

**New
Internationalist**

Planet farm

New Internationalist Easier English Ready Lesson – Intermediate level



This lesson:

- Speaking
- Reading
- Vocabulary
- Writing – formal letter

- a) Is the planet turning into one big farm?
b) Is this good or bad?



Read this to compare with your ideas :

Modern agriculture came with capitalism, the global slave trade, and science. European countries used imperial scientists to look at the new lands and their people. Imperial science also helped to make money from these lands and these people.

From Europe and Africa, capitalism followed and grew across the Americas, the Caucuses, and the tropics. It makes local food into exports. From 1700 to 2017, croplands and pasture grew by 500% to 27 million square km. After the Second World War, the livestock and crops industry increased more than before. We now use forty per cent of the ice-free Earth for agriculture. We will bring many millions more hectares into production by 2050, especially in the Global South. There we will cut down the last of the rainforests and savannahs. Poultry and livestock today are 72 per cent of all animals. There are now cities of pigs and chickens. Planet Earth is now Planet Farm. The result is that there is less diversity in animals and crops. Technology chooses only a few breeds and we lose varieties. This affects ecology and public health.

Match:

1. diversity

2. flock

3. herd

4. agribusiness

5. poultry

6. livestock

7. outbreak

8. monoculture

a) a large group of birds or sheep

b) a large group of cows or elephants

c) domesticated birds eg. chickens, geese, ducks, used for food

d) animals kept on a farm for food or other products

e) the start of a disease

f) growing only one crop in one place at a time

g) big business related to agriculture

h) including or involving lots of different types

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What is a 'pathogen'?

- a) A toxin / something poisonous, especially related to pollution eg. radon?
- b) A chemical created by humans, for example to cure disease eg. cannabinoid?
- c) An live organism or substance (especially a microorganism) that can cause a disease, like bacteria, virus, fungus eg. COVID-19?

What do you know about pathogens?

Decide on, and write, 3 questions – that you would like to know the answer to
eg.

- * Where do pathogens come from?
- * What are other pathogens apart from Covid-19?



Read this to find 3 facts about pathogens:

Deforestation and development are increasing pathogens from wildlife and animals and the workers who look after them. Covid-19 is only one of a number of new pathogens. These pathogens have appeared suddenly in the 21st century as dangers to us. These viruses – avian and swine flu, Ebola, Q fever, Zika, and many others – are all connected to intensive agriculture. They are also connected to cutting down forests and to mining.

Pathogens appear in different ways, it depends on the place and the commodity. But all are connected to environmental damage. This explains why the new pathogens are international. SARS in China. MERS in the Middle East. Zika in Brazil. H5Nx in Europe. Swine flu H1N1 in North America. How does production start these outbreaks? The diversity in primary forests keeps us safe from 'wild' pathogens. But cutting down forests, mining, and intensive agriculture change this. In the past infections burned out quickly in the forests, but now they can suddenly spread much more widely.

Ebola is an example. Since the mid-1970s, Ebola outbreaks usually appeared in one or two sub-Saharan villages and then died out. In 2013-15, the Makona strain of the Ebola virus appeared along a frontier of monoculture oil palm and other crops out of a globalized West Africa. The Makona Ebola strain was not very different in its genetics but it infected 35,000 people, and killed thousands in big cities. Suddenly it was only an aeroplane flight away from the rest of the world.

So all these pathogens are connected to intensive agriculture



Discuss:

What do you think the problems are with intensive agriculture?
And what could the solutions be?

What are the problems with this type of farming?



How do industrial farms breed these infections?

They grow industrial turkeys in barns of 15,000 birds and hens in barns of up to 250,000 birds. Overcrowding and poor hygiene bring intense stress to these food animals. It makes their immune systems weaker and they are more likely to have infections. They now kill animals at younger and younger ages. They grow chickens in only 6 weeks and pigs in 22 weeks and this may mean more deadly pathogens, including infections that can survive in younger, stronger immune systems.

With no reproduction on-site and breeding offshore, livestock populations cannot evolve resistance to pathogens. As survivors do not breed, they cannot pass on their resistance. So when meat production is industrial, global agribusiness makes pathogens industrial and they infect its livestock and poultry. Where does Covid-19 come from? - forests and the industrial farms.

Bats around the world carry coronaviruses. But the strain that bats carry in China appears to affect humans worse when it jumps species. The environment in which these bats live has also changed in important ways. With its economic freedom after Mao, China followed the way of BRICS (Brazil, Russia, India, China and South Africa) and wanted to feed its own people with its own natural resources. Millions came out of poverty. Millions did not. And so there was Chinese agribusiness and wild-foods business in central and south China, where many of these bat populations live.

Like Ebola, the contact between the bats, livestock, wild-food animals, farmers, and miners increased. This increased the spread of SARS-like coronaviruses. Using more pesticide may have reduced the insect populations bats feed on. This may have increased the carriers of coronavirus shared with human populations as bats looked further for food. With the wild-foods and agricultural production increasing, many SARS-like coronaviruses spread into food animals or into humans and made their way to regional capitals such as Wuhan. Then they spread on the global travel network.

Read to find 5 solutions:

Is there anything we can do? Yes, there is.

We must change agriculture from an industrial economy back to a natural economy. We must respect the soil, water, air, ecology, and community wellbeing on which food, and the people who eat it, depend. To stop the worst pathogens, we must preserve forest (and wetland) diversity. We must keep ecological barriers across bats, geese, other places of natural disease, our food animals, and our communities. We must bring back agrobiodiversity into livestock and poultry to stop pathogens on farms and landscapes. We must return to letting livestock reproduce on-site so that herds and flocks can protect themselves against pathogens. This means giving control to rural communities, and taking it away from agribusiness.

We must have state planning that wants farmer autonomy, community socioeconomic resilience, circular economies, co-operative supply networks, land trusts, and reparations. We must undo race, class, and gender trauma at the centre of land grabbing and environmental alienation.

We must end the unequal ecological exchange between Global North and South. We must heal the split between ecology and economy that drives pathogens and climate damage at the heart of modern agriculture.

Agribusiness is the main source of the pandemic problem. It cannot be the answer to the problem. We can think better and act better.

Writing:

Write a formal letter to the government of your country to:

- Explain the dangers of intensive agriculture
- Suggest what could be done instead

180 – 200 words

Check your writing very carefully for errors

