



BOOK TWO

FOOD, LAND AND TREES

Introduction

see page 40 for cross curricular approach

This book is the second in the series being produced by Self Help Development International. The first book on the topic of "Water" gives a picture of how important water is in all our lives. It also gives a picture of the simple, basic problems people have in getting water and how they solve these problems.

The main purpose of this series is to give information about life in Africa in a colourful and interesting way. Secondly to challenge the negative images and stories about developing countries. It is clear that there are problems to be dealt with. What is emphasised in this series are the ways that these problems are solved. The focus is on the lives of the people in their farms and villages in rural Africa.

The age range for this series is broad, 10–17 years old, so there is a range of articles to cater for the interests and educational levels of the students targeted. It is also planned that this series would be used in a number of different subject areas. This means that there would be a different view and understanding of the stories written. The information would help to throw light on when, where, how or why things happened and the effects of events on people's lives.

Very high quality images have been used to help show the different situations. It is very important to look



at these images carefully and to give time to discuss what they show.

Short questions and exercises have been put at the end of each story to give an opportunity for recall and allow room for discussion.

The layout is to first give an overall picture on the issues of Food, Land and Trees in the world, then give a country profile and a case study for each one and finally to give some information that is connected to all of these.

It is important that there would be an emphasis on students discussing the issues and taking action. In this way what they learn is reinforced and they have a sense of greater power and control over important issues in the world today.

A set of worksheets has been scattered throughout the book. The students have an opportunity to do work on the topics covered, to add to their knowledge by finding information for themselves and also creating situations that relate to the material given.

The teacher is the guide and helper and the hope is that the students will find new information and insights into our lives and the lives of people in many different parts of the world.

Knowledge with action is a powerful tool in moving things forward and making changes for the better.

I hope that you find this book useful and beneficial. If you have any ideas or information to share please contact us at Self Help. Feedback on this book is also very welcome and will help to make future books more relevant and useful.

If you wish to get copies of the first book in the series on "Water" please contact us at the addresses etc given on the back cover.

Good Luck and Enjoy.
Dáithí O hAodha.

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The Earth in Numbers

Can the planet produce enough food to feed the billions who will be born in the future?

On the day you read this, the population of our planet will increase by 230,000 people. Hungry people.

In 2003 about 138 million human beings will be born and 54 million of us will die. That amounts to a net population gain* of 84 million, more than 230,000 new people on earth every day of the year. Many of these newcomers will suckle* their mother's breast for a year or so, but after that it will be up to Mother Earth to provide them food and drink. Our fragile* planet and its hard-working population will have to feed those 230,000 hungry people day after day for the next 66 years, not to mention another quarter million tomorrow, and the next day and the day after that...

Our wealth is measured by economic growth*, which does not take into account the state of natural resources*. This means that the deforestation* of a country is considered to create value.

Land suitable for growing food is a limited resource. There is less and less land for more and more people (every year land the size of Munster turns into desert). In 50 years, growing land per person has been cut in two. The resources given to agriculture in poor countries are too little to compensate* for this, which causes food shortages and famine.



World-wide wealth in 2002 stood at €33 trillion (€33,000,000,000,000).

40% of the world's population does not have electricity (2.5 billion people).

47% of the world's population live on less than €2 a day.

The share of the 50 poorest countries in world trade* has gone from 4% to 2% in the last decade* (until 2000).

33% of children under the age of five suffer from malnutrition*.

One in four adults in the world cannot read or write.

One in five people in the world do not have modern healthcare.

95% of people infected* with AIDS live in developing countries.

The foreign debt of developing countries has grown 6 times its amount since 1970, totalling €3 trillion in 2002.

Food and Nutrition: The food triangle

This is a tool used by nutritionists*, doctors and teachers to promote* a balanced diet*.

A minimum of six servings of foods on the bottom shelf should be eaten each day. Cereals, breads and potatoes form the bottom shelf. Then comes fruit and vegetables with a minimum daily intake of four servings. Next level up comes milk cheese and yogurt at three servings per day. Meat, fish and poultry are the second highest level at two daily servings. At the top comes sweets, cakes and saturated fats* which are to be avoided or taken in small amounts.



To live a healthy life the average adult needs 2,400 calories* per day. It is important that this is balanced between carbohydrate 55%, fat 35%, protein 10% plus vitamins and minerals. Fibre is very important in our diet as it is the means of cleaning out the digestive system*. Fibre is found in different foods. It is very important also that we drink six glasses of water per day.

- Carbohydrates and polyunsaturated fats* are known as the energy foods (bread, potatoes, nuts, chocolate etc.)
- Protein is the body building food (fish, meat, cheese, eggs, beans etc.)
- Vitamins and minerals are the protector foods (fruit, vegetables, cereals, milk bread etc)
- Water is the transporter*.

Student Exercise

1. Can you work out how your diet rates with what is recommended* in the food triangle?



2. If you need to change what you eat can you identify what changes are necessary?

3. Name two examples of each type of food that you eat every day: carbohydrates, fats, protein, vitamins and minerals.

The World's Land

At present a little over one tenth of the world's land surface is under cultivation*—little more than 0.2 hectare (0.5 acre) per person.

The map shows the general distribution of vegetation*: areas from which the natural vegetation has been cleared and the land cultivated for food and industrial crops such as fibres, cotton and rubber; areas where the natural vegetation is being used and developed; and areas which have remained in their natural state with little or no vegetation.

Bad methods, including the entire removal of trees, destroy the soil and turns it into new man-made deserts. In the words of Joseph Awanu, Sudanese forestry worker: "The Sahara is not moving south; we are pulling it south."

In Europe, Russia and the former Soviet states, North America and parts of South America, South Africa and Australia, farming is carried out with the help of machinery. In South and East Asia, most of the work is done with simple hand tools. Even so, they get two crops of paddy rice a year.

The crops are largely grown for family food, though in

some cases enough food, such as cacao, oil-palm and peanuts, is grown for sale in the local markets.

The areas of shifting cultivation are found near and among the tropical rainforests. Here land is cleared for individual needs. It is also cleared and cultivated on a commercial scale* to produce, rubber, tobacco, sugar, tea, oil-palm and cacao.

Areas of coniferous forest* provide most of the world's soft timber: spruce, pine and fir. Some forests are being maintained and developed.

Mountain slopes and much of the grassland and scrub-land

areas provide grazing* for cattle and sheep and can be naturally maintained. Tropical grassland areas provide a variety of crops, such as maize, millet, cotton, sugar and groundnuts. Grain is the main crop in temperate regions*. Systems of farming vary from country to country. In the United States 2,500,000 people (3% of the working population) are employed in

farming. On the other hand, 370,000,000 people in India (50% of the working population) grow enough food and a surplus in some areas for the whole population.

Scientific and improved methods of farming produce only a quarter of the world's food. These methods are being promoted* and used more around the world today. Irrigation* and water conservation* are the most important of these.

Technology is used to:

- Improve varieties of seeds
- Build up soil fertility*

- Plant new crops to provide a more varied and nutritious diet* and lessen a country's dependence* on a single crop (e.g. potatoes and The Great Irish Famine 1845–1848)
- Plant trees and protect forests

KEY TO MAP

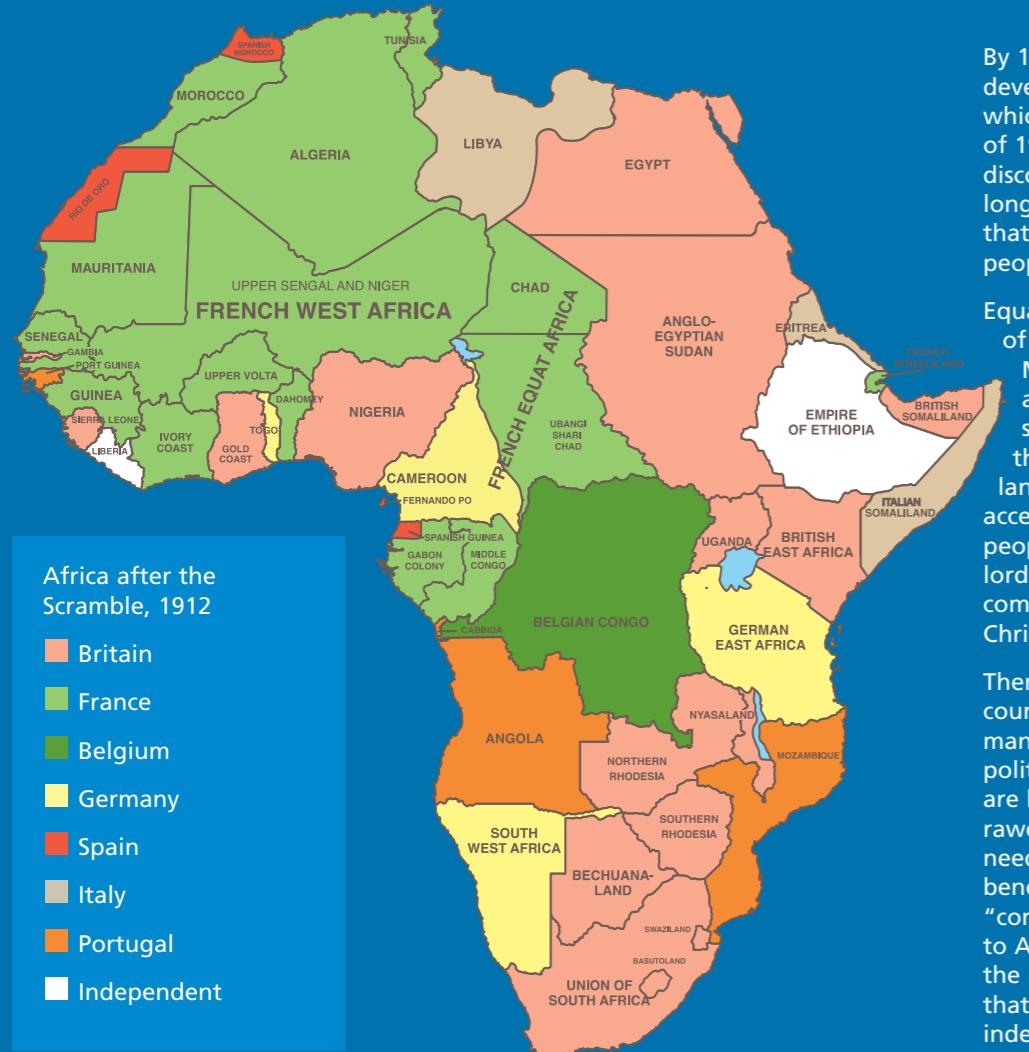
- intensive cultivation
- secondary cultivation
- rain forests
- coniferous forests
- mountains
- grasslands
- desert
- ice caps and tundra

- Use organic waste* as manure*
- Increase use of artificial fertilisers*
- Improve tools and farm machinery
- Reclaim land
- Control of pests

Using these methods and traditional skills the earth is being controlled and influenced more by man, for better or for worse.

The Scramble for Africa

The scramble for Africa amazed everyone. In 36 years (1876–1912) Europe gained control of almost the whole continent; including 30 new colonies*, 10 million square miles of territory*, and 110 million new subjects*. Africa was sliced up like a cake between seven rival nations; Germany, Italy, Portugal, France, Britain, Spain and Belgium.



By 1900, great jealousies had developed between these countries which eventually led to the Great War of 1914–1918. How Africa was discovered and conquered* has left long-lasting and far-reaching results that still affects the lives of the African people today.

Equally amazing was the scramble out of Africa in the ten years 1957–1967.

Many of the countries were left in a very poor economic and political state. In slicing up the cake no thought had been given to tribal lands*, natural boundaries* or access* to resources by the native peoples. The European powers were lords and masters "bringing commerce*, civilisation* and Christianity to the dark continent".

There are now 47 independent countries in mainland Africa but in many cases this independence is political only. The resources* of Africa are being used and exported in their rawest state so that the countries that need them so badly are the ones who benefit least. While bringing "commerce, civilisation and Christianity to Africa", there was another motive in the hearts of the seven big powers; that was "conquest"*. Political independence was given to most of the



African countries 40 years ago or more but there is still a strangle hold* on the economies, resources and trading positions* of these countries.

The population* of Africa has increased enormously from 110 million in 1900 to almost 1 billion in 2002.

The extra pressure on the land and resources of Africa means that the people need more and better use of what is available to them. The political leaders of Africa co-operate more and have developed stronger economic, political and cultural links between them. Sadly, because of old treaties* and agreements their hands are tied and the future of Africa remains scrambled* and out of their control.

Exercise

1. On the 1912 map identify in order 1–7 (biggest to smallest amount of territory controlled) the countries who colonised Africa.
2. Name five products that come from Africa in their "rawest state"
3. Name five products (with brand names) that we use or eat regularly whose raw materials came from Africa.
4. Using an up-to-date map of Africa identify six countries that have different names from the ones shown on the 1912 map.
5. Using the up-to-date map of Africa give the names of six countries that are not shown on the 1912 map



Ethiopia

Ethiopia is one of Africa's largest countries, with an area of 1.12 million km². Most of the land is highlands*, rising to 4000m. The land falls towards Kenya in the south and the Ogaden Desert and Somalia in the east.

The main rivers are the Blue Nile and the Awash which are both used for irrigation*. Rain falls mainly in the West, but is unreliable*. Drought* sometimes prevents crops growing; at other times heavy rain erodes* soil from slopes and reduces the area in which crops can be grown. Most Ethiopians live in family clusters* of up to 20 huts without piped water or electricity and are often miles from the nearest shop or health centre. They must provide almost all their own basic needs.



Farms are generally less than 1 hectare (2.4 acres). An occasional farmer may have a pair of oxen* and a plough but many have only hoes to work their land. The main crops are "teff" (a local grain), barley, wheat, maize, sorghum and "enset"** (a relative of the banana).

Coffee, the chief agricultural export*, accounts for 60% of export earnings and is grown mainly on small farms. Ethiopia is the birthplace of the coffee plant. Ethiopia has few known minerals and there is very little industrial development. There are very few jobs outside agriculture. Some small factories produce building materials, footwear, tyres, food processing and textiles*.

About 20% of Ethiopians live in towns and enjoy a

higher standard of living. Ethiopia is ranked among the world's ten poorest countries, in fact some say it is at the bottom of the list.

It is one of the world's least developed countries. 38% of the population is illiterate*. There is only one doctor for every 79,000 people, which is the worst figure in the world. The infant mortality* rate is 125 per 1000 live births. Medical needs are greatly increased by famine (the most recent famine occurred in 2003).

Ethiopia is different to other African countries because it has existed as a nation for more than 2000 years. It was strong enough to resist Italian attempts at colonial occupation* during the great "Scramble for Africa".

It has had an unsettled political history with a 30 year war against the

Farmer with his flock, Lalibela, Ethiopia



Case Study 1: Supporting Ethiopian farmers

Since 1987 Self Help has developed a successful programme for rural development*. The reasons for success are: participation of beneficiaries*, partnership*, new ideas and methods, long-lasting equality between men and women, leadership training and a clearly explained starting, finishing and handing-over* system.

Farmer, Dodota, Ethiopia



Location: Sodo District in South Eastern Ethiopia

Group: 113,307 Beneficiaries

Budget: Total budget of Birr 10,949,950
(10 Birr = £1)

Duration: five years starting in 2001

There are a large number of activities in this project but, for the purposes of this book, crop production and irrigation will be the focus.

Activities and Targets

1. Crop Production*

The major crops grown in Sodo District are teff*, wheat, barley, maize, coffee and various vegetable crops. Regular droughts* and poor quality land makes it difficult to grow cereals* and vegetables. Fertilisers*, pesticides* and insecticides* are not available when needed. Helping farmers to get improved seeds* and fertilisers would result in a bigger supply of food and a wider range of crops.

The main aims are to help farmers buy improved seeds and pesticides, provide irrigation* and grow a wider range of crops. The plan is to grow drought-resistant* enset*, coffee and vegetables.

Coffee production

Coffee is a major cash crop in Ethiopia. Farmers want to grow more coffee in Sodo District. The project will produce and distribute 300,000 coffee seedlings* per year.

Enset Production

Enset is a drought-tolerant* plant and a major food for the Sodo people. Enset plants will be distributed and

planted in low rain fall areas that have suitable soils.

100,000 enset suckers* will be produced and distributed to farmers each year. Enset nurseries* will be set up to provide enset seedlings to interested farmers.

Horticultural* crop production

Horticultural crop production (cabbage, carrots, onions, tomatoes etc.) for the family diet and for sale is unknown in most parts of the project area. These crops will be introduced and promoted.

Small scale irrigation schemes

Two irrigation schemes of 40 hectares each (total 80 hectares) will be set up during the five years. These schemes will produce vegetables and fruit trees to help provide jobs for the people.

Bateri Berbo with her cabbage crop,
Odo Vegetable Irrigation Association,
Meki, Ethiopia



Student Exercise



You have been given examples of two activities that will be covered in this project area.

What in your opinion is another important activity? Explain your choice and show how this will be achieved.

Water: The importance of water for food security*



Aojabule village fish pond, Asamuk, Uganda

Water is essential to all forms of life. There is an increasing demand for water world-wide. Populations* are increasing but the supply of water available is decreasing due to pollution*.

The demand for water in urban areas* in developing countries will increase greatly in the decades* ahead. Groundwater* levels are falling in key rivers, lakes and reservoirs*. Water is available to farmers through tubewells*, irrigation* schemes, crop spraying and other methods. As resources get scarce it is the poor and weak who suffer first and most.

Water for agriculture is being squeezed as more water is needed in urban areas. Agriculture has grown used to cheap and plentiful water in irrigated areas. Amounts of food grown have risen sharply in recent decades due to high yielding varieties* and increased fertiliser* use.

The growth in populations and the move to towns and cities have created new challenges. How can the needs of farmers who produce the food needed for all be supplied along with the greater demand for water in the urban areas? When there is pressure on governments to deal with conflicting demands then the louder urban dwellers* get priority*. Where does this leave the farmers/food producers?

Greater efforts must be put into making the most of what is available at present. One way to do this is to waste less. Drip irrigation*, for example, delivers water direct to the plant roots rather than drenching* the whole field. This makes sure that 95% of the water gets to the

crop and boosts the amount of food produced by up to 90% over traditional methods. New varieties of seeds and foods that use less water and can cope better with drought* must be developed. New developments must respect traditional methods and knowledge. The impact* on the environment, changes to the food chain* and the effects on people's health cannot be ignored.

A simpler way to save water is to eat less meat. Livestock* convert large amounts of plant material into smaller amounts of meat, so each kilogram of meat takes far more water to produce than a kilogram of grain.

Another method is water harvesting* (see Book 1 "Water", p.11). Build systems for catching the water, put it into reservoirs and then onto the fields. "The irrigation age has bypassed* the small poor farmers of 2 hectares or less," says Sandra Postel of the Global Water Policy Project. "Simpler, cheaper systems must be put in place".

Kofi Annan (Secretary General of the United Nations) urges "a Blue Revolution in agriculture that focuses* more on the amount of food per unit of water. More crop per drop."

The emphasis is on getting more for less. "Water productivity"* must increase by 60% in irrigation schemes and by 35% in rainfed agriculture* in the next 20 years.

Higher yields world-wide will be necessary but not enough. "We need a huge change in the amount of carbohydrate* we can produce per unit of water," says Wayne Meyer of Australia's Land and Water division. "It's got to be seen as important as putting man on the moon".

It must be done in a way that overcomes* poverty and shares the benefits among all the people. It needs to pay more attention to the needs of other users of water. We need to find ways, globally*, to co-manage water for agriculture and nature, for industry and domestic use*. Working together rather than competing* and fighting with each other.

Student Activity

Calculate* how much water you use in a day. Use the following table to help you

Glasses of water	4 glasses = 1 litre
Soft drinks	3 cans = 1 litre
Flushing toilet	10 litres per flush
Cups of tea/coffee	5 cups = 1 litre
Bath	80 litres
Shower	40 litres
Brushing teeth	3 litres
Washing clothes	20 litres



The Nile: Source of life; source of concern and conflict

The Nile is the longest river in the world. Its two main sources are the lakes close to the Equator and the highlands of Ethiopia. The first collects its water from year round rain over the Democratic Republic of Congo, Tanzania, Rwanda, Burundi, Uganda and Kenya. Water from the highlands of Ethiopia feeds three main rivers: the Sobat, the Blue Nile and the Atbara.

Forecasts estimate* that the river's population* of 300 million in 2000, will double by the year 2025. Pressure is put on water resources through drinking and sanitation*, deforestation* and using water for irrigation* for food production.

Water is essential* for life and a healthy population. The percentage of the population able to get clean and safe water ranges from 18% in Ethiopia to 86% in Egypt. Demand is set to increase greatly.

Water is needed for food production*. Irrigation methods are not efficient and 90% of the water taken from the Nile is used for agriculture, e.g. to grow 1 tonne of wheat takes 1000 tonnes of water and rice takes double this amount.

The region's growth in food lags behind the growth in population. In all countries in the region, with the exception of Egypt, there has been a huge drop in the amount of food produced per capita*. In the most

extreme case of Ethiopia, the amount of food available per person is a quarter of what it was 20 years ago. For an already malnourished* people, making sure of water for food production is crucial, but solving the problem is a very difficult task.

A growing population needs more water. The amount available is shrinking due to natural and man-made causes. There are plans to solve this problem but there is a lack of money. Some new dams and canals are being constructed in Egypt.

In many countries debt problems, a lack of good government and civil wars have made it difficult to get money from international funders*. There are also problems with damage to the environment in trying to solve the problems of water supply.

People affect water resources through deforestation. Trees are cleared to expand cropland*, gain free access to fuel wood and build houses. The forest areas of the Nile basin have been shrinking at a rate of 1% per



year. In Ethiopia, at present rates, the forests will have disappeared by the year 2025 (see article on "Deforestation" in this book).

There is no official organisation to manage the Nile basin, its tributaries* and lakes. Agreements have been drawn up involving different countries. Some of the older treaties* were signed long ago and gave power over the river and other resources to foreign companies and governments.

History teaches us that international laws are not strictly followed. The population is growing but the water supply is not. This means that sooner or later wars will be fought over water. Governments must sit down and draw up a plan where everyone makes a sacrifice* but everyone gains something. This has been done before by the countries along the Nile Basin. Lessons can be learned from history and with the development of new technology and methods there is hope. Solutions can and must be found.

Questions

1. Why is the River Nile so important to so many people?
2. Why is it the cause of so much fighting?
3. How can the problems be solved?
4. Give a vision of the Nile basin in the year 2020.

Pump irrigation system, Keren, Eritrea





Deforestation*

Deforestation is posing a real threat to the world right now. Half of the rainforests* are already gone and the rest are facing total destruction. Without large areas of forest the world will not survive. One fifth of the oxygen* we breathe is produced by the Amazon rainforest.

One major reason for deforestation is world debt, which stands at €1.3 trillion. The countries with the highest debts are often the ones with the largest rainforests. They are put under pressure to cut down the forests to meet the repayments and in spite of this the debts grow bigger and bigger.

Population growth is also a reason. More land is cleared to grow food and also meet the needs of the people for firewood. 90% of Ethiopia's forests are gone and within ten years the country will be importing* timber to meet its needs.

The United Nations Food and Agricultural Organisation says that ranching* and logging* are the main causes of deforestation. Small-scale farmers clear the land to produce "cash crops"** which give a quick return. The international drugs trade is

a cash crop that deserves special mention. Vast areas of forest are cleared to grow coca for crack and cocaine, and poppies for heroin. These crops have a 4,000% profit mark up between the developing country and the European markets.

Reclaimed rainforest is used for ranching. Ranchers clear large areas to have grassland for cattle. As meat is too expensive for the local people, the beef that is produced is almost always exported* to produce fast-food hamburgers or pet food supplies.

(The cost of eliminating world hunger is €14 billion per year; €17 billion per year is spent on pet food in Europe and the USA.)

Effects

Forests act as "carbon sinks" which means that trees store large amounts of carbon* and keep it out of the atmosphere*. For example 1 hectare of forest can extract* 10 tonnes of carbon dioxide* from the atmosphere each year. The cutting down of trees and the burning of wood releases carbon into the atmosphere causing heat, that would otherwise escape, to be reflected* back to the earth. This causes global warming*. Global warming leads to the melting of the polar icecaps* and a rise in sea levels. If present sea level change continues there will be a 1.5 metre rise over the next 40 years. Poorer countries will not have the resources to defend themselves against such huge changes (see Book 1 "Water", p.18).

Acid rain*

Fossil fuels (oil, petrol, gas, peat and coal) are burned at a huge rate world wide. This fuel releases nitrogen oxide* and sulphur dioxide* into the air. This

turns the rain, fog, sleet and snow into acid. This acid affects forests, rivers and lakes world wide. Rain as acidic as lemon juice falls on parts of Norway every year. 80% of its southern lakes and streams are in critical condition* or technically dead. It is the same story in other European countries like Poland, Germany and Switzerland.

The bad effects of what we do combined with the destruction of natural resources are leading to an environmental disaster*. It seems that it is only a question of time unless we change our attitudes and habits. Can we afford to delay?

Student Exercise



Can you identify five products (mainly furniture) that have come from tropical rainforests?

How does the fast food industry affect the rainforest?

Explain how "acid rain" forms.

Give one other example of the world-wide effect of deforestation.

How can each individual help solve the problems caused by deforestation?

Worksheet 1

1. Most of our food today is not fresh. We 'preserve' food in many ways, e.g. frozen chips. African farmers preserve food by drying it in the sun. From your kitchen at home find out how many different ways we preserve food.

3. Colonial farming replaced food crops with cotton. Do a survey in your class to find out what clothes are made of cotton. Are cotton clothes cheap or expensive?

5. The diet of most Irish people in the nineteenth century was potatoes. Make a list of all the foods that you eat in a day and compare it to the recommended intake from the food pyramid. Try to group them into the different levels as shown on the food pyramid.

2. How many different 'grains' or grain products can you find in your kitchen e.g. 'cornflakes'?

4. In 1845 Ireland had 300,000 farms under 2 hectares. In 1851 Ireland had 88,000 farms under 2 hectares. In 1910 Ireland had 62,000 farms under 2 hectares. Show this information on a bar chart.
What happened during these years to reduce the number of small farms?

6. What is the difference in your diet and that of a vegetarian?

Uganda: "The Pearl of Africa"

In colonial days* Uganda was relatively prosperous*. It was under British control but was encouraged to manage its own affairs and develop its resources*.

Uganda is a fertile land*, well watered and with a kind climate, but there is soil erosion* and deforestation*. It has deposits* of copper and cobalt* which have not been developed. Much of the country lies between the east and west arms of the Great Rift Valley system. This is a wide savannah* belt, supporting one of the last great wildlife communities of the African grasslands. The south-eastern border runs through Lake Victoria. The Nile runs north-west from the lake through central Uganda. The lakes and rivers keep Uganda fairly cool, the chief exception being the Karamoja district where rainfall is uncertain and the land is semi-desert.

Uganda gained independence on 9 October 1962. At the time it had the highest percentage of western educated people and was well supplied with schools and hospitals. Within a decade* it had crumbled into a tragic shambles. From the start Uganda was torn with tribal* and regional battles. It had a number of different kingdoms each wanting to gain power and control. There were huge differences in language and culture. This led to Idi Amin gaining power in 1971.

From the start Amin was a harsh ruler, taking control of foreign owned property and expelling all Asians with British passports (almost all the business community). These businesses were handed over to Ugandans who had no experience of running them and the

economy* fell apart. It is estimated that between 100,000 and 300,000 people were brutally killed during Amin's reign. Amin was overthrown in 1979 after he tried to take over part of Tanzania but was easily beaten by the troops of Julius Nyerere.

Uganda got stable government* in 1986 when Yoweri Museveni came to power. Inflation* dropped from 300% in 1987 to 23% by 1994.

Only 20% of the people of Uganda live in towns. In remote areas life has changed little, most people still grow their own food, family ties are strong and urban dwellers* are able to get food from country cousins. Few crops are grown. In the south the main food is a green banana called "matoke", while in the north it is millet and sorghum.

Agriculture produces 60% of the gross national product (GDP)* and employs* 80% of the country's workforce. Most Ugandans are small farmers. People plant cash crops of tea, coffee, cotton and tobacco while potatoes, millet*, maize and cassava* are the main food crops. Coffee is still Uganda's most important export* and the government is looking for ways to reduce its dependency* on it. Uganda's industries, such as sugar, brewing, tobacco, textiles* and cement are showing an annual growth rate of seven%. Asians have been invited back and their property has been given back to them. The Mombasa-Kampala railway is running again after many years of hostility* between Kenya and Uganda.



Museveni is due to retire in 2006. There is an elected non-party assembly* which is gaining power but many people fear that old tribal rivalries* could once again create divisions* and problems. If stability* and growth continues then Uganda may be considered one of the more fortunate African countries.

Questions

1. Show how Uganda is fortunate in terms of: climate, location and resources.
2. Show the differences to the economy of the regimes* of Idi Amin and Yoweri Museveni.
3. Uganda wants to reduce its dependence on cash-crops. Why?
4. Design and write your own post card to a friend from Uganda.

Case Study 2: Uganda; meeting basic needs

The key to success in development work is that from the start the people who benefit are fully involved, have all the information and are in control of what is happening. It is vitally important to meet and discuss with them the needs of their community. Their knowledge and skills determine what can be done and what new projects can be started. The abilities and capacity of the people are the building blocks for the future. Development will involve new skills and knowledge. As the projects are in the hands of the people, long-term growth and expansion of the work depends on the short-term results and benefits to them.

Since 1999 Self Help has focused* its work on meeting the simplest and most basic needs of the people. The first step was to meet the people and get them working together. From the start they were in control and responsible for the progress of the work. They are working for themselves and any benefits that come from this belong to them.

In July 1999, Self Help started developing the Asamukpilot project in 50 villages. The three-year project is focused on improving household income* and supplying clean and safe water. In two years a lot was done to:

- Distribute improved seed* of the major food crops (cassava, groundnuts, sorghum and green gram)
- Support income generating activities*
- Provide clean and safe water

Food Security

- Supplied improved seed of groundnuts (5,273 kg), sorghum (6,310 kg), green gram (1,240 kg) and cassava cuttings (1,244 bags)
- Built four seed banks* in Obur, Asamuk, Ajaki and Atirir parishes
- Distributed pineapple suckers* and cassava cuttings*

Income Generation

- Supported 27 poultry* groups with 1,450 pullets (layer birds)
- Supplied 110 modern bee hives to 11 groups of farmers
- Supported 8 groups of fish farmers
- Supplied two exotic* Boer he-goats for the improvement of the local goats

Rural Water Development

- Built three shallow wells*
- Constructed six boreholes

Other Activities

- Supplied six groundnut grinding machines* to six groups of women
- Trained 57 groups of farmers on poultry production, 14 on fish farming, 22 on bee keeping and six on pineapple production
- Supplied 782 seedlings of improved seed oranges and mangoes to farmers

Challenges

- To support more farm families
- Support activities other than agriculture, that help rural development

Protecting and Developing the Forests of Uganda

The forests of Uganda are under strain, according to Dr Tony Finch, the EU consultant* working with the Forestry Department. Uganda has at present 4.9 million hectares (11.75 million acres) under trees providing the 22 million people with 90% of their fuel and energy needs and most of their food and shelter. 3.7 million hectares (8.8 million acres) are in private hands. 50% of the tropical high forests are government owned nature reserves* which cannot be used.

The government has passed a Forest and Land Bill which means the owners have to use environmentally friendly* ways to develop these resources.

A big problem to be dealt with is the use of wood in producing energy. Trees and timber cut up and used in fires supply about 30 times as much energy as oil and electricity combined. Industry* gets almost 80% of its energy (fuel) needs this way. If Uganda was to get its energy (fuel) from other sources then the annual* import* bill would rise by e300 million. Industries like tea, sugar, bricks, tobacco, tiles and food processing all depend heavily on wood. Sawn wood, panelling and other products are worth more than e40 million a year to the country in export income. The building industry, growing by 10%–20% annually, uses wood for doors, beams,

roofs, scaffolding and fencing. According to Dr. Finch, "The quality of life of every person in Uganda depends on the output of the forests. There is still time for farmers and private investors* to avoid a future energy crisis which will destroy a large part of the forests that remain".

What is urgently needed are fast-growing tree plantations. The alternative* will be to depend on imported timber. At least 100,000 hectares will have to be grown over the next 20 years if all the demand for sawn wood is to be met. As the population grows there is greater pressure on the forests. Trees will be chopped down to give people land for food production. The dangers are that too many trees will be chopped down and that there will be a lack of controls.

The only hope is that money will come from private and public sources including international donors. There is already some replanting by a local private company and foreign interests (Norway, Germany and Saudi Arabia). On a local level more than 200 individuals and families have started small plantations* and nurseries* (see "Eladu Robert").

There is still a long way to go. A lot of work has to be done on a local, national and international level to ensure* that the needs of all can be met in a way that safeguards the future.



Bessie Oluka, Moro village, Asamuk, has established a nursery of 40 trees.

Exercise

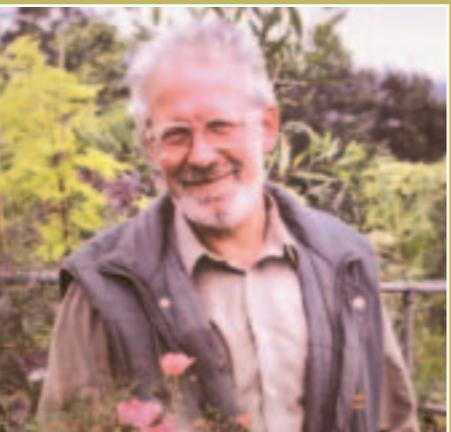
1. Explain why trees are important to Uganda.
2. Give five different uses for timber.
3. How does growth in population affect trees?

Ari Van der Wel

Ari Van der Wel came to Ireland in the 1960s as a forestry student*. This was his 'work experience' as part of his forestry diploma from a private forestry college in Arnhem, Holland. Ireland at that time had only 2% of its land under trees and was undergoing a massive re-afforestation programme*. The Forestry Department had many state forests and each area had its own tree nursery*. Ari liked the country and the people so much that he completed his diploma and returned in 1966 to stay. With few jobs in Ireland, and immigrants* not so welcome, Ari had to sign a document* stating that he had enough money and would not sign on the "dole"*. So he had to make a living without any help! He came to live in Aughrim, Co.Wicklow where his training had begun.

As with any entrepreneur* he tried lots of jobs. He bought trees and sold them for timber, he worked in local forestry projects, he took on contract work* in some of the large estates in the area and bought 6 acres of hill land. He met Maria and they got married. They bought the rest of the hill farm and with his farming background* they tried many ventures* to earn a living. Ari bought some sheep and cattle, they grew vegetables for local markets, they began a small tree nursery and grew hedging plants*. All this time Ari was still travelling to work on forestry contracts wherever he could get them.

With lots of advice and help from local forestry workers and a developing afforestation* programme, the nursery became a success and Ari decided to put all his efforts into this business. As forestry development is driven by grants and government policies, the demand for trees for planting was never steady. In the 1980s Ari was getting the equivalent of €180 for 1,000 young plants, today he will only get €140. So the business needed to diversify* and the garden end of the business expanded, supplying hedging, ornamental plants* and flowers. Now the Cappagh Nursery and Garden Centre is a thriving business. Ari bought a 30 acre site near the town of Aughrim to establish a good retail centre* alongside the main road. His three children were always helping around the nursery and are all part of the business today. Nicolette did a three year horticultural* diploma in Termonfeckin, County Louth, specialising in seed propagation*, she now runs the sales to the public from



the garden centre. Ari (junior) now married with three children, did a forestry degree in U.C.D. and runs the tree nursery. Monique is the accountant* of the family and helps with the sales, she is married with two children. This is a real family business begun by a young entrepreneur who came to Ireland, not with a great vision, but simply with the wish to have a family and provide for them. Ari puts his success down to hard work, local help and changing to meet demands. Enjoying life and taking time for family is of great importance too and while the rest of us trip to the garden centres on Sunday, the Van der Wel family business remains shut, as Sunday is family day.

Eladu Robert

Eladu Robert sparkles with energy for life. He is a 24-year-old Ugandan student, farmer and entrepreneur*. He has finished secondary school and would love to go on to university but his chances are very slim. His only hope is that he will win a government scholarship* to study agriculture or forestry. He could go to a local third-level college but the big problem is that the fees are very high.

Robert has a great knowledge of the trees and plants in his local area and he has set up his own nursery. "Oasis Nursery" is in its second year and he has a lot of orders on his books from local farmers who want to buy tree seedlings*. Robert has grown these seedlings from seeds that he collected from trees and plants in his locality*. The more uncommon varieties were grown from seeds he bought from a government run horticultural unit* in Mbale, which is 40 miles from his village. Robert knows that some seeds have to be carefully collected and stored to ensure* germination* and growth. This knowledge and care is what makes Roberts project a success. The nursery was his own idea and enterprise.

Robert's father died when he was only nine years old. He lives with his three grandmothers and his aunt. Robert's maternal grandfather* had three wives and he divided the land among them with the first wife getting the largest portion. Robert and his brother (Michael, 26) will inherit* 3.75 hectares (nine acres) of land and part of this land makes up "Oasis Nursery". As the only adult male living with these old women Robert is concerned about wanting to



go to college and yet leave them with a provider* and protector*. Luckily Michael is willing to take on this responsibility. Michael left school at the age of 14 and went for horticultural training to the local Catholic mission. Robert got a lot of his knowledge from his older brother, some from his science classes in school and a great deal from the elders* in his village, who told him about the different plants and their uses in terms of food, shade and medicine. This combination of respect for the knowledge of the past and the use of modern resources and techniques give a sense of confidence in Robert.

Robert and his grandmothers got a grant from Self Help to buy some hens and they also got 200 suckers* for improved variety* pineapple plants.

He is an intelligent, capable*, resourceful* and skilful young man. He built all the little one roomed houses and huts that make up their homestead*. He dug the hole for the pit latrine* (with government advice) and he also built the hen house ensuring that they remain free of disease and safe from wild animals. Recently when an old Shea-nut tree broke in a storm Robert collected the sap which can be used in a soap that is very good for skin

problems. He also made eight beehives (using an ancient local technique) from large branches and some of the wood he has dried and stored for building plans in the future.

Michael will take good care of his elderly relatives when Robert leaves to go to college. These ties of family loyalty* are the backbone of a simple rural community. There are strong family bonds and everybody shares the benefits of the work done. Robert is a young man who grasped the opportunities and made the most of what was around him. There is a bright and prosperous future ahead for Uganda if Robert and other young entrepreneurs get the support and encouragement they need.

Questions

1. What type of person makes a successful entrepreneur?
2. What are Robert's main difficulties?
3. How are things different in this part of the world?
4. Imagine you are a young entrepreneur here, describe what steps you would take in setting up your enterprise and what support systems you would have?

Supporting Farmers in Sub-Saharan Africa*.



Tesfay Abraha, Madeo village, Emni Haile district, Eritrea

96% of the farms in Sub-Saharan Africa are small, farming less than 5 hectares, with over two thirds having less than 1 hectare (2.4 acres). Small farms produce over 90% of the region's food.

Small farmers are efficient*, making better use of their land than many large farmers but the majority are very poor. UN statistics show that over two thirds of rural people in most Sub-Saharan countries are in absolute poverty*, living on less than £1 a day. The situation is getting worse. The region is now suffering with the major health problem of HIV/AIDS. 13.7 million of the 16.8 million adult women living with HIV/AIDS are in Africa, the vast majority in rural areas.

Most of these small-scale, food-insecure* farms have problems getting to markets and have few inputs* such as fertiliser* and high yielding seed varieties*. The land is often in poor condition and most are far from services* and roads.

Small farmers in Sub-Saharan Africa are also faced with new problems and challenges:

(a) The decline* in world prices for traditional exports* such as cocoa, coffee, cotton and tea, with increasing costs for inputs because subsidies* have been removed.

In 2001/2002 the World Bank and the International Monetary Fund advised the Government of Malawi to stop paying part of the price of inputs for food production. As a result farmers have been unable to produce surplus food* for storage* for future use. With no food in storage a serious food shortage* was the result. This caused another famine in that country.

(b) Trends* towards globalisation* should give small farmers access to

world markets but really mean that these farmers lose much of the urban markets* of their towns and cities to imported goods* from other countries.

Small farmers cannot compete with globalisation. To prevent these small farmers becoming unskilled labourers in the world economy, governments, non-government organisations, the private sector* and the international donor community* must take action.

- The needs of small farmers must be given attention when making national policy*
- Urgent steps must be taken to make HIV/AIDS drugs freely and cheaply available
- Provide governments with the means to invest* in education, health and rural infrastructure (roads, irrigation schemes etc.). Cancelling debts is vitally important for these governments
- Make well designed and easily used technology available to the small farmers
- Reduce the costs of fertilisers and other inputs and make credit* available

The future of the small farmers of Sub-Saharan Africa depends on combined action so that they can survive and compete in the global economy*.

I Sing of Change

I sing
of the beauty of Athens
without its slaves.

Of a free world
of kings and queens
and other remnants*
of an arbitrary past*.

Of earth
with no sharp north
or deep south
with blind curtains
or iron walls

of the end
of warlords* and armouries*
and prisons of hate and fear.

Of deserts treeing
and fruiting
after the quickening rains

Of the sun
radiating* ignorance*
and stars informing*
nights of unknowing

I sing of a world reshaped*.
(Niyi Osundare, Nigeria)

Sing on; somewhere,
at some new moon,
We'll learn that sleeping is not death,
Hearing the whole earth
change its tune.
(W.B. Yeats, Ireland)



Farmers from the Koro irrigation site, Dodota, Ethiopia

Exercise

1. What does the poem tell of the history of Africa?
2. What is the strongest feeling in the poem? Gives reasons for your choice.
3. Draw a picture to show what the poem means to you.
4. Pick a song or piece of music to go with the poem
5. Looking at the example from W. B. Yeats, write a short three-line poem to add to this.

Growing Bananas: giving people a supply of good healthy food

800 million people suffer from malnutrition* today. Feeding the world is one of the huge challenges of the twenty-first century. Bananas could be part of the answer. They are the fourth most important food crop after rice, wheat and maize. World production stands at 86 million tonnes.



Market scene, Kampala, Uganda

Bananas feed 400 million people in tropical countries*. They are vital to the small farmers who grow, eat or sell them at the local markets, and also for the poorest people. For many developing countries, banana exports* are an important source of income*.

90% of the bananas grown are eaten locally, especially in Africa, Latin America and Asia. In some regions bananas are the main crop. Over 120 countries grow bananas. 98% of all bananas and plantains* (type of banana used as a vegetable) come from developing countries. In China people eat about two kilograms of bananas per person per year, in Australia and Indonesia the figure is 50 kilograms

and in East Africa (Uganda, Rwanda and Burundi) they eat 250 kilograms per person per year. In some countries mashed banana is the first solid food given to babies.

Bananas have many other uses. They can be processed* to make flour, crisps, ketchup and beer. Fruit and leaves can be used to feed animals and they are also used to make starch and a type of cloth.

In poor countries it is easy for the people in the country areas to get bananas, even if they are very poor. It is much more difficult for people in towns and cities to get them as they are expensive to buy.

Bananas are very easily bruised and damaged so it can be difficult to transport* them from the farms to the towns. There are many middlemen* who buy cheaply from the farmers and make a big profit* selling the bananas to the towns-people. Better roads would make it much easier for the farmers to take their bananas to the towns. They could sell them at a cheaper price than the middle-men and still make more profit for themselves. This would help the poorer people in the towns to have a healthier supply of food.

The price of bananas for people in Europe is largely down to all the middle-men who are involved in buying, transporting and selling them to us. In most cases the growers end up with less than 10% of the price we pay for them. A better and fairer trading system* needs to be supported (See the article on "Fair Trade" in this book).



Slicing the Banana

- *Real bananas (one for each group of 6)*
- *One large paper banana (one per group)*
- *One large paper banana coloured to match the graph above shown above (keep hidden)*
- *One knife to cut bananas (to be held by teacher)*
- *Paper and pens.*

Divide the groups of 6 and give everybody in the group one of these roles:

- (a) pickers & growers
- (b) importers
- (c) packers
- (d) wholesalers
- (e) shipping company
- (f) retailers

Give out paper and pens. Give the pickers/growers a real banana each. The banana costs 10c in the shop.

Taking into account the shop price of a banana, each group must decide how much each member will receive for their labour and costs.

After five minutes each group must present its case in full and fill in the amounts on their paper banana.

Reveal the actual situation on the filled in hidden paper banana.

Give the pickers/growers a knife and they must cut the real bananas in the correct amounts. The pickers will be left with one tenth of the banana.

How do they feel? Is it fair? What can be done about this situation?

Worksheet 2

1. Unscramble the letters to find unusual trees from around the world. The first letter of each tree is given.

BBBAOA B

AANNYB B

GGNOIK G

REPJNIU J

LMNOAAIG M

SHUJOA J

AEIOUQS S

2. The oldest tree known to science is a bristlecone pine called 'The Old Man' in the White Mountains in California, U.S.A. This tree is over 4,600 years old!

Is this older than

- (a) Newgrange,
- (b) The Sphinx,
- (c) The Great Wall of China?

a

b

c

3. Make an alphabetical list of trees e.g. ash, banyan, cedar... How many can you get?

4. Some trees have their seeds as fruit, nuts or with wings. In your copy make a chart with; "fruit", "nuts" and "wings" at the top of the page. Now place each of the following trees in the right column; holly, chestnut, sycamore, ash, hazel, blackthorn, mountain ash, oak and birch.

5. Collect the seeds of a number of different trees and try to germinate them in the class. If you are successful you can plant the young sapling, if not, Coillte will supply your class with saplings and guidance in planting.

6. During the French Revolution the people planted 'Trees of Liberty' in their towns and villages. Find out if there are any trees planted for special occasions in your town or village. If not then why not be the first to plant a tree for Self Help!

Malawi

The name Malawi means "the lake where sun-haze is reflected in the water like fire" and it is from Lake Malawi that the country takes its name. It is the third largest lake in Africa. As "Nyasaland" the country was ruled by the British from 1891 to 1964. Malawi has great natural beauty with its lake, grassland and woodland.

Malawi lies in a narrow strip never more than 160 kilometres (100 miles) wide and the country's share of the lake covers one fifth of the lake's area. The lake, renowned for its golden beaches and teeming fish and bird life, lies in a deep valley. Malawi is a tourist's paradise* with loads of resort areas that have water sports and swimming as well as several national parks.

Dr Hastings Banda became president when the country got independence in 1964. Having himself declared president for life in 1971 gives an indication of his regime. He controlled every aspect of life in Malawi, even dictating* what people should wear in the Dress Act of 1973. During his 30



years as president, many thousands were detained *without trial, tortured and executed*.

In 1992, mounting criticism of his regime* and a freezing of foreign aid* led to the legalisation* of opposition parties. A new government came to power after the first elections of 1994.

Malawi depends on foreign aid for more than 80% of its development budget*. It is one of the ten poorest countries in the world; more than 60% of its population* cannot read or write and there is an infant mortality rate* of 14%. The government's priority* has been to tackle poverty and improve health and educational services but it is fighting a losing battle with HIV/AIDS. The education system is falling apart due to the numbers of teachers who have died of AIDS and this is reflected throughout society in Malawi.

Agriculture is still the main occupation, employing over 80% of the people and accounting for 40% of the gross national product (GNP)*. Many Malawians live off their own crops. The government has encouraged wealthy Malawians to invest* in plantation* farming to increase agricultural exports. This has resulted in more and more land being held by an elite group* and has caused an acute* land shortage for the small-scale peasant farmers*.

The main crops are maize, groundnuts, coffee, beans, cassava, millet and rice

on the lake shores as well as tobacco, tea and sugar cane – the main exports – grown on large privately owned estates. Most tea estates are on terraced hillsides* in the south. Tobacco is grown mainly on the fertile central plateau*.

Malawi has deposits of bauxite and coal but little is mined because these lie in remote areas. Manufacturing, using hydroelectricity*, has been developed in recent years, but imports* of manufactured goods remains large.

Most people live in rural areas and 98% of them belong to one of nine groups: the Chewa, Nyanja, Lomwe, Yao, Tumbuko, Sena, Tonga, Ngoni and Ngonde. Most of the people live in the south and central region.

Case Study 3: Malawi: ground up approach.

Self Help since its foundation* in 1984 has used a "ground-up approach"** to the projects that it has been involved in. Self Help helps to start projects but within five years the farm families fully own and are in charge of these projects. The activities listed have all been identified by the local people.

Yamikani Yotamu planting potatoes, Linthipe, Malawi



Project Activities

Aim: to achieve food self-sufficiency* and a surplus* for sale.

Project activities are as follows; 100 awareness meetings* to 167 villages will be held over the project period. It will help set-up 167 Village Co-ordinating Committees (VCCs)* and

train these in group dynamics* and leadership.

The project will get and distribute* 40 tonnes of beans, 40 tonnes of groundnut seed and 20 tonnes of soya beans to communities. It will distribute 20 tonnes of maize seed to 2,000 beneficiaries*. To help acceptance* of new varieties

and technologies 60 demonstrations will be held.

To improve livestock production*, the project will identify* 30 livestock villages and help set-up 30 Village Livestock Development Committees (VLDCs). It will identify 300 beneficiaries to participate* in livestock production and these 30 VLDCs will be trained in rabbit, pig and guinea fowl rearing*.

The project will buy 60 boar goats, 60 landrace pigs, 50 local pigs, 50 local goats to cross with the boar goats, 1000 guinea fowls, 50 New Zealand white rabbits for distribution to the beneficiaries. It will also establish five model farms, one for each type of livestock to act as demonstration sites*.

To stop soil loss and environmental damage, the project will identify 60 villages for soil and water conservation* and afforestation*. 60

awareness meetings will be held and 60 Village Natural Resource Conservation Committees (VNRCCs) will be formed. These 60 VNRCCs will be trained in soil and water Conservation principles*. The VNRCCs will establish 60 tree nurseries* and 500,000 seedlings* will be raised within the project period.

To boost horticulture* production, 12 horticulture groups to produce crops will be formed. 20 tonnes of Irish potato seed, 20 kilograms of vegetable seeds and 100 tonnes of cassava plants will be bought and distributed. 30 village nurseries and 60 individual nurseries will be set up. 12 fruit tree nurseries for communities and one tree nursery for the project will be set up.

To decrease marginalisation* of women, the project will help set up 45 womens' groups with a membership of 600 women to participate in income generating activities*. These 600 women will be trained in business management to be able to run petty trading*. Under "food and nutrition", 100 women will be trained in food processing of crops like soya beans, cassava and sweet potato to add value to the crops. 200 women will be trained in the use of fuel saving devices*. 400 fuel saving devices will be distributed to the women. For a regular supply of fuel saving devices, 20 women will be trained in making these. Afterwards 2 kilograms of seed for home garden production* will be distributed. 100 women will be trained in home vegetable gardening over the project life.

Beneficiaries will be responsible for planning and implementing* the project. They will be responsible for providing labour* for construction work*, materials that are locally available, providing and paying for skilled labour* where required. Beneficiaries will also be responsible for opening bank accounts for the different groups.

Finally they will be responsible for monitoring* and evaluating* the project activities*.

Market scene, Lilongwe, Malawi



Problems of Malawi's Farm/Estate tenants

The Irish tenant farmer* suffered from the effects of the Irish famine of 1845–48. This experience led to a rethink* and eventually change in Irish land holding and land use.

Malawi is a landlocked* country wedged* between Mozambique, Zambia and Tanzania.

In the year 2002 Malawi had a severe food shortage and famine. Malawi's tenants are among those most affected by the food crisis. Tenants make up a third of workers in agriculture. Tenants have no power and no voice. Famine was caused by people not having land to work and produce food.

In Malawi tenants are landless workers* with no rights. Sometimes there are contracts* but these are ignored or else work against the tenants. Often the tenants do not have rights to a lease*. The tenant has very little control over how the land is used or managed. For example tenants are not allowed to grow food crops for their own needs. They are supplied with food rations by their landlords.

Lack of control means tenants cannot spend money on growing a regular food supply for themselves and their families. This has had a disastrous impact* on the tenant food supply. Evictions* are explained on the basis that the landlords are unable to

provide food rations. This terrible situation creates huge problems.

Changes are needed to give rights to tenants. There is also a big question about dividing up the land. This would give more people a chance to grow their own food and decide their future. There are many problems connected to this issue and it will be very difficult to find an answer.

Changes and developments need to plan for population growth*, job creation* and the need to develop the country apart from agriculture. Many of the problems connected to land ownership* go back to colonial times* and the scramble for Africa, when Malawi was taken over by Britain. Experts in land law, from home and abroad, will be needed to untangle this many-sided problem.

Malawi will have to continue getting outside help to move forward from this problem and develop a better and more secure future* for its people.



Elisoni Beni a farmer from Chiradzulu, Malawi

Exercise

1. What is the biggest problem for tenants in Malawi?
2. How would changes in land ownership help to solve the problems?
3. Do short dramas or mimes to show:
 - (a) The situation of the tenant farmers in Malawi.
 - (b) The views of the landlords in Malawi.
 - (c) Different jobs connected to farming in Malawi.
 - (d) An eviction scene.

Who's Eating and Who's Being Eaten?

At the beginning of the new millennium*, of the 100 largest economies* on the planet 51 were companies and 49 were countries. The sales of the 500 largest trans-national corporations* are equal to 47% of the gross product* of the planet, but they provide jobs for only 1.59% of the world's workers. Small-scale farmers represent 25% of the world population and they directly feed half the world's people and an even higher percentage indirectly*.

Multi-national corporations* have huge influence on the economic, political and social life of countries. Their interests are what move financial institutions*, governments and United Nations agreements. Treaties* affecting trade come under their influence in a major way. They control international trade in so many products, ranging up to 90% in some product areas.

In the year 2000, five transnational corporations controlled 75% of the

world grain trade. Three big companies dominate*: Cargill, Bungi and Dreyfus. A few TNC's control 90% of the trade in corn, wheat, coffee, cocoa and pineapples and about 80% of the world trade in tea. They control 70% of the global market in rice and bananas, and more than 60% of the market in sugar cane, according to the Global Forum* on Agricultural Research.

In 2002 the ten largest agricultural chemical companies* controlled 90% of the world market (Bayer, Monsanto, Dupont and others), 58.4% of the pharmaceutical* market (Pfizer, GlaxoSmithKlein, Novartis and others), 34% of the world market in food and beverages* (Nestlé, Kraft Foods, Unilever, Coca Cola, Mars and others), 30% of the world market in seeds (Dupont, Monsanto, Bayer and others).

Twenty years ago, there were thousands of seed-producing companies, and none of them controlled even 1% of the market. Now, ten companies control 30% of the market. Also 20 years ago, there were 65 companies producing materials for use in agriculture. Today ten companies control 90% of the market.

Now big companies who produce different products are merging so that food growers have to take a "package deal", e.g. the chemical companies have merged* with the seed companies. This will spread into the food-processing and drinks industries and in the end they will be swallowed up by the supermarket chains. This will mean huge control over producers* and consumers*, from seed to supermarket.



David Okwee with his pineapple harvest, Dokolo village, Asamuk, Uganda

In 2002, for the first time in history, the largest company in the world was not an oil company or a car manufacturer, but a supermarket: Wal-Mart. They have the biggest sales in North America.

This gives a snapshot of what is in "trade treaties"** and it is clear to see that the voices of the producers and consumers are being silenced in the huge drive to control the people of the world in the most important way: what we eat and drink, when, where and how it is produced.

Student Activity

Bring in labels, wrappers etc from food controlled by big multi-national companies. Make a world map using these to show their power and influence.



No Longer "The Farmer's Wife"

(see Book 1, "Water", page 14, "A day in the life of a Kenyan Farmer's Wife")

More and more women are participating* in development projects and this is being reflected* in a more woman-aware approach. Until recently, an African woman in a field would have been described as the farmer's wife. Today we know that she is more likely to be the farmer. African women produce two thirds of the continent's agricultural output*. The assumption* that men go out to work and their wives take care of the house and children is not the reality*. It is accepted now that women are equal partners with men in achieving development.

Women are emerging from men's shadows and becoming visible* in their own right. Women are learning to speak out, to voice their own opinions and wishes. The biggest barrier in development projects is illiteracy*. Nearly two thirds of the billion people who cannot read and write are women. High rates of female as compared to male illiteracy reflect discrimination* against women. In some countries more effort is made to educate boys than girls. In some cases, women lack support from men who fear losing power if women become literate*. Illiteracy increases their dependency* on men and lessens their ability to control their own property, wealth and health.

Women are limited by not being able to read and write and this restricts the development of the family and the community also. In many cases women do over 75% of the work in food production* but this is not recognised because the sale of the produce and

the buying of goods is still in the hands of the men.

The problem of getting the message across to people is being overcome by meetings, workshops, training sessions, radio, video or as started by the village community in Arubella in North Uganda by dramatisation*. The National Association of Women's Organisations in Uganda now use a nationwide radio drama series to spread the message.

Letting people know about the knowledge and skills of women as well as their rights is essential for development. This should result in great strides and big improvements being made for all.

Exercise

1. What does the change from "farmer's wife" to "farmer" mean for women?
2. What is the biggest barrier to development for women?
3. Give examples of how people learn about development.
4. Make a collage of pictures showing the work that women do in this part of the world.



Tsege Weini Gebreab, looking after cattle she purchased through the Credit & Savings scheme.



Fair Trade

Guarantees
a better deal
for Third World
Producers



Things to do

Campaign to have your school shop sell Fair Trade goods.

In the school canteen and staff-room have Fair Trade tea and coffee available.

Find out what shops in your area sell Fair Trade goods and shop there.

Get your local supermarket to stock Fair Trade products and then make sure that your family and friends shop there.

Set up a Fair Trade group in your school who will buy, advertise and sell the goods to the students and others.

Contact Fair Trade at www.maketradefair.com

There are rich and poor people in the world. Some have huge wealth while others struggle to get enough to eat each day. The difference is often down to the simple everyday choices we make. Many of the things we buy in our local supermarkets come at a reasonable price to us. The people who grow and produce them in developing countries often end up getting less than 10% of the price we pay.

Where is the other 90% going and who is making big profits* from the tea, coffee, bananas, chocolate and many other items that we buy?

In many cases it is the multi-national companies*. They own much of the land in the developing countries and the people who work it are barely able to survive on the wages they get, as little as £1 a day.

Fair Trade was set up to give a fair price to the growers and producers*. Enough money from their work to feed and support their families and also to be able to plan for the future

"After we sold our first cocoa under the fair trade conditions, the local middle-men* immediately raised their prices. For the first time, we farmers were able to influence the price of our cocoa" (Safula, a Sierra Leone Farmer)

"Fair Trade" is not just a name, it is the way things are done.

Fair Trade was set up by Oxfam (UK) in 1964 to change the system. The first Fair Trade shop was opened in The Netherlands in 1969. By 2003 Fair Trade has grown to almost 100 organisations in 25 different countries. They buy directly from the growers and producers in developing countries and sell them through Fair Trade shops, mail order catalogues*, organic* shops, local markets and now in supermarkets around the world.

Fair Trade exists to give a fair price to the producers. Where the price is decided on international markets* (for example tea, coffee, cocoa) then the international price plus an extra margin* is paid. The absence of middle-men in the chain of getting the goods from producer to consumer means that the prices in the shops are often lower and the producer gets a higher price.

There are now 2,500 products available through Fair Trade. Coffee, tea, cocoa, sugar, wine, fruit juices, chocolate, nuts, spices, rice and most recently bananas are part of the range of goods for sale.

Action

Now it is over to you to raise awareness of Fair Trade in your family, school and local community.

Worksheet 3

Find the following words:

Arid, Tenant, Irrigation,
Soil, Contours, Conifer,
Grain, Africa, Plantain,
Food, Teff, Pest, Ghana,
Tutsi.

Find the two letters of the alphabet which are missing from the word-search box. Use these letters and the letters : A, L, and I to spell an African country.

A	B	C	O	N	T	O	U	R	S
G	R	A	I	N	U	K	O	Y	O
A	R	I	J	V	T	U	T	S	I
F	O	O	D	P	E	S	T	P	L
R	I	C	C	O	N	I	F	E	R
I	R	R	I	G	A	T	I	O	N
C	D	F	O	H	N	S	O	I	O
A	F	N	I	A	T	N	A	L	P
Q	A	N	L	N	K	X	F	H	X
F	F	E	T	A	E	D	C	B	Z

Malawi Crossword

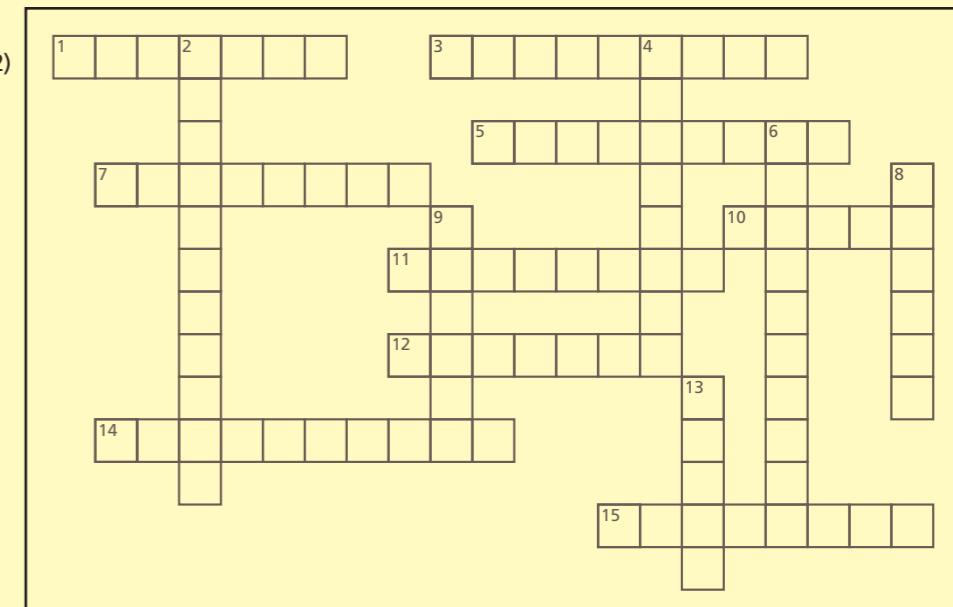
(based on information on pages 29-32)

across

- third of agricultural workers
- 1891–1964
- lift up half a million
- national language
- no tag tribe
- battle and president
- source of aluminium
- 80% national budget
- how to put on your clothes

down

- 80% of employment
- big letters
- salted and roasted
- go west and find
- third largest lake in africa
- decrease marginalisation of...



Trees are vitally important to the environment*. They help to hold the water table* at a level that allows our farm families and rural dwellers*, towns and cities to exist. If trees were not there most of the water would vanish into the earth's crust. In addition, trees also give us shelter, clean air, timber and other natural resources.

In 1900 only 1% of the land of Ireland was covered by forests. By 2000 this had increased to almost 10%. This is a big increase but it is still the lowest in the EU. 25% of Germany is covered by forests and 35% of Poland is given over to forestry.

In Ireland the 1960s saw a big increase in the amount of land being used for forestry. Today in spite of stricter budget guidelines* forestry continues to grow. More and more private investors* have planted trees.

The future plans to cut back on agricultural production* means that many farmers are now looking at growing trees as a way of making use of their land. Generous grants have been given by the Irish government to help the planting of trees. Coillte; the Irish Forestry Service is responsible for supporting and developing this industry. 40 million trees are grown by Coillte on a yearly basis. This is a big investment in the future of Ireland. The decline in the rainforests of the world continues at an alarming rate. Ireland must plan for its future needs and also play its part in building a safe and healthy environment for all the people of the world.

Irish people must learn from the example of the forestry service. This

means that we must plant more trees each year, especially deciduous trees* like oak, ash and lime. The planting of a small sapling* takes little effort but it makes a big difference. Concerns about pollution* and not wasting resources follow on naturally. Saving water, electricity, heat and using unleaded petrol are popular ways that people in Ireland show how they have become "greener"*. This "green power"** is now getting a new look with the use of wind energy for electricity and solar panels* for heating water.

The challenge is continue to be "green" in our everyday lives. The simplest and most effective way for students to take action is to organise a campaign of tree planting in the school or local community.

In Ireland Coillte have agreed to help schools in this campaign by supplying tree saplings at a nominal cost (50 cent per tree). Requirements are that a minimum order for 50 trees is placed with them. Coillte will organise delivery of the saplings to the school. Contact the Sales Manager (Pat Peters) at Ballintemple Nurseries, Ardattin, Co. Carlow. Tel: 059 9155621, e-mail: pat.peters@coillte.ie or visit their website at www.coillte.ie

Make the euro green by buying "Fair Trade Products" (See separate article on "Fair Trade").

Student Challenge

Organise a campaign to;

1. Raise awareness of environmental issues, e.g. use of water.

2. Buy trees from Coillte or from a local nursery.

If possible sell the trees to the public as part of an awareness raising campaign (donate proceeds to charity).

Plant the trees in the school grounds, public area, or at home.

3. Organise a campaign to buy "Fair Trade" products in the school.

Quiz

Question 1	The population of Africa in 1900 was			
	A. 50 million	B. 80 million	C. 110 million	D. 144 million

Question 6	The average increase in the world's population per day is			
	A. 100,000	B. 230,000	C. 480,000	D. 610,000

Question 11	The amount of money spent on pet food in Europe and the USA each year is			
	A. €25 billion	B. €17 billion	C. €8 billion	D. €900 million

Question 2	At present the number of countries in mainland Africa is			
	A. 32	B. 39	C. 43	D. 47

Question 7	Which type of food should make up the largest part of our daily diet			
	A. Carbohydrate	B. Fat	C. Protein	D. Vitamins

Question 12	The name of the Irish Forestry Service is			
	A. Coillte	B. Crann	C. FÁS	D. Teagasc

Question 3	The average amount of cultivated land per person in the world today is			
	A. 0.2 hectare	B. 1 hectare	C. 1.5 hectare	D. 5 hectare

Question 8	The average amount of bananas eaten per person per year in Uganda is			
	A. 2 kg	B. 25 kg	C. 100 kg	D. 250 kg

Question 13	Dr Hastings Banda was president of which country			
	A. Malawi	B. Uganda	C. Ethiopia	D. Kenya

Question 4	The Nile Delta is in which country			
	A. Eritrea	B. Sudan	C. Egypt	D. Libya

Question 9	Fair Trade opened its first shop in which country			
	A. The Netherlands	B. Germany	C. Britain	D. Ireland

Question 14	The infant mortality rate in Ethiopia is			
	A. 50 per 1,000	B. 75 per 1,000	C. 100 per 1,000	D. 125 per 1,000

Question 5	Uganda is known as			
	A. The Warm Heart of Africa	B. The Pearl of Africa	C. The Bread Basket of Africa	D. The Sunshine State of Africa

Question 10	Which type of gas do trees take from the earth's atmosphere			
	A. Methane	B. Nitrogen	C. Carbon Dioxide	D. Oxygen

Question 15	15. The biggest barrier to development for women in Africa is			
	A. lack of money	B. lack of government support	C. illiteracy	D. malnutrition

Answers on inside back cover

Cross-Curricular Approach

HISTORY	GEOGRAPHY	ENGLISH
Exploration	Use of land	Poems/stories on land
Colonisation	Agriculture and farming	Stories of the dispossessed
Wars for territory in Africa	Water	Media views of life in Africa
Treaties in/about Africa	Development of industry	Voices of Africa in literature, songs etc
R.E	ECONOMICS	SCIENCE
Care for the environment	Trade	The surface of the earth
Equality and Justice	The food industry	Greenhouse gases
Modern day pressures	Development of resources	Food, nutrition and digestion
Respect for other cultures	International debt	Seed germination
ART	MUSIC	HOME ECONOMICS
Collage-images of Africa	African rhythms	Nutrition and diet
African design	Music for the four seasons	Food in Africa
Beads and jewellery	Songs for planting and harvesting	Cooking and storing methods
Bodypainting	Instruments made of wood	Celebrations with food

Exercise: Looking at pictures

Look at the photos of the women on pages 11 and 31.

1. Discuss the different work that these women are doing. Would you like to do their jobs? Why?
2. How does this work differ from the jobs done by working women in Ireland.
3. How does the food market on page 26 differ from our shopping in a supermarket? [Think about: food, packaging, where the food comes from, preservation, etc.]
4. Interpreting the image. Look at page 35. Would our interpretation of this image be different if we knew who owned these cattle? What would be different if (a) she owned them, (b) her husband owned them, (c) a women's co-operative owned them or (d) a landlord owned them.

Useful links

Information on Africa:
www.oneworld.org/odi
www.africasia.com

Information on forestry:
www.coillte.ie
www.coilltenurseries.ie

Information on food & nutrition:
www.ndc.ie

Information on fair trade:
www.maketradefair.com
www.cafedirect.co.uk

Information on world food programme:
www.wfp.org

Information on food:
www.oneworld.org
www.globalissues.org

Information on water:
www.worldwaterforum.org

Information on the environment:
www.doingyourbit.org.uk
www.enfo.ie
www.peopleandplanet.org
www.envirolink

Information on international funding:
www.worldbank.org

Information on women in the 3rd world:
www.women3rdworld.miningco.com

Information on deforestation:
<http://environmentminingco.com/msubfor1.htm>
<http://forests.org/forsite.html>
<http://www.wri.org/wri/index.html>

Self Help website
www.selfhelp.ie

International Famine Centre
www.ucc.ie/famine/

Development Co-operation Ireland
www.dci.gov.ie

Information on Agriculture
www.fao.org Food & Agricultural Organisation

UCC Centre for Co-operative Studies
www.ucc.ie/acad/foodecon/centre_b.html

UCD Rural Development Unit
www.ucd.ie/~agri/

Tree Council of Ireland
www.treecouncil.ie

Glossary

Absolute poverty	<i>extremely poor</i>	Construction work	<i>building work</i>	Family loyalty	<i>care about family</i>	Ignorance	<i>lack knowledge</i>
Acceptance	<i>agree with</i>	Consumers	<i>buyers of goods</i>	Fertile land	<i>good quality land</i>	Illiteracy	<i>cannot read or write</i>
Access	<i>can use</i>	Contracts	<i>agreements for goods/jobs</i>	Fertiliser	<i>substance to help produce bigger crops</i>	Impact	<i>effect</i>
Afforestation	<i>planting trees</i>	Credit	<i>money/goods given in advance</i>	Financial institutions	<i>banks etc.</i>	Implementing	<i>putting to use</i>
Agricultural chemical companies	<i>companies producing chemicals for farming</i>	Critical condition	<i>very bad condition</i>	Food chain	<i>who is eating who from smallest to biggest</i>	Import	<i>buying goods from another country</i>
Agricultural output/ production	<i>amount of crops from farming</i>	Cropland	<i>land for crops</i>	Food security,	<i>sure supply of food</i>	Improved variety	<i>seeds that give bigger crops</i>
Alternative	<i>another way</i>	Cultivation	<i>using land</i>	1. (self sufficiency),	<i>1. (growing enough for self)</i>	Income	<i>(generating activities) (activities that) earn money</i>
Annual	<i>yearly</i>	Decade	<i>10 years</i>	2. (insecure)	<i>2. (unsure supply of food)</i>	Indirectly	<i>not straight</i>
Arbitrary past	<i>no definite history</i>	Deciduous trees	<i>trees that lose leaves in winter</i>	Food production	<i>growing/ making food</i>	Industry	<i>system of making goods</i>
Armouries	<i>stores of weapons</i>	Decline	<i>get worse</i>	Forecasts estimate	<i>figures for future</i>	Infected	<i>made ill</i>
Assembly	<i>parliament</i>	Deforestation	<i>cutting down forests</i>	Foundation	<i>basis</i>	Inflation	<i>increase in price</i>
Assumption	<i>believe something without checking</i>	Demonstration sites	<i>fields used to grow sample crop</i>	Fragile	<i>delicate</i>	Informing	<i>giving information</i>
Atmosphere	<i>gases that protect the Earth</i>	Dependence	<i>need</i>	Freezing	<i>stopping money/ goods from other countries</i>	Inherit	<i>pass from parents to children</i>
Awareness meetings	<i>meetings to give information</i>	Deposits	<i>amounts of</i>	foreign aid	<i>stoves/ovens that use less fuel</i>	Inputs	<i>goods used to make/grow a product</i>
Balanced diet	<i>correct amounts & types of food</i>	Dictating	<i>one person decides</i>	Fuel saving devices		International donor	<i>organisations who help poor countries</i>
Beverage	<i>a drink</i>	Digestive system	<i>way food is broken down after eating</i>	Germination	<i>seed starts to grow</i>	community	
Budget (guidelines)	<i>(advice for) planned use of money</i>	Disastrous impact	<i>very bad effect</i>	Global economy	<i>world-wide use of goods and money</i>	International funders	<i>International Banks</i>
Bypassed	<i>ignored</i>	Discrimination	<i>treating people badly</i>	Global warming	<i>world-wide rise in temperatures</i>	Invest	<i>put money into</i>
Calories	<i>energy from food</i>	Distribute	<i>give out goods</i>	Globalisation	<i>world-wide buying and selling of goods</i>	Irrigation	<i>pump water to fields</i>
Capable	<i>able to</i>	Divisions	<i>rival groups</i>	GNP- gross national product		Job creation	<i>setting up new jobs</i>
Carbohydrate	<i>foods including starches and sugars</i>	Domestic use	<i>for use in homes</i>	Government scholarship	<i>total value of goods produced in a year</i>	Labour	<i>workers</i>
Carbon	<i>non-metallic element (in diamonds & coal)</i>	Dominate	<i>control</i>	Grazing	<i>government prize/money for students</i>	Land ownership	<i>who owns land</i>
Carbon dioxide	<i>gas breathed out by animals</i>	Dramatisation	<i>make into drama</i>	Green power	<i>grass for cows</i>	Landless workers	<i>people who work but do not own the land</i>
Cash crops	<i>crops grown to earn money</i>	Drenching	<i>covering with water</i>	Greener	<i>able to help the environment</i>	Landlocked	<i>surrounded by countries (no coastline)</i>
Cassava	<i>potato-like plant in tropical countries</i>	Drip irrigation	<i>drops of water to plants</i>	Gross Product	<i>helping the environment</i>	Lease	<i>agreement between landlord and tenant</i>
Civilisation	<i>system of living</i>	Economy, (Economic growth)	<i>(Increase in) use of money in country</i>	Ground up	<i>total amount of goods</i>	Liberate	<i>set free</i>
Cobalt	<i>hard silvery-white metal</i>	Efficient	<i>well managed</i>	approach	<i>starting/growing from bottom up</i>	Livestock (production)	<i>(rearing) farm animals</i>
Colonial days	<i>time of colonies</i>	Elders	<i>older people</i>	Ground-water	<i>rivers, lakes etc</i>	Locality	<i>local area</i>
Colonies	<i>countries controlled by more powerful countries</i>	Employs	<i>uses as workers</i>	Group dynamics	<i>behaviour of groups</i>	Logging	<i>cutting trees for timber</i>
Commerce	<i>business</i>	Ensure	<i>makes sure</i>	High yielding varieties	<i>seeds that produce bigger crops</i>	Mail order catalogues	<i>lists of goods for sale through postal system</i>
Commercial scale	<i>larger amounts with a business plan</i>	Enset	<i>a relative of the banana</i>	Homestead	<i>farm and home</i>	Malnourished	<i>not enough food</i>
Compensate	<i>make up for loss</i>	Enterprise (Entrepreneur)	<i>(person who) sets up new system</i>	Horticultural unit (Horticulture)	<i>place for growing (fruit and vegetables)</i>	Malnutrition	<i>effect of lack of food</i>
Competing	<i>in competition with others</i>	Environment, 1(al)		Hostility	<i>unfriendliness</i>	Manure	<i>animal waste for use in fields</i>
Coniferous forest	<i>pine type forest</i>	disaster, 2(ally) friendly	<i>1(very bad effect on), 2(concerned about), plants, animals & people in the world</i>	Hydroelectricity	<i>water-powered electricity</i>	Marginalisation	<i>taking power away from people</i>
Conquered (conquest)	<i>(territory) took over</i>	Evaluating	<i>measuring effect</i>	Identify	<i>see/know</i>		
		Evictions	<i>putting people out of house/land</i>				
		Executed	<i>put to death</i>				
		Export	<i>selling goods from a country</i>				
		Extract	<i>get substance from</i>				

Maternal grandfather	<i>mother's father</i>	Producers	<i>grower/farmer</i>	Stability	<i>long-lasting</i>	1. (dwellers)	<i>1. (people who live in)</i>
Merged	<i>joined together</i>	Profit	<i>money made after costs</i>	Stable government	<i>long-lasting government</i>	2. (markets)	<i>2. (places to sell goods in)</i>
Middle-men	<i>people between producer and buyer of goods</i>	Project activities	<i>work done in an area</i>	Storage	<i>keep goods for later time</i>	Vegetation	<i>plants growing</i>
Millennium	<i>1,000 years</i>	Promote	<i>show benefit of</i>	Strangle hold	<i>total control</i>	Village	
Millet	<i>tall-growing variety of grain</i>	Protector	<i>minder</i>	Sub-Saharan Africa	<i>countries South of the Sahara desert</i>	Co-ordinating	
Monitoring	<i>looking at growth of project</i>	Provider	<i>person who will supply needs</i>	Subjects	<i>people ruled by king/queen</i>	Committees	<i>groups to help projects work</i>
Multi-national		Radiating	<i>giving off (heat/energy)</i>	Subsidies	<i>part of price paid by government</i>	Visible	<i>able to see</i>
Companies/		Rainfed agriculture	<i>crops grown using rains</i>	Suckers	<i>small plants that grow from base of mother plant</i>	Warlords	<i>people who control wars</i>
Corporations	<i>companies that work in several countries</i>	Rainforests	<i>forests in tropical countries that grew naturally</i>	Suckle	<i>feed from</i>	Water conservation,	<i>Saving water,</i>
National policy	<i>policy of the country</i>	Ranching	<i>large-scale rearing of cattle</i>	Sulphur dioxide	<i>mixed gas of sulphur and oxygen</i>	(harvesting),	<i>(system to collect and use water),</i>
Natural boundaries	<i>borders by mountains, rivers etc</i>	Reality	<i>true situation</i>	Surplus /food	<i>extra food</i>	(productivity)	<i>(amount of produce from water)</i>
Natural resources	<i>land, forests, water etc in a country</i>	Rearing	<i>helping to grow</i>	Teff	<i>a type of grain</i>	Water table	<i>level of water</i>
Nature reserves	<i>special area for wild animals</i>	Reflect	<i>shows</i>	Temperate regions	<i>regions with a mild climate</i>	Wedged	<i>stuck between</i>
Net population gain	<i>number of extra people in country after all other influences</i>	Regime	<i>system of government</i>	Tenant farmer	<i>farmer who leases land</i>	Wholesalers	<i>sellers of goods to shopkeepers</i>
Nitrogen oxide	<i>mixed gas of nitrogen and oxygen</i>	Relatively		Terraced hillsides	<i>fields stepped like stairs</i>	World trade	<i>world-wide buying and selling of goods</i>
Nursery		prosperous	<i>a good standard of living</i>	Territory	<i>region of land</i>		
Nutritionists	<i>place for growing plants from seeds</i>	Remnants	<i>pieces left after a long time</i>	Textiles	<i>cloth/clothes</i>		
Nutritious diet	<i>experts on food</i>	Reservoirs	<i>man-made lakes to supply water</i>	The Scramble for Africa	<i>rush of European countries to control territories in Africa</i>		
Organic /waste	<i>healthy diet</i>	Reshaped	<i>changed shape</i>	Tourist paradise	<i>perfect spot for tourists</i>		
Overcome		Resourceful	<i>clever use of resources</i>	Trading positions	<i>ability to buy and sell goods</i>		
Oxygen		Resources	<i>what is available naturally</i>	Transnational corporations	<i>companies that work in a number of countries</i>		
Participate		Retailers	<i>shopkeepers</i>	Transport(er)	<i>(method of) moving goods/food</i>		
Peasant farmers	<i>take part in small farmer</i>	Rethink	<i>think again</i>	Treaties (Trade)	<i>agreements (about buying and selling products)</i>		
Per capita	<i>per person</i>	Reveal	<i>show</i>	Trends	<i>new styles</i>		
Petty trading	<i>small-scale selling of goods</i>	Rural dwellers	<i>people living in country areas</i>	Tribal	<i>part of group/tribe</i>		
Pharmaceutical	<i>chemical</i>	Sacrifice	<i>give up something for the benefit of others</i>	Tribal lands/rivalries	<i>lands owned by tribes/ fights between tribes</i>		
Pit latrine	<i>deep hole for toilet</i>	Sanitation	<i>washing and using toilets</i>	Tributaries	<i>small rivers feeding into big river</i>		
Plantain	<i>tall tropical banana-like plant</i>	Sapling	<i>small tree</i>	Tropical countries	<i>countries near the Tropics</i>		
Plantations	<i>large areas for crops</i>	Saturated fats	<i>unhealthy fats</i>	Tubewells	<i>water that is piped up from well</i>		
Polar icecaps	<i>Arctic & Antarctic Ice sheets</i>	Savannah	<i>treeless grassy plain</i>	Urban areas	<i>towns and cities</i>		
Pollution	<i>dirt and waste damaging nature</i>	Scrambled	<i>mixed up</i>				
Polyunsaturated fats	<i>Fats that are healthy to eat</i>	Secure future	<i>able to plan for the future</i>				
Population growth	<i>increase in the number of people</i>	Seedlings	<i>young plants</i>				
Principles	<i>Beliefs</i>	Shortage	<i>not enough</i>				
Priority	<i>Most important</i>	Skilled labour	<i>trained worker e.g. carpenter, plumber</i>				
Private investors/ sector	<i>Individuals who put money into a scheme made into a new product</i>	Soil erosion (fertility)	<i>(quality of earth), wearing/washing away of top soil</i>				
Processed		Solar panels	<i>panels to take energy from the sun</i>				
		Sorghum	<i>a type of grain</i>				

ANSWERS

Question 1 C
Question 2 D
Question 3 AQuestion 4 C
Question 5 B
Question 6 BQuestion 7 A
Question 8 D
Question 9 AQuestion 10 C
Question 11 B
Question 12 AQuestion 13 A
Question 14 D
Question 15 C

Africa Alive Schools Programme

Students and teachers are being given an opportunity to discover the mysteries of the dark continent for themselves. Self Help is offering teachers and students an opportunity to study and visit a community in Africa as part of a school programme to help developing countries become self sufficient, and have some fun while they're at it.

Countries in the programme include Ethiopia, Eritrea, Malawi, Uganda and Kenya.

Aims

- To bring young students and teachers in touch with people in a developing country
- To promote greater understanding of cultural, geographic and economic differences
- To give a clear picture of life in an African country
- To give young people a clear knowledge of how development projects work
- To encourage teachers and students to study methods used to eliminate poverty and famine in Africa

Benefits

- Once in a lifetime experience for teachers and students to visit Africa
- Personnel to teach material to students

- Curriculum material for schools
- Links with teachers and students from other schools involved in the programme
- Targets young people today to look beyond themselves to take action on behalf of others less well off

Supporting Projects in Africa

Self Help works with the people living in the villages and farms of rural Africa. When teachers and students visit a country they see first hand how the people live. Apart from visiting Africa schools can support the work by helping to raise funds for small-scale projects that make a big difference to the lives of the Africans.

A simple example of this is;

- To raise funds for a well that will provide clean safe water for a community of 1,000 people or more. The well will be named after the sponsoring group or school.



Karen Campbell, a student from St. Dominics in Cabra, Dublin with local woman, Nancy, in Asamuk, Uganda.

Other examples are;

- building a school class- room
- furnishing a school library
- ensuring the production of a balanced diet for families
- planting trees

The activities involved in supporting these projects create awareness of the issues. They also give students a different purpose for their work. It is what education is all about, learning through action, learning for life, long lasting and meaningful.

"I think that visiting Uganda has been one of the most life changing experiences I have ever had and it has changed my views forever." (Karen Campbell. Student, St Dominics College, Cabra, Dublin. 7.)

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