEARCH SHOULD INCLUDE THE FOLLOWING INFORMATION:

- 1. A location map.
- 2. An explanation of the causes of the land grab in the country of your study.
- 3. Where possible, some images to show the land grown for food before and after the land grab.
- 4. Some possible solutions to the issues.

PRESENT YOUR FINDINGS USING ONE OF THE FOLLOWING DIGITAL FORMATS:

- Prezi presentation: prezi.com
- · PowerPoint or Keynote
- · Kizoa slideshow maker: www.kizoa.com
- Emaze: www.emaze.com
- Fotobabble: www.fotobabble.com





HOW CAN FOOD SECURITY BE ACHIEVED IN THE FUTURE?

Here are five ways that food production and food security can be improved so that perhaps, by 2050, the global demand for 70 per cent more food will in part be met. In so doing, local communities, in particular small-scale farmers and those farming in challenging environmental situations, will have a better life.



FAIR TRADE

- 1. Make a list of the Fair Trade products that you can purchase in your supermarket and local shops.
- 2. Go to www.oxfam.org.au/explore/trade/fairtrade-coffee-campaign/frequently-asked-questions/ Read the frequently asked questions about Fair Trade and produce a poster, video or digital presentation on the purpose of fair trade and the products that it promotes. What is the main aim of Fair Trade? How is this achieved?
- 3. These two case studies of small-scale farmers growing coffee in Papua New Guinea and cocoa in Ghana use the basis of Fair Trade to improve the livelihoods of the people.
 - www.oxfam.org.au/explore/trade/fairtrade-coffee-campaign/
 - www.oxfam.org.au/2014/04/the-power-of-fair-trade/

List all the ways the local community benefited once Fair Trade was implemented.



LOCAL FOOD SECURITY RESERVES

In the western Africa country of Burkina Faso food security reserves were set up to provide food security when the unpredictable weather conditions reduced food production. Check out this case study:

• www.oxfam.org/sites/www.oxfam.org/files/cs-promoting-local-food-security-reserves-burkina-faso-110713-en.pdf

Answer the following questions:

- a. What is the purpose of a food security reserves for the supply of food and for community livelihoods?
- b. Outline how a neighbourhood food security reserve operates for the benefit of small-scale farmers. Include in your answer an explanation of when food is added and when food is distributed.
- c. Make a list from the text of what you perceive to be the five most difficult challenges to overcome.







AGROECOLOGY

Agroecology is the use of ecological processes to design and manage agricultural production and create sustainable farming systems.

Ongoing research and new technologies means that food products can be developed that are best suited to the environment. Making the most of the land and its climate ought to provide more food either for local use or for trade and the return of money to the communities.

System of Rice Intensification (SRI) - an example of agro-ecology in action

SRI is an agro-ecological approach that originally focused on better husbandry of hand-planted rice crops and has since been adapted for other staples. Key components of SRI include starting with fewer, younger, widely spaced seedlings, grown in mostly aerobic soils instead of constantly flooded fields. The resulting larger, healthier root systems give higher yields with 25–50 per cent less water and with fewer inputs such as seeds and less methane gas emissions from paddies.

Oxfam started working on SRI in 2000 and has since expanded its programmes to 12 countries in Asia, West Africa, and Latin America and the Caribbean. As of 2013, over 1.5 million smallholder farmers in groups supported by Oxfam's partners in Cambodia, Sri Lanka, and Viet Nam had benefited from SRI, using both local and improved varieties of rice.

Widespread adoption of SRI led to increases in yields of 68 percent in Cambodia and 30–50 percent in Sri Lanka in the period 2010–13. In Cambodia, incomes increased by \$339 per hectare and in Viet Nam by \$200–300 per hectare. In addition, with each season of SRI application the soil ecosystem improves, and along with it potential future crop performance.

The same husbandry principles are applied to new crop rotations, such as potatoes in Viet Nam. Rice straw and stubble are used as a mulch bed which, as it gradually decomposes, improves the soil ecosystem for the next rice crop. Farmers have saved between 28 per cent and 47 per cent in terms of labour, while gaining improvements of between eight per cent and 25 per cent in yields, earning additional income of \$480–950 per hectare. They are also increasingly adopting complementary technologies such as hand-held rotary weeders, which not only improve efficiency but also address concerns over women's labour.

Successful scaling up of these innovations requires an enabling policy environment, particularly in terms of building human capital and empowering communities. For example, in its national agriculture strategy the Government of Viet Nam has endorsed SRI as a practice that can increase climate resilience. During the period 2010–13, public funds allocated to extend SRI were nearly five times larger than Oxfam's investment in the six provinces where its programmes were active.

In Ethiopia, the Agriculture Transformation Agency (ATA) is promoting the system of crop intensification for teff. Evidence shows that farmers applying SRI principles have seen yields triple, while also making savings on seed of up to 90 percent.

Source: http://www.oxfam.org/sites/www.oxfam.org/files/ib-building-new-agricultural-future-agroecology-280414-en.pdf

- a. Use the statistics in this article to create a table to show the benefits of SRI in Cambodia, Vietnam, Sri Lanka and Ethiopia.
- b. Producing more rice with less water, using less fertiliser increases yields and incomes and brought change to communities in Mali. Hear or read the interview with Moussa Ag Demba at www.one.org/us/2010/10/22/interview-malianrice-farmer-uses-sri-to-get-more-from-less/

c. In small groups, pretend you are interviewing a Vietnamese farmer who is explaining the changes to food production in his region. One person should be the Vietnamese farmer, another the interviewer, and one could be responsible for recording the ideas. Everyone in the group should contribute to the content design

— use the text above as a basis. Record or present your interview so that the class can comment.



Photo: Timothy Herbert/OxfamAUS





INITIATIVES BY AND FOR SMALL-SCALE FARMERS

Go to the following site www.oxfam.org/en/grow/adapting-climate-impact-food that includes a series of photo essays about eight communities that are adapting so that food continues to be available in a changing climate. Open each story to experience how life is changing for each community. Small-scale farmers, and non-government agencies that support them, are developing new techniques to ensure food security.

- a. Select one that you feel is a compelling story of a small-scale farmer changing his/her farming techniques. Outline the difficulties that are being overcome by the farming initiative and the impact that this will have on families and communities.
- b. Chandrani's story from Sri Lanka in the following two articles shows the change that small-scale farmers can experience with improved food security:

www.oxfam.org.au/2012/04/stopping-hunger-in-sri-lanka-chandranis-story-part-1/ www.oxfam.org.au/2012/04/stopping-hunger-in-sri-lanka-chandranis-story-part-2/

Is there a lesson in this story for small-scale farmers elsewhere in the world? Explain your answer.



LESS FOOD WASTAGE

About one third of the food produced to eat in Australia ends up as waste. Australians throw away about \$8 million in food waste each year. In the developing world, poor food storage post-harvest results in the loss of up to a quarter of the food produced.

Revisit this site: http://awesome.good.is/transparency/web/1204/what-s-wrong-with-our-food-system/flash.html and consider the information about waste.

- 1. What can be done about food waste? These articles provide a range of ideas.
- www.oxfam.org.au/grow/method/save-food/
- www.oxfam.org.au/2013/07/grow-challenge-5-watch-your-waste/
- www.oxfam.org/en/grow/pressroom/pressrelease/2012-07-18/mothers-want-help-fix-our-broken-food-system
- http://www.thinkeatsave.org/
- http://www.lovefoodhatewaste.nsw.gov.au/
- a. Which of these suggestions on food waste could you implement in your family?
- b. Work in groups to design your own campaign to change people's behaviour on food waste. Discuss what makes an effective campaign. You might like to look at these videos for ideas and inspiration:
- Greenpeace palm oil: http://www.youtube.com/watch?v=QV1t-MvnCrASfeature=kp
- In my place: Oxfam/Coldplay: http://www.youtube.com/watch?v=ogltgr09GSg
- Oxfam land grabs for sugar: http://www.youtube.com/watch?v=JsTi8LrTLFg
- Do my 3things make a difference?: http://youtu.be/XLwle0sdp3Q
- c. List all the elements that make these videos appealing and interesting to your group emotions such as determination, optimism, surprise and shock, music, filming and editing.
- d. Develop a story board for your own video or marketing campaign to stop people wasting food. Think of the main message you want to develop and how you will best deliver the message. Which music, images and text will you use?
- e. Film your message/video. Use video software (e.g. Movie Maker) to develop and edit your message.
- f. Organise to show the completed videos at a school assembly.





WHAT CAN WE DO TO IMPROVE FOOD SECURITY?

There are many things young people can do, either as an individual, a class, a school or as a family member, help to improve food security for others in Australia and overseas.

How can you make a difference? Who can you contact to make your ideas heard and promoted? Should you use social media? What power can letters have, and who would you send them to? Are songs and videos the best way?

Work in small groups to come up with a food security campaign at each of the following scales:

- a. International campaigns
- b. National campaigns
- c. Local action

A number of ideas and links have been provided for you below, which looks at ways everyday people can create change. Look through these sites for your ideas, and decide what way you or your group think could make the most positive difference about food security.

SHARE YOUR IDEAS WITH YOUR CLASS.

Some ideas for possible action:

- Climate change action: oxfam.org.au/explore/climate-change/ getting-smart-on-climate-change/ provides access to a "Getting Smart on Climate Change" pocket booklet to share with friends, be part of an online community "A Climate for Change" or become a UN Climate Tracker
- 3 things youth program: 3things.org.au
- Land grab campaign: oxfam.org.au/2014/03/pushing-pepsicoto-the-max-on-land-grabs/
- Coldplay and land grab video: youtube.com/watch?v=ogltgr09GSg &feature=youtu.be
- Grow Campaign video: youtu.be/QpTrhJ0ka_g
- Be a #FoodHero: oxfam.org.au/my/act/grow-a-better-future/
- The Foodbank: foodbank.org.au/
- 3 things fair trade action guide: oxfam.org.au/wp-content/ uploads/2014/05/2014-18-3things-action-guides_fa_web.pdf
- Oxfam unwrapped: unwrapped.oxfam.org.au
- Exercise for food security: trailwalker.oxfam.org.au/?utm_ source=UW&utm_medium=web&utm_campaign=topnav
- Saving food waste from supermarkets and restaurants: secondbite.org

and

goodfood.com.au/good-food/food-news/wanted-wasteful-restaurants-20130730-2qwv9.html

• Using surplus foods: fareshare.net.au/



