

Geography

KS3 Farming Case Study

By David Weatherly

日本の土地

～農家の事例研究～

Less than one-fifth of Japan's land area is suitable for farming, yet Japanese farmers produce almost three-quarters of Japan's food requirements including most of its rice, vegetables and fruit. Farms tend to be small but very INTENSIVE which means large amounts of seeds, fertilisers, pesticides, machinery and manual labour are used to create a huge amount of produce from a small area.

Case Study: Mrs Aoyama's farm in Wakayama Prefecture

Mrs Aoyama's farm is only 10 hectares but every square centimetre of it is used to produce an incredible range of crops which include rice, oranges, cabbages, spinach, sweet potatoes, chrysanthemums and strawberries. She owns a modern tractor, rice harvester and pick-up truck for transporting the produce to market.

Assignments

1. Look carefully at Photograph 1 which shows Mrs Aoyama and part of her farm. She grows a lot of her products in steel framed tunnels covered with polythene.

a) What is the advantage of growing crops in the polythene covered tunnels?

b) Why do you think the polythene has been pulled down to uncover the tunnels?

c) What do you think is in the sack in the middle of the photograph?

d) How can you tell that normal rainfall is not enough for the crops?



Photograph 1

2. Beyond the tunnels are the rice fields, one of which is shown in Photograph 2.

a) Describe what you can see in the photograph



b) Can you explain what is going on?

Photograph 2

3. After drying, the harvested rice plants pass through a threshing machine which removes the husks and allows the rice grains to pour into 20 kilogram sacks.

Look carefully at Photograph 3 and make an outline sketch of the picture (trace if you need to). Add the following labels to the sketch and fill in as much detail as you can:

- threshing machine
- partly filled bags of rice
- individual rice grains (in Mrs Aoyama's hands)
- filled and sealed sacks of rice



Photograph 3

4. After threshing the rice stalks are not wanted. Look at Photograph 4.

a) What is happening here?



b) Can you explain why this is being done?

Photograph 4

* Printed here is a case study of a small farm in Aoyama which forms part of the section on farming in a resource pack made by David. If you are interested in using the whole pack, please contact David Weatherly, via Japan 21.